

National Drought Summary for February 4, 2025

Summary

Another week with isolated precipitation and warmer-than-normal temperatures for much of the contiguous U.S. (CONUS) brought a mixture of degradations and some smaller areas of improvement. The Midwest, Northeast and Southeast generally saw one-category degradations near existing abnormally dry or drought areas. There was some improvement from Texas to West Virginia and northeastern Kansas into northwestern Illinois, which followed a band of beneficial precipitation that fell this week. The northern intermountain West saw minor improvements with isolated precipitation and decent snow (snow water equivalent). Washington saw some improvement along the eastern Cascades while abnormally dry conditions expanded southward into northwest Oregon. The Southwest and southern Plains saw extensive degradation. Another week with no precipitation continues drying out the region, with alarmingly low streamflows in some areas and high fire danger from south California into southern New Mexico. Many mountainous regions of the Southwest and into Utah and Colorado are showing abnormally low snowpack, leading to degradation in these areas.

Northeast

The Northeast had below-normal temperatures this week and missed any meaningful precipitation. Conditions from northern New Jersey through central Massachusetts degraded, along with western New York, where abnormally dry conditions expanded along Lake Ontario. Little to no precipitation for several weeks is taking its toll on streamflows and surface-level soil moisture.

Southeast

The Southeast saw a mixture of improvements and degradations. Improvements followed a band of heavy precipitation that fell last week. The rest of the Southeast continues with dry conditions due to a prolonged lack of rainfall and warmer-than-normal temperatures. Mississippi and far northwestern Alabama saw one-category improvements from the recent precipitation and improved streamflows. North-central Alabama, northern Georgia, South Carolina and western North Carolina had significant one-category degradations. These areas have been without rainfall for extended periods, leading to drier soil moisture and decreased streamflows. Southwestern and southeastern Georgia also saw the expansion of moderate drought. Similarly, with warmer-than-normal temperatures, Florida missed out on the precipitation and saw moderate drought expansion into the Tampa Bay and Miami-Dade areas.

South

Above-normal temperatures and the absence of this weeks precipitation led to widespread degradations across the Texas and Oklahoma panhandles, along the Red River and in central Oklahoma. Last week, a band of heavy rainfall fell, leading to improvements in central Texas, along the eastern edge of the Oklahoma-Texas border, along the Red River, and up into central and northern Tennessee. Outside the band of precipitation, Tennessee saw degradations in the West and along the Georgia and North Carolina borders.

Midwest

The Midwest was warmer than usual, with Iowa and surrounding states being 10 to 15 degrees above normal. Precipitation was isolated this week with a band of rainfall from northwest Missouri, southern Iowa and northwest Illinois, resulting in one-category improvement in western Missouri, southwest Iowa, and along the Mississippi River of eastern Iowa and northwestern Illinois. Unfortunately, this precipitation provided little relief as short-term precipitation, soil moisture, and, in some cases, streamflow remained below the 30th percentile. Abnormally dry conditions further expanded southward into central Illinois and Indiana. Central Iowa, southern Minnesota, and southern Wisconsin also saw the further expansion of abnormal dryness and moderate drought.

High Plains

Like much of the central part of the country, the High Plains were 5 to 10 degrees warmer than usual. Little precipitation led to minor improvements in southeast Nebraska, northeast Kansas and along the Wyoming Rockies. Due to prolonged dryness, South Dakota saw the expansion of severe drought in the north-central eastward and extreme drought in the southwest.

West

The Northwest saw below-normal temperatures while the rest of the Western states were near or above normal. The intermountain West saw temperatures of 5 to 10 degrees above normal. Precipitation fell along the western coast from Washington to northern California, central Idaho, and higher elevations in Montana and Wyoming. This precipitation, along with good snow water equivalents, aided dry and drought conditions

in north-central Washington, northwest and northern Wyoming, and central Montana. Unlike the rest of the northwest, Oregon saw the expansion of abnormal dryness in the northwest. Despite precipitation, streamflow and soil moisture were below the 30th percentile, indicating abnormally dry conditions. The remainder of the West saw widespread degradations. Severe and extreme drought expanded in southern California into southern Nevada, Utah and Arizona. Exceptional drought was introduced in southern Nevada along the northwestern Arizona border. Conditions are alarmingly dry, with dry soil and high fire danger. Moderate drought and abnormally dry conditions expanded in central and northern Utah and western Colorado. One-category degradations continued into New Mexico, with abnormal dryness to extreme drought expanding across the state into west Texas.

Caribbean

No changes this week in Puerto Rico

The U.S. Virgin Islands all remained free of drought or abnormal dryness this week. The precipitation estimate for St. Thomas was higher on the western end of the island at half an inch or less and lower to the east. Precipitation on St. John ranged between 0.1 and 0.25 inches. St. Croix received less than 0.25 inches at the western end of the island and was drier to the east.

Conditions were sufficiently dry on St. Croix to turn the Standardized Precipitation Index negative at the one-month time scale, but values were neutral or wet at other time scales. SPI values for St. Thomas and St. John did not indicate dryness.

The Vegetation Health Index did not indicate much stress for St. Croix or the other islands. Well levels were trending lower, but were still relatively good at 5.91 feet below the land surface for St. Thomas, 9.19 feet below the land surface on St. John, and 16.30 feet below the land surface on St. Croix.

Pacific

No changes this week in Alaska

Late last week, an intense low-pressure system affected the state, producing strong winds and heavy rainfall/flooding in many areas. The most significant rainfall occurred from Oahu to the west half of the Big Island. One-category improvements were made across all islands, with minor expansion of abnormal dryness on the Big Island.

The Republic of Palau received ample rain with more than 3 inches at Palau and Koror. Water supplies should be ample.

Rainfall has been below normal in the Mariana Islands, leaving Saipan in severe drought (D2) and Guam and Rota abnormally dry (D0). Guam received 0.46 inches, while Rota reported 0.19 inches. Saipan received from 0.37 to 0.48 inches at the three monitoring locations. These islands need an inch weekly to meet minimum water needs. Vegetation on plantations was beginning to turn brown, and the wildfire threat was increasing as wildfires have been reported across Guam and the CNMI in recent weeks.

Most locations in the Federal States of Micronesia received below normal precipitation over the past week. Yap was in D1 and got just 0.17 inches. Woleai got 1.39 inches and was categorized as being in D0. Pingelap and Kapingamarangi also entered D0 this week with no rain and 0.70 inches reported, respectively. Lukunor, Nukuoro, and Kosrae saw more rainfall than other islands, receiving 3.12, 1.69, and 1.71 inches. Chuuk Lagoon received 3.17 inches and was no longer considered to be abnormally dry.

Some of the Marshall Islands continued to experience below normal precipitation. Kwajalein, in moderate drought, received no rainfall in the past week. Utirik was in D0 after receiving just 0.89 inches of precipitation in January and no rain in the first three days of February. The label of abnormal dryness was removed from Majuro as the island received more than 2 inches last week and 1.85 inches this week. The Majuro reservoir held 24.579 million gallons on Jan. 31. Ailinglaplap and Jaluit got more than 3 inches in the past week. Mili received 13.78 inches in January and 0.65 inches at the start of February.

American Samoa entered D0 after several weeks of below normal rainfall. Pago Pago, Siufaga Ridge and Toa Ridge received 1.14, 1.02, and 1.19 inches of rain, which is about half of the amount these islands need to meet minimum water needs.

Looking Ahead

Over the next five to seven days, some coastal areas of the West could see precipitation from the Oregon Cascades into northern and central California. Other higher-elevation areas in the intermountain West are also expected to receive some precipitation. Precipitation chances appear good over the southern Plains and across much of eastern CONUS, with the heaviest expected in the Appalachian region. Areas from northern Louisiana into West Virginia could see 3 to 5 inches of precipitation. Dry conditions will continue in the Southwest and Central Plains.

The 6-10 day outlook shows the greatest probability of below-normal temperatures is in the northern Plains and across the U.S.-Canadian border. Below-normal temperatures are leaning toward below normal as far south as north Texas. The best chances of above-normal temperatures will be across the Southeast, with the greatest chance being in the Florida Panhandle. Hawaii is also likely to see above-normal temperatures. Alaska could experience below-normal temperatures in the Southeast and above-

normal temperatures along the state's western side. The greatest chances of above-normal precipitation are in the southern Appalachian region and the West in south Oregon and north California. The best opportunity for below-normal precipitation is in the central and northern Alaska interior.

Author(s)

Denise Gutzmer, National Drought Mitigation Center

Lindsay Johnson, National Drought Mitigation Center