

National Drought Summary for April 15, 2025

Summary

During the week of April 8-14, temperatures across the Contiguous U.S. were split into above-normal readings in the western U.S., below-normal readings east of the Mississippi River, and near-normal temperatures in the Mississippi River Valley. Temperatures across the western Great Plains, the Rocky Mountains, and the Intermountain West ranged from 3-12 degrees warmer than normal. In the Upper Ohio River Valley and Appalachian Mountains, temperatures from 6-12 degrees cooler-than-normal were widespread. Dry weather occurred over much of the Great Plains and western U.S., except for parts of North Dakota, Montana, northern Idaho and western Washington. Some moderate precipitation amounts, locally exceeding an inch or two, occurred in parts of the eastern U.S., especially in the Mid-Atlantic, though precipitation was mostly light east of the Mississippi River otherwise.

Changes to the U.S. Drought Monitor depiction were somewhat limited this week compared to the last few. Increases in drought coverage occurred in parts of southern Texas, New Mexico, much of Colorado, and parts of Kansas, Nebraska and northern South Dakota. Dry weather and high fire danger continued in south Florida this week, leading to further degradation and the development of localized extreme drought. The higher precipitation amounts in the Mid-Atlantic and Northeast led to some localized improvements in ongoing drought and abnormal dryness. Heavier precipitation over the last month has quickly improved conditions in this region, with lessened precipitation deficits and increasing groundwater in many areas.

Northeast

Improvements to ongoing areas of drought and abnormal dryness occurred this week, especially in New Jersey, Delaware, eastern Maryland and parts of southern New England. Recent heavier precipitation over the last few weeks led to improvements in precipitation deficits and groundwater levels in many areas. Over 2 inches of rain fell in southeast Maryland and northern Delaware this week, while lighter amounts fell in other parts of the Northeast. Cooler-than-normal temperatures occurred across the region this week, with temperatures from 6-12 degrees below normal occurring from southern New England southwest into West Virginia.

Southeast

Mostly quiet weather occurred in the Southeast this week, though scattered rainfall amounts from 0.5-1 inches occurred, especially in parts of the Carolinas. Cooler-than-

normal temperatures occurred across the region, with the coolest readings (compared to normal) occurring in North Carolina and Virginia, where temperatures from 3-9 degrees below normal were common. Moderate drought expanded slightly this week in coastal North Carolina, where short-term precipitation deficits grew and soil moisture levels dropped. Moderate and severe drought expanded and extreme drought developed in south Florida, where high fire danger continued to grow amid decreasing streamflow and soil moisture and growing short-term precipitation deficits.

South

Mostly dry weather occurred across the South region this week, aside from eastern Tennessee and scattered light rain amounts in northern Mississippi and central and western Tennessee. Temperatures ranged from 3-9 degrees below normal in areas east of the Mississippi River and in southern Louisiana and southeast Texas, to 3 to locally 9 degrees or more above normal in western parts of Oklahoma and Texas. Given recent very wet weather in the eastern half of the region, no changes occurred in drought or abnormal dryness in the eastern part of the region other than a slight reduction in abnormal dryness in eastern Tennessee after recent rains. In southern Texas, severe drought expanded in a small area between San Antonio and Houston where streamflow and soil moisture decreased and short-term precipitation deficits grew. Exceptional drought grew in coverage from near Eagle Pass to northwest of Del Rio in southern Texas, where short- and long-term precipitation deficits worsened, soil moisture and groundwater levels worsened, and reservoir levels were at or near record-low levels. Stage 3 restrictions were in effect for the San Antonio Water System, and Stage 4 restrictions were present for farmers and pumpers operating in the Edwards Aquifer.

Midwest

Aside from areas near the Canada-U.S. border and in parts of Kentucky, mostly dry weather occurred in the Midwest this week. Temperatures east of the Mississippi River were mostly cooler than normal, especially in Ohio and eastern Kentucky, where temperatures ranged from 6-12 degrees below normal. Western reaches of Minnesota, Iowa and Missouri finished the week either near normal or 3-6 degrees warmer than normal. Reductions in coverage of drought and abnormal dryness occurred in southern Minnesota and the Wisconsin Northwoods and western Michigan Upper Peninsula, where conditions in soil moisture levels and precipitation deficits have improved over the last several weeks. Abnormal dryness and moderate drought expanded slightly in northeast Missouri and southeast Iowa, where short-term precipitation deficits grew and soil moisture levels decreased.

High Plains

Across the High Plains, ongoing drought or abnormal dryness mostly stayed the same or worsened after dry weather occurred across the region (excluding North Dakota) and warmer-than-normal temperatures overspread the Great Plains and central Rocky Mountains. Temperatures from 3-12 degrees above normal occurred across the region, with the warmest readings occurring in the western Great Plains and in the Colorado Front Range area. Widespread degradation in drought conditions, due to low snowpack and short- and long-term precipitation deficits, occurred in the central and southern Rocky Mountains in Colorado. Moderate drought expanded in western and east-central Kansas this week, where streamflow and soil moisture dropped amid growing precipitation deficits. Similar conditions existed from south-central into eastern Nebraska, where moderate drought became re-established. Localized degradations to drought conditions occurred in north-central South Dakota amid growing precipitation deficits, though conditions across most of the Dakotas remained unchanged this week. Moderate drought coverage decreased slightly southwest of the Bighorn Mountains in Wyoming, where precipitation deficits lessened and soil moisture conditions improved.

West

A mix of near-, below- and above-normal temperatures occurred in northern Idaho and in Washington. Otherwise, temperatures across the West were warmer than normal this week, with widespread readings of 6-12 degrees above normal in parts of central and eastern California, Nevada, Utah, Arizona and New Mexico. Mostly dry weather, with a few exceptions in Montana, northern Idaho, western Washington and northwest Oregon, occurred across the West this week. In northern New Mexico, soil moisture levels dropped and short-term precipitation deficits grew, leading to an expansion of severe drought (concurrent with expansions of drought coverage in Colorado). Extreme and exceptional drought grew in coverage in far southwest New Mexico and southeast Arizona, where very dry surface conditions and high evaporative demand continued amid severe precipitation deficits.

Caribbean

Puerto Rico remained free of drought or abnormal dryness this week, though recent dry conditions in far northwest Puerto Rico and in the southern plains of Puerto Rico were noted for further analysis in the coming weeks.

The main issue affecting all the U.S. Virgin Islands is the increase in sustained wind speeds for the month of April. For example, the St. Thomas Cyril King Airport (TIST) station has recorded an average wind speed of 12.9 mph so far for the month. Additionally, the St. Croix Rohlson Apt (ISX) has reported an all-time high average wind

speed of 13.2 mph. While these high winds may signal a transition from the dry season to the wet season, it also enhances moisture transport away from the islands, which can lead to drier fuels. Because of this, a territory-wide burn ban has been implemented for all islands during peak camping season.

CoCoRaHS stations for St. Croix Island have recorded anywhere from 0.08 to 0.61 of rain for the week. SPI values for the Christiansted Hamilton station were favorable. Additionally, well water levels have improved considerably for this time of year (17.24 ft) compared to April 2024, which had well water levels around 30 ft. St. Croix Island remains free of drought and dryness.

St. John Island will remain abnormally dry. CoCoRaHS stations around St. John recorded up to 0.39 of rain, but SPI values were similarly favorable for the Windswept Beach station and the East End. Well water levels for the Susannaberg 3 well are currently 10.24 ft, which was slightly higher than last April.

St. Thomas Island will also remain abnormally dry. Precipitation observations from CoCoRaHS ranged from 0.08 to 0.15. Well water levels are around 6.12 ft, a considerable improvement from last year, which was greater than 10 ft.

Additionally, the lack of precipitation that has reached soils on St. John, St. Thomas and St. Croix islands is another cause for concern. It reinforces the need to maintain status quo for St. John and St. Thomas Islands, and the need to further monitor St. Croix Island.

Pacific

Abnormal dryness continued this week in southwest Alaska, though the impacts of lacking snow cover there may be lessening some. In south-central and southeast Alaska, abnormal dryness also continued this week amid low snow levels.

In Hawaii, widespread drought and abnormal dryness continued this week. Wetter weather associated with trade winds and a remnant frontal system allowed for a reduction in moderate drought coverage in central Kauai. On the Big Island, severe drought in the north slightly increased in coverage due to short-term precipitation deficits and impacts to vegetation there.

The Republic of the Marshall Islands (RMI) continues with the pattern of dryness that has been observed last week. Precipitation totals have remained very low across each member island, ranging from 0-0.67 of rain. Mili received no precipitation this week and Utirik received 0.67 of rain this week. The continual dryness has led to increasing concerns for all islands. Stations like Mili, Utirik, and Alingalapalap may potentially see one-category degradations next week, but will remain at the current classifications.

Most islands in the Federated States of Micronesia (FSM) are seeing no drought or abnormal dryness. There are a few exceptions, though, as Yap and Pingelap continue with drought due to below average weekly precipitation. Kapingamarangi remains abnormally dry with 0.7 of rain. However, there are increasing concerns for some stations, as they may face the potential for abnormal dryness in the coming weeks if low weekly precipitation persists. Lukunor and Kosrae only received 0.11 and 0.33 this week, respectively. Data were not available for analysis at Fananu and Ulithi this week.

For the Marianas Islands, Saipan International Airport received 0.60 of rain Wednesday, marking the first week where precipitation has met the requisite 1 for the Saipan area, with 1.04 of rain. Whether this marks a change of pace for the Saipan area remains to be seen. Rota Airport has recorded 0.54 of rain as of this week. The Guam WFO has recorded 0.72 of rain this week as well. Both Guam and Rota recorded at least a half inch of rain this week, but the abnormal dryness classification will remain for these two sites. Overall, The Marianas Islands has started seeing beneficial precipitation that hasn't been observed in a while.

The Republic of Palau has seen beneficial rains for many places last month. March 2025 monthly precipitation has been favorable for many parts of the large island of Babeldaob. For example, regions such as Melekeok and Ngeremlengui received anywhere from 8-10 of rain last month. The southern island of Peleliu also received satisfactory precipitation last month, between 6-8 of rain. Additionally, The WSO Palau station recorded 3.17 of rain this week. Koror has only received 0.67 of rain, but the pattern of precipitation is not consistently dry. Additionally, VHI levels have demonstrated to be satisfactory, with values ranging from 48 to 60 all around Babeldaob.

American Samoa has also seen good precipitation. Pago Pago has seen just under an inch of rain this week, at 0.92. However, the Toa Ridge and Siufaga Ridge have not had any precipitation records for April. Given their precipitation totals for last month (10.62 and 2.65), the situation for both ridges differs considerably. Given satisfactory precipitation measurements for the island of Tutuila, American Samoa currently remains free of drought or dryness.

Looking Ahead

Between Wednesday, April 16 and the evening of Monday, April 21, the National Weather Service Weather Prediction Center is forecasting widespread heavy rainfall in parts of the central U.S., especially along east and south of the Interstate 44, 35 and 70 corridors in Oklahoma, Kansas, Missouri, Arkansas, Illinois and Indiana. Precipitation amounts may reach or exceed 3 inches from eastern Oklahoma northeast through St. Louis into eastern Illinois. The forecast calls for precipitation amounts from 0.25-1 inches in parts of the Rocky Mountains, with locally higher amounts possible, especially from far northern New Mexico north to southern Montana. Precipitation amounts from

0.5-1.25 inches, with localized higher amounts, are forecast from southeast Minnesota east through Wisconsin and Michigan. Farther east, weather along the Atlantic Coast is forecast to be mostly dry.

For the period from April 22-26, the National Weather Service Climate Prediction Center forecast favors above-normal precipitation in much of the central and southern U.S., especially in Oklahoma, Texas, Arkansas and Louisiana. Warmer-than-normal temperatures are also favored across most of the contiguous U.S., especially in the Southeast. Drier-than-normal weather is slightly favored in northwest California and coastal areas of Oregon and Washington.

In Hawaii, warmer- and wetter-than-normal weather is strongly favored from April 22-26. In Alaska, above-normal precipitation is favored for April 22-26 in most areas outside of the North Slope. Colder-than-normal temperatures are favored in the central and eastern thirds of Alaska, while warmer-than-normal temperatures are likelier in southwest Alaska and the Aleutian Islands.

Author(s)

Curtis Riganti, National Drought Mitigation Center

Daniel Whitesel, National Drought Mitigation Center