

National Drought Summary for September 9, 2025

Summary

Abnormal dryness (D0) and short-term moderate (D1) to severe (D2) drought continued to expand across the Lower to Middle Mississippi Valley, Ohio Valley, Central Appalachians, Northeast, and Southeast. However, heavy precipitation (2 inches or more) resulted in a 1-category improvement to central and eastern portions of Kentucky and Tennessee. Enhanced moisture, associated with Hurricane Lorena in the East Pacific, led to locally heavy precipitation and drought improvements to parts of the Desert Southwest. Following a relatively wet week for this time of year, minor improvements were made to parts of Oregon. Elsewhere, little to no changes were warranted for the Pacific Northwest and California. A strong cold front for early September triggered heavy precipitation and drought improvements across New Mexico and the Rio Grande Valley of Texas. Much of the Central to Northern Great Plains and Upper Mississippi Valley remained drought-free. 7-day temperatures (September 2-8) averaged below-normal across most of the central and eastern U.S. with above-normal temperatures limited to the Pacific Northwest, Northern Intermountain West, Great Basin, and California. Widespread drought of varying intensity continued for Hawaii, while Alaska and Puerto Rico remained drought-free.

Northeast

Following a two to three-category degradation across New England and northeastern New York from August 5th to September 2nd, additional degradations were warranted this past week. Based on 30 to 90-day SPI, soil moisture, and 28-day average streamflow, extreme drought (D3) was added to New Hampshire. Although 0.75 to 1.5 inches of precipitation limited further worsening of drought conditions across Maine, 28-day average streamflow have declined during the past month. Another week with below-average precipitation led to the expansion of moderate drought (D1) across parts of western Maryland, western Pennsylvania, New York, and West Virginia. 60-day SPI along with NASA SPoRT and/or NLDAS soil moisture supported adding severe drought (D2) to portions of West Virginia.

Southeast

Similar to the Northeast, a very dry August and start to September resulted in degradations across Virginia. Short-term moderate (D1) drought was added to parts of the Virginia Piedmont. The rapid onset of drought and its intensification is ongoing across west-central Alabama with expanding short-term moderate (D1) to severe (D2) drought. The one exception to the worsening conditions in Alabama was near the border with Tennessee where small improvements were made following more than 2 inches of precipitation this past week. Increasing 30-day precipitation deficits coupled with declining soil moisture led to increasing abnormal dryness (D0) coverage across portions of the Carolinas, Georgia, and northern Florida. Heavy precipitation (2 to 6 inches) led to a 1-category improvement to south Florida.

South

Heavy precipitation (1.5 to 2 inches or more) supported a 1-category improvement to central and eastern Tennessee, while 30 to 60-day SPI along with soil moisture indicators resulted in the expansion of severe drought (D2) across western Tennessee, northern Mississippi, and northeastern Arkansas. Increasing 30 to 60-day precipitation deficits supported extending abnormal dryness (D0) south to the Mississippi Gulf Coast. For the long-term drought areas designated in Texas, a round of heavy precipitation (more than 1.5 inches) this past week resulted in 1-category improvements. Based on the 120-day SPI and NASA SPoRT soil moisture, D0 was expanded across southwestern Oklahoma with the addition of a small moderate drought (D1) area. 30 to 60-day SPIs along with declining soil moisture supported an increasing coverage of D0 across the Texas Panhandle and Edwards Plateau.

Midwest

Widespread 1-category degradations were warranted for much of central and southern Missouri based on 30 to 60-day SPI, soil moisture, NDMC blends, and impact reports. Poor pasture conditions, low farm pond levels, and increasing stress on soybeans have been reported across southwestern and south-central Missouri. Short-term moderate drought (D1) continues to expand across Illinois, eastern Indiana, Ohio, and western Kentucky due to a multi-week period of below-normal precipitation. The degradations are consistent with 30 to 60-day SPI at various soil moisture indicators. Impacts in Ohio include rapid crop dry down, water hauling, low farm ponds, and poor pasture conditions. For southwestern and west-central areas of Illinois, ecological drought impacts (trees prematurely dropping leaves) and agricultural impacts (poor bean production) are being reported. In contrast to these widespread degradations, heavy precipitation (more than 2 inches) supported a 1-category improvement to southeastern Kentucky.

High Plains

Heavy precipitation (more than 2 inches) occurred in D-nada areas of central Kansas, but significant precipitation (1.5 to inches) led to a minor decrease in abnormal dryness (D0) in southwestern Kansas. Conversely, a slight increase in D0 and moderate drought (D1) was made to eastern Kansas. Significant precipitation (more than 0.5 and locally 2-3) supported improvements across southern Colorado, while worsening SPIs led to a slight expansion of severe (D2) to extreme (D3) drought for northern Colorado. A majority of the Dakotas, Nebraska, and eastern Wyoming remain drought-free.

West

Heavy precipitation (1 to 2.5 inches) supported a decrease in severe (D2) to extreme (D3) drought around the Albuquerque, Santa Fe, and Las Cruces areas of New Mexico. In addition, NDMCs long-term drought blend was used as guidance. Locally heavy precipitation led to improvements across portions of southeastern Nevada, southwestern Utah, and western to

southern Arizona. Conversely, the continued drier-than-normal Monsoon (60-day precipitation averaged 50 percent below normal) supported an expansion of extreme drought (D3) for eastern Arizona. A favorable response to heavy precipitation (2 to 2.5 inches) two weeks ago led to the removal of extreme drought (D3) in southwestern Montana. Farther to the north, a 1-category degradation was made in northwestern Montana after a reassessment of longer term metrics including the NDMC blend. A small increase in extreme drought (D3) in eastern Washington was made to match up better with 6-month SPI. An unusually wet start to September resulted in small areas of improvement to Oregon. Elsewhere across the Pacific Northwest and California, no changes were needed.

Caribbean

Recent precipitation along with decreasing precipitation deficits led to a reduction in the coverage of abnormal dryness (D0). Stream levels have recovered in the northeast but remain on the lower side across the eastern interior and southeast.

Spotty but briefly heavy showers dotted the U.S. Virgin Islands, with totals during the drought-monitoring period at more than a dozen volunteer (CoCoRaHS) observation sites ranging from 0.41 to 1.80 inches. However, there was negligible groundwater response from the rain, with depth to water at three U.S. Geological Survey wells remaining nearly steady. At the Adventure 28 Well on St. Croix, depth to water was more than 18 feet all week, greatest since mid-November 2024. Meanwhile, Standardized Precipitation Index (SPI) values continued to support neither dryness nor drought on St. Thomas and St. John, in part due to residual effects from rainfall associated with last months brush with Hurricane Erin. However, moderate drought (D1-S) persisted on St. Croix, with the clearest drought signal appearing in the 3-month SPI data. East Hill, St. Croix, received just 1.41 inches of rain (45% of normal) during August, with a little over an inch falling during the first 9 days of September.

Pacific

Precipitation this past week resulted in the removal of abnormal dryness (D0) across interior northeastern Alaska. D0 was maintained for the Kenai Peninsula and southeastern Alaska.

Hurricane Kiko tracked northeast of Hawaii on September 8 with 24-hour precipitation amounts (according to CoCoRaHS) of only around 0.10 inch for northern and eastern areas of the Big Island. Based on precipitation averaging less than 50 percent of normal from June through August, severe drought (D2) was increased in coverage across parts of the Big Island and Oahu.

A fairly typical wet season pattern remained in place across the U.S.-Affiliated Pacific Islands, keeping drought coverage at a minimum. In the Republic of the Marshall Islands (RMI), a no data label was placed on Utirik, Wotje, and Mili, as no recent rainfall reports were available for those atolls. Elsewhere in the RMI, Kwajalein retained a designation of abnormal dryness (D0), with 1.33 inches of rain reported during the first 9 days of September. Meanwhile, neither dryness nor drought was noted for any locations in the Marianas, the Republic of Palau, and the Federated States of Micronesia. Drier-than-normal weather has been reported in recent

weeks in American Samoa, but long-term wetness has precluded the development of abnormal dryness. American Samoas Pago Pago International Airport, on track for one of its wettest years on record, has received year-to-date rainfall totaling nearly 140 inches. (The annual airport record of 191.39 inches was set in 2020.) Through September 9, month-to-date rainfall at Pago Page International Airport has totaled 1.92 inches.

Looking Ahead

The drier pattern is likely to persist across much of the eastern and central U.S. through September 15. Along with the continued dryness dating back to August, a transition to warmer-than-normal temperatures is underway throughout the central U.S. and summerlike heat is forecast to expand east across the Mississippi and Ohio Valleys. From September 13 to 15, maximum temperatures are expected to reach the upper 90s to near 100 degrees F from St Louis south to Memphis. Another week of heavy rainfall is forecast to affect the southern third of the Florida Peninsula and portions of New Mexico. Showers and thundershowers will shift eastward from Oregon and the Northern Intermountain West to the Northern Great Plains.

The Climate Prediction Centers 6-10 day outlook (valid September 16-20, 2025) favors above-normal temperatures for the nearly the entire lower 48 states, southeastern Alaska, and Hawaii. The largest above-normal temperature probabilities (70-80 percent) are forecast across the Mississippi Valley. The outlook leans towards the drier side across most of the Northeast, Mid-Atlantic, Ohio and Tennessee Valleys, and Lower Mississippi Valley. Above-normal precipitation is more likely for the Upper Mississippi Valley, Northern to Central Great Plains, Rockies, and Southwest. The outlook also favors above-normal precipitation for most of Alaska and Hawaii.

Author(s)

Brad Rippey, U.S. Department of Agriculture

Brad Pugh, NOAA/CPC