

# National Drought Summary for September 23, 2025

## Summary

: It was a challenging period for drought monitoring, with a broad mix of improvement and deterioration. Additionally, a significant rainfall event was underway in parts of the central, eastern, and southern U.S. when the drought-monitoring period ended early Tuesday. Any precipitation that fell after the Tuesday cutoff will be considered for next weeks map. Broadly, precipitation fell across the Plains, Midwest, and mid-South, mostly from the central Rockies to the western slopes of the Appalachians. Locally significant showers also dotted the Southwest, providing limited drought relief but triggering flash flooding. In contrast, mostly dry weather prevailed in the Northwest, Intermountain West, Deep South, and along much of the Atlantic Coast.

## Northeast

As the drought-monitoring period ended, rain overspread the western slopes of the Appalachians. However, for the majority of the region, worsening drought highlighted another dry week. Extreme drought (D3) expanded across northern New England, where impacts included poor crop and pasture conditions, along with low streamflow, low lake levels, and groundwater shortages. Some additional D3 was also introduced in the central Appalachians, including parts of West Virginia and neighboring states. According to the U.S. Department of Agriculture, topsoil moisture in agricultural regions was rated at least 75% very short to short on September 21 in New York, Vermont, New Hampshire, Maine, and West Virginia.

## Southeast

Much of the Southeast experienced worsening flash drought, amid a warm, dry period. There were significant expansions of severe drought (D2) in Alabama, Georgia, and northern Florida, as well as western Virginia. Two exceptions to the dry pattern were ongoing showers across southern Florida and rain along the middle Atlantic Coast associated with a low-pressure system. By September 21, Southeastern topsoil moisture rated very short to short ranged from 35% in Florida to 59% in Georgia, according to the U.S. Department of Agriculture, while South Carolina led the region with 30% of its pastures rated very poor to poor.

## South

Rain arrived late in the drought-monitoring period across the northern tier of the region. Elsewhere, hot, mostly dry weather dominated. On September 21, prior to the rains arrival, topsoil moisture as reported by the U.S. Department of Agriculture was rated 78% very short to short in Tennessee, along with 71% in Arkansas. By September 23, a core area of severe to extreme drought (D2 to D3) existed across the mid-South, including parts of Arkansas and Tennessee. Statewide, 40% of the pastures in Arkansas were rated very poor to poor on that date.

## **Midwest**

Late-arriving rains made for a messy drought map, showing a variety of changes. Some of the heavier rain fell from Missouri to Ohio, although not all areas received significant moisture. On September 21, prior to the rain, topsoil moisture across the lower Midwest was more than 70% very short to short in five states, led by Ohio (88%). On that date, 50 to 60% of the pastures were rated very poor to poor in Illinois, Kentucky, and Ohio.

## **High Plains**

Most of the region is free of drought or received drought-easing precipitation, including some high-elevation snow in the central Rockies. Although rain slowed fieldwork, including summer crop harvesting and winter wheat planting, moisture should benefit rangeland, pastures, and fall-sown crops.

## **West**

Worsening drought in parts of the Northwest contrasted with locally heavy showers farther south. In the Southwest, those showers led to targeted drought improvement, but also resulted in spotty flash flooding in some of the nation's driest locations, including Death Valley, California. Farther north, the U.S. Department of Agriculture reported that statewide topsoil moisture (on September 21) was rated 92% very short to short in Washington, along with 80% in Oregon. Winter wheat planting has been advancing quickly in Washington and was 58% complete by September 21. Any fall-sown Northwestern crops will soon need moisture for proper autumn establishment. Currently, at least 45% of the rangeland and pastures in all Northwestern States were rated very poor to poor, led by Montana (61%).

## **Alaska, Hawaii, and Puerto Rico**

Suddenly wet weather across southeastern Alaska eradicated the abnormal dryness (D0) that had developed in recent weeks. Ketchikan received more than 15 inches of rain from September 15-22.

There were no changes to the depiction in Hawaii, with drought covering more than two-thirds (69%) of the island chain, although drier-than-normal weather persisted across much of the state.

Puerto Rico received locally heavy showers, chipping away at the eastern edge of the abnormal dryness (D0) in eastern sections of the commonwealth.

## **Virgin Islands**

This week, heavy showers and thunderstorms that developed over the U.S. Virgin Islands brought significant rain, improving the dry conditions across the islands.

Several weather stations on St. Croix reported heavy rainfall, including VI-SC-10 in

Christiansted (1.6 E) and VI-SC-30 (1.7 SW), which recorded 10 and 9.67 inches of rain, respectively. In addition, VI-SC-23 (Christiansted 6.5 W) and VI-SC-34 (Frederiksted 1.9 NE) recorded 6.28 inches and 5.79 inches of rainfall, respectively, while VI-SC-20 (Frederiksted 1.7 ESE) reported 3.65 inches. The 1-month Standardized Precipitation Index (SPI) value for East Hill improved from -1.18 last week to 1.44 this week. Additionally, the SPI values for the past 3, 6, 9, and 12 months are all positive, indicating an overall improvement across the island due to the recent heavy rains. According to the USGS, the groundwater level at Adventure 28 Well in St. Croix decreased to 18.31 feet on September 23, 2025, down from 18.82 feet the previous week. However, this level is still higher than the recording from August 24, which was 17.93 feet. As a result, St. Croix has improved from short-term moderate drought (D1-S) to abnormally dry (D0-S) conditions due to recent heavy rains.

This week, St. John experienced heavy rainfall across the island. Windswept Beach (VI-SJ-3) recorded 4.38 inches of rain, while VI-SJ-5 (Cruz Bay 1.6 E) reported 5.21 inches. All Standardized Precipitation Index (SPI) values indicate that the island is currently experiencing normal conditions. As of September 23, 2025, the water level at the Susannaberg DPW 3 well (St. John, USVI) measured 11.15 feet below the land surface, showing a decrease from last week's measurement of 12.32 feet. Overall, due to the recent rainfall, St. John has improved from abnormally dry conditions to drought-free status.

St. Thomas experienced heavy rainfall across the island, with significant totals reported. The rainfall at VI-ST-13 (Charlotte Amalie, 1.2 NNW) recorded 2.79 inches, although there are two days of missing data. In addition, VI-ST-15 (Charlotte Amalie West, 1.3 N) observed 2.40 inches of rain. On September 23, 2025, the depth of the water level in the Grade School 3 well in St. Thomas was measured at 6.62 feet below the land surface, showing a slight decrease from the previous weeks level of 5.69 feet. At Cyril E. King Airport, all Standardized Precipitation Index (SPI) values for 1 to 12 months shifted significantly from negative to positive, indicating that St. Thomas is now drought-free.

## ***Looking Ahead***

Rainfall will continue to shift southward and eastward, resulting in a boost in soil moisture in many areas experiencing short-term drought. Five-day rainfall should reach 1 to 3 inches or more across much of the eastern U.S., as well as portions of the Gulf Coast States. Once rain ends across the Plains and Midwest, dry weather will prevail for the next several days. Dry weather should extend into the Northwest until late in the weekend, when showers will arrive along the northern Pacific Coast. Elsewhere, a late-season monsoon surge will result in unusually heavy showers for this time of year in parts of the Southwest, leading to another round of possible flash flooding.

The NWS 6- to 10-day outlook for September 30 October 4 calls for near- or above-normal temperatures nationwide, with the north-central U.S. having the greatest likelihood of experiencing warmer-than-normal weather. Meanwhile, near- or above-normal precipitation across most of the country should contrast with drier-than-normal weather in a band stretching from the southern Plains into the Great Lakes region and the Northeast.

**Author(s)**

Brad Rippey, U.S. Department of Agriculture

Tsegaye Tadesse, National Drought Mitigation Center