

National Drought Summary for September 2, 2025

Summary

This U.S. Drought Monitor (USDM) week saw widespread degradation in drought-related conditions across areas of the Midwest, Mid-Atlantic, and Northeast where precipitation during the past 30-day period has been below normal. In these areas, rainfall deficits ranged from 3 to 5 inches with the largest deficits observed across areas of New England and Lower Midwest. Elsewhere, short-term dryness and drought impact reports from the agricultural sector led to degradations in isolated areas of the Southeast and South. For the week, most of the eastern half of the conterminous U.S. experienced unseasonably cooler temperatures, while temperatures out West were above normal, especially across the Pacific Northwest and Desert Southwest. In the West, conditions were generally dry, however, some isolated monsoon thunderstorm activity was observed in the Southwest, Sierra Nevada Range of California, Great Basin, and in the Rocky Mountains. In the Pacific Northwest, continued dryness as well as declining streamflow and soil moisture levels led to expansion of areas of exceptional drought in the Idaho Panhandle. In terms of reservoir storage in the West, Californias reservoirs continue to be at or above historical averages for the date (September 2), with the states two largest reservoirs, Lake Shasta and Lake Oroville, at 104% and 112% of average, respectively. In the Southwest, the U.S. Bureau of Reclamation is reporting (September 1) Lake Powell at 29% full (44% of average for the date), Lake Mead at 31% full (52%), and the total Colorado system (September 1) at 38% of capacity (compared to 44% of capacity the same time last year).

Northeast

On this weeks map, widespread degradations were made on the map including expansion of areas of drought in West Virginia, Pennsylvania, New Jersey, New York, Vermont, New Hampshire, and Maine. The most severe drought in the region is currently centered on areas of central Maine and northern portions of Vermont and New Hampshire. In these areas, numerous observing stations reported precipitation totals for the past three-month period that were in the top-5 driest on record including Barre, Vermont (-6.76-inch departure from normal; driest on record), Berlin, New Hampshire (-3.95 inches; driest on record), and Portland, Maine (-5.87 inches; 3rd driest on record), according to data from the Southeast Regional Climate Center (SERCC). Moreover, numerous streams and rivers across the region were reporting streamflows that are well below normal levels, according to the U.S. Geological Survey. For the week, much of the region was quite dry; however, some light rainfall accumulations (<2 inches) were observed across isolated areas New York, Connecticut, Massachusetts, New Hampshire, and Vermont. Average temperatures were below normal across most of the region, especially in the southern extent, where temperatures were 8 to 12 degrees F below normal.

Southeast

During the past week, light-to-moderate rainfall accumulations were observed across isolated areas in the southern extent of the region in Florida, southern Georgia, southeastern South

Carolina, and western Alabama, with the heaviest accumulations (ranging from 3 to 4 inches). On the map, dryness during the past 30-day period led to introduction of Abnormally Dry (D0) areas in the Carolinas and Georgia as well as introduction of a small area of Severe Drought (D2) in southwestern Alabama where 30-day rainfall departures ranged from 3 to 5 inches. In South Florida, improving conditions during the past 30-day period led to some minor improvements on the map. In terms of average temperatures for the week, most of the region experienced well-below-normal temperatures, with the greatest anomalies (4 to 8+ degrees F) observed across the Carolinas, central Georgia, and northern Alabama.

South

On this weeks map, improvements were made in eastern Texas, northern Louisiana, northern Arkansas, and central Oklahoma in response to locally heavy rainfall (ranging from 2 to 6+ inches) observed during the past week. Elsewhere, short-term dryness led to introduction of areas of Abnormally Dry (D0) in areas of Texas including the Panhandle and Edwards Plateau. In Tennessee, degradations were made on the map in central and western portions in response to precipitation shortfalls (1 to 4 inches) during the past 30-day period. In terms of hydrologic conditions in Texas, the states reservoirs (cumulatively) were 77% full with many in the eastern part of the state in good condition (over 90% full), while numerous others in the western portion of the state continue to experience below-normal levels, according to Water Data for Texas (September 3). For the week, average temperatures were below normal (2 to 8 degrees F) across most of the region with the exception of southern and western portions of Texas where temperatures were 1 to 5 degrees above normal.

Midwest

Widespread degradations were made across the region in response to precipitation shortfalls (ranging from 2 to 4+ inches) during the past 30-day period. Record to near-record dryness (for the past 30-day period) was observed at numerous observing stations across the region including Cincinnati Airport (AP), Ohio (-2.71 inch departure from normal; driest on record), Columbus AP, Ohio (-3.1 inches; driest on record), Springfield, Illinois (-3.21 inches; 2nd driest on record), and Springfield AP, Missouri (-3.45 inches; driest on record), according to the SERCC. Additionally, numerous drought impact reports (agricultural sector) were reported during the past seven days to the National Drought Mitigation Centers Condition Monitoring Observer Report (CMOR) system primarily from southern Missouri, north-central Kentucky, and southern Ohio. For the week, average temperatures were well below normal (2 to 15 degrees F) across most of the region, while northern Minnesota saw positive anomalies ranging from 2 to 6+ degrees F above normal.

High Plains

On this weeks map, improvements were made in the region, namely in northern Kansas, and southern Nebraska, where some isolated shower activity (1 to 5+ inches) during the past week continued to help chip away at the longer-term precipitation deficits. For the past 60-day period,

the Lincoln AP observed its 6th wettest on record with 10.24 inches (+3.69 departure from normal), according to the SERCC. Conversely, conditions deteriorated on the map in the southwestern extent of South Dakota where a combination of short and long-term precipitation deficits have persisted leading to expansion of areas of Moderate Drought (D1). For the week, above-normal temperatures (ranging from 2 to 10 degrees F) were logged across northern North Dakota, while much of the remainder of the region experienced below normal temperatures (ranging from 1 to 10 degrees F), especially in the southern extent of the entire region.

West

Out West, some isolated monsoon shower activity was observed across areas of the Desert Southwest, Sierra Nevada, and Great Basin as well as areas of the central and northern Rockies. Improvements were made on the map in Colorado, western Montana, southern Idaho, northern Utah, and southeastern California, while some degradations were made in north-central Arizona where monsoon-season precipitation has been below normal. According to the National Weather Service in Tucson, 2025 monsoon rainfall has been below normal across much of the state including Flagstaff, Phoenix, and Tucson. Conversely, a more active monsoon season has affected areas of New Mexico including southern and eastern portions of the state. For the week, average temperatures were below normal across areas of eastern California, central Great Basin, and areas of the Intermountain West including Utah, Colorado, and southern Wyoming where temperatures were 5 to 10 degrees below normal. In the Pacific Northwest, temperatures were above normal with anomalies ranging from 2 to 15 degrees F and the greatest departures observed in eastern Washington, Idaho Panhandle, and northwestern Montana.

Caribbean

In Puerto Rico, the map remained status quo for the week.

For the drought week of August 27th-September 2nd, 2025, relatively dry conditions were observed across the U.S. Virgin Islands (USVI) making this the second consecutive dry week since the passage of Hurricane Erins outer rain bands and locally heavy rainfall. This week was characterized by a mix of sunshine and periods of cloud cover, with generally scattered showers and a few thunderstorms. There were periods of elevated heat risk, especially late in the drought week with southeasterly flow bringing an increase in low-level moisture. Despite the approach of a mid-level trough from the northwest and moisture from a tropical wave passing south of the Islands, satellite-based (SPoRT IMERG) rainfall estimates over the last 7 days show that most of the precipitation remained southwest of the region.

On the island of St. Croix, weekly precipitation amounts ranged from 0.05-inch at VI-SC-29 (Frederiksted 2.5 NNE) to 1.04 inches at VI-SC-35 (Frederiksted 1.3 ENE). Intermediate precipitation values included 0.17-inch at VI-SC-24 (Christiansted 2.1 ENE, 3 days missing), 0.27-inch at VI-SC-23 (Christiansted 6.5 W), 0.30-inch at VI-SC-25 (Christiansted 4.4 W), 0.35-inch at VI-SC-34 (Frederiksted 1.9 NE), 0.39-inch at VI-SC-10 (Christiansted 1.6 E), an even

half-inch at VI-SC-20 (Frederiksted 1.7 ESE), and 0.54-inch of rain at VI-SC-30 (Christiansted 1.7 SW). The Adventure 28 Well maximum and minimum water levels below the land surface ranged from 18.06 feet (2:45 a.m., August 28th) to 18.50 feet (4:45 p.m., September 2nd). Though there were relatively small rises and falls in water level throughout the drought week, an overall decline was noted. The Standardized Precipitation Index (SPI) values at the 1-, 3-, 6-, 9-, and 12-month periods for East Hill (#672560) were, respectively: -1.13, -1.64, -0.31, -0.23, and +0.71. Values have worsened (decreased) for each of the time periods compared to last week, except for the 12-month SPI which stayed the same. Given the weekly observed rainfall amounts, groundwater levels, and SPI values, St. Croix's drought designation remains D1(S). The possibility of future degradation within the next few weeks will be monitored closely.

On St. John, weekly accumulated precipitation amounts ranged from 0.03-inch at VI-SJ-10 (Cruz Bay 3.1 NNW) to 0.90-inch at VI-SJ-8 (Cruz Bay 7.4 E). An intermediate total of 0.19-inch of rain was measured at Windswept Beach (VI-SJ-3). However, the observer noted 0.45-inch of rain fell shortly after this week's data cutoff, and therefore will be included in next week's precipitation total. The rainfall totals for the past three months are 7.26 inches in August, 2.07 inches in July, and 1.36 inches in June. The Susannaberg Dpw 3 Well maximum and minimum water levels below the land surface ranged from 12.43 feet (3:00 p.m., August 27th) to 12.67 feet (11:00 a.m., September 2nd). A slow decline in wellwater level was noted this week. The SPI values at the 1-, 3-, 6-, 9-, and 12-month periods for Windswept Beach were, respectively: +0.74, +0.19, +0.49, +0.51, and +0.68. Positive values at all the time ranges do not support any drought, despite the relatively light precipitation received this past drought week.

On the island of St. Thomas, weekly rainfall measurements included 0.16-inch at VI-ST-13 (Charlotte Amalie 1.2 NNW) and 0.17-inch at VI-ST-15 (Charlotte Amalie West 1.3 N). The Grade School 3 Well maximum and minimum water levels below the land surface ranged from 6.95 feet (3:00 p.m., August 27th) to 7.45 feet (9:00 a.m., September 2nd). A smooth decline in water level was noted during the week, except for a slight rise in water level towards the end of the period. The SPI values at the 1-, 3-, 6-, 9-, and 12-month periods for the Cyril E. King Airport (#11640) were, respectively: +0.04, -0.86, +0.41, +0.53, and +1.05, indicating similar numbers to last week. Though the weekly precipitation amounts were light and groundwater levels declined, drought-free conditions remain at St. Thomas.

Pacific

In Alaska, improving conditions led to the removal of areas of Abnormally Dry (D0) along the North Slope, Interior, and Southcentral Alaska, while D0 was introduced across the central Gulf Coast and Southeast Alaska due to combination of below-normal rainfall during the past 30 to 60 days and above-normal temperatures during the past few weeks.

In the Hawaiian Islands, dry conditions prevailed across most of the island chain except for some light accumulations on the leeward side of the Big Island. Overall, the past 30-day period has been dry across the majority of the state aside from some modest rainfall events that helped to improve monthly totals to average or above. On this week's map, areas of Abnormally Dry (D0) were added on the leeward side of the Big Island, and North Shores of Oahu and Kauai.

The U.S.-Affiliated Pacific Islands (USAPI) domain was primarily dominated by such features as trade wind troughs, weak circulations, the InterTropical Convergence Zone (ITCZ), the Monsoon Trough (MT), and regions of low-level convergent flow. South of the equator, the drought week was characterized by generally fair weather, subtropical ridging, and light precipitation on most days. Towards the end of the week, cloudiness and shower activity were increasing across the region, as an east-west-oriented ridge axis approached the region from the south, and a trough line approached from the north-northeast. Increasingly moderate-to-fresh southeast winds were occurring over the region as the ridge axis approached from the south. No major tropical cyclones were noted during this past drought week over the USAPI domain. Perhaps the most active weather occurred over the western Federated States of Micronesia (FSM) area and the nearby Republic of Palau. A monsoon pattern dominated this region during most of the past week. As the monsoon pattern evolved and drifted northward (accompanied by a surge in the monsoon flow), west-southwest winds set up over Palau and Yap, accompanied by very moist flow and periods of gusty showers and locally heavy rain. These west-southwest winds, which flow contrary to the usual easterly trade winds at these low latitudes are consistent with the location of the so-called Monsoon Trough (MT). Towards the end of the drought week, a subtropical ridge had settled across Palau and Yap, allowing winds and showers to briefly diminish.

Over the tropical western North Pacific, from about the equator to 10N and 130E to 170E (which encapsulates most of the USAPI region), quantitative precipitation estimates (QPE) from SPoRT IMERG satellite imagery ranged from about 0.5-4.0 inches. From about 10-15N along the same longitude band (which includes most of the Commonwealth of the Northern Mariana Islands (CNMI)), only 0.5-1.0 inch amounts were generally noted. The satellite estimated rainfall for the CNMI region appears underdone in comparison to the rain gauge measurements described below. This may be due to a combination of factors such as the highly localized and rapidly changing convective conditions over this area, the limitations of satellite sensors in seeing through the tops of extremely deep convective clouds, and infrared satellite sensor inaccuracies when estimating rainfall rates based on cloud-top temperature which varies widely over the oceanic tropics. Local orographic enhancement may also be a partial contributor. Over American Samoa south of the equator, 0.5-inch or less of precipitation was estimated.

Across American Samoa, three-quarters of an inch of rain was measured at the Pago Pago WSO Airport, well shy of the 2-inch minimum requirement to meet most water needs for a week. The preliminary rainfall accumulation for the month of August is 3.45 inches (about half of its normal 6.93 inches), though 7 of the past 11 months have registered as wet (i.e., 8 inches or more). For the higher elevation sites of Siufaga Ridge and Toa Ridge, the past weekly and preliminary August monthly rainfall totals are, respectively: 0.49, 1.43 and 0.12, 1.15, which fall well short of minimum water requirements for a week and month. Despite the recent dryness, Tutuila maintains its dryness- and drought-free designation.

For the Commonwealth of the Northern Mariana Islands (CNMI), the Rota Airport measured 2.95 inches of precipitation for the past week and 14.79 inches for the August total (preliminary), both of which registered wet (i.e. met or exceeded the weekly and monthly precipitation thresholds of 1-inch and 4-inches, respectively). This marks the 8th consecutive wet week for Rota, as well as the third consecutive wet month. Rota continues to be drought-

free. The Saipan International Airport reported 3.59 inches of rain this past drought week and 8.61 inches for August (preliminary), easily surpassing weekly and monthly water requirements. This marks the third consecutive wet month for the site. Accordingly, Saipan retains its drought-free status this week. In Agat, 2.38 and 11.58 inches of precipitation were noted for the past week and August (preliminary), respectively. Eleven of the past 12 weeks have been wet, as have the last 3 months. Dededo measured 2.04 inches of precipitation this week, marking the 8th consecutive wet week. Their August preliminary rainfall total is 9.35 inches. Tinian measured 1.49 inches of rain this past drought week, with 4.88 inches reported for the month of August (preliminary). Tinian was also wet in July, and remains drought-free. The island territory of Guam recorded 3.91 inches of rain this week, which is nearly as much as the monthly rainfall requirement (4 inches). This is now the tenth consecutive wet week. Guam received 13.06 inches of rain (provisional) in August, and the last three months were wet. The island territory remains drought-free this week.

The majority of stations across the Federated States of Micronesia (FSM) came in with adequate rainfall amounts this week to meet most water needs. Precipitation during the past week and for the month of August (provisional) at the FSM stations include, respectively: Pohnpei (6.59 inches, 22.54 inches), North Fanif (5.19, 14.15), Lukunoch (5.01, 12.20), Kosrae (4.56, 26.17), Chuuk (4.34, 13.74), Rumung (4.05, 15.69), Yap Island Airport (3.56, 10.23), Woleai (3.41, 10.65), Pingelap (2.52, 11.68), Kapingamarangi (1.79, 10.11), and Nukuoro (1.48, 7.55). Most of these reporting stations this week were wet, except for Kapingamarangi and Nukuoro which were dry. A few other statistics include: 11 of the past 12 weeks were wet, as were the past 11 months at Pohnpei; 4 consecutive wet months at North Fanif; 9 consecutive wet months at Lukunoch; 12 consecutive wet weeks and 11 consecutive wet months at Kosrae, 8 of the past 11 months were wet at Chuuk; 9 of the past 11 months were wet at the Woleai atoll; July and August 2025 were both wet months at Kapingamarangi; and 9 of the past 11 months were wet at Nukuoro. Dryness- and drought-free conditions continue this week at all these locations, including Nukuoro despite the marginal dryness this past week and month. No analysis was possible this week at Ulithi and Fananu due to lack of rainfall data.

The Republic of Palau experienced another very wet week and month. Koror measured 5.75 inches of rain this past week, making 11 of the past 12 weeks wet. The preliminary August total is 19.33, making the last 11 months wet. For Airai (WSO Palau), the weekly rainfall accumulation totaled 6.48 inches, and the preliminary August total is 18.91 inches. Drought-free conditions persist in Palau.

In the Republic of the Marshall Islands (RMI), Automatic Weather Stations (AWS) were installed in the atolls to gather precipitation data. The greatest precipitation total this week occurred at Ailinglaplap, where 6.10 inches of rain was reported, marking the 5th straight wet week. Ailinglaplaps drought designation remains as drought-free. The next highest weekly rainfall amount was 4.83 inches at Kwajalein, with a provisional August total of 8.29 inches. The most recent week and month both registered as wet periods in Kwajalein. The last wet month reported at this site was in November of last year (2024) when 8.83 inches of rain fell. Despite these statistics, Kwajaleins designation remains at D0-S (short-term dryness). Mili measured 3.90 inches of rain this week, with a preliminary August rainfall total of 12.09 inches. Mili remains drought-free this week. Majuro came in with 1.68 inches of rain this week which

registers as dry, though 9 of the past 12 weeks were wet. The provisional August total is 10.76 inches, and the last 3 months have been wet. Despite this most recent dry week, Majuro retains its drought-free depiction. Finally, 0.63-inch of precipitation fell at Utirik this week, with a preliminary August total of 4.29 inches. Utiiks drought designation remains as short-term moderate drought (D1-S). Due to the unavailability of rainfall data at Jaluit and Wotje, no analysis was performed at those stations.

Looking Ahead

The NWS Weather Prediction Center (WPC) 7-Day Quantitative Precipitation Forecast (QPF) calls for moderate to heavy precipitation accumulations across areas of the Desert Southwest (southeastern Arizona) in association with remnant moisture from Hurricane Lorena. Additionally, heavy rainfall is expected in southern Florida, while light-to-moderate accumulations are expected across areas of the Pacific Northwest, Rockies, Texas, Lower Midwest, and Northeast. The Climate Prediction Center (CPC) 6-10-day outlooks call for a moderate-to-high probability of above-normal temperatures across most of the West, Central and Northern Plains, and Gulf Coast region. Conversely, below-normal temperatures are forecasted for the Midwest, Mid-Atlantic, Northeast, and areas of eastern California and western Great Basin. In terms of precipitation, there is a low-to-moderate probability of above-normal precipitation across most of the conterminous U.S. with exception of areas of the Southwest, Upper Midwest, and New England in proximity to the Great Lakes and Canadian border where below-normal precipitation is expected.

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