

National Drought Summary for April 29, 2025

Summary

Strong thunderstorms and heavy precipitation again affected parts of the central and eastern Contiguous United States, although coverage was spotty in all but a few areas. Heavy to excessive rains (at least 2 inches) doused portions of the Plains, Mississippi Valley, Upper Southeast, and scattered to isolated sections of the northern and western Great Lakes, Ohio Valley, Carolinas, Northeast, and northern Rockies. In several sizeable areas of the Plains where there was relatively solid coverage of heavy precipitation, conditions improved significantly. Meanwhile, rainfall was negligible (several tenths of an inch at best) in most areas from the Rockies westward and in a few areas farther to the east, including much of southern and western Texas, the Oklahoma Panhandle, southeastern Kansas, central and western Nebraska, central and western North Dakota, a band from parts of the middle Mississippi Valley through the southern and eastern Great Lakes region, much of the immediate Gulf Coast, central North Carolina, central and eastern Virginia, and most of Florida and adjacent southeastern Alabama and southern Georgia. This led to another week with significant dryness and drought expansion and deterioration in the latter areas of the Southeast.

Northeast

Rainfall totals of 1.5 to locally over 3 inches soaked eastern and southern sections of Maine, northwestern Pennsylvania, and scattered locations in the rest of western Pennsylvania. Similar totals were isolated across the remainder of the region, but only a few tenths of an inch fell at best across most of southern New England, the East Coast Megalopolis and adjacent Maryland and Pennsylvania, and western New York. Despite the heavy rains, improvement was limited in southern Maine and lower New England, where deficient groundwater remains a concern. In addition, the locally heavy rains prompted some small-scale improvements in parts of north-central and northwestern Pennsylvania and central Vermont. Deterioration was limited to a few patches in northeastern Pennsylvania and adjacent New York and New Jersey. Severe drought (D2) persists from central and northern Maryland through south-central and east-central Pennsylvania.

Southeast

Heavy rains (1.5 to locally 4 inches) were common in a band across the southern Appalachians, northern Georgia, and a broad portion of Alabama. Dryness and drought in these areas mostly in northern Georgia improved. Scattered moderate rains with isolated heavy amounts were observed in southeastern Georgia and much of South Carolina. In contrast, little or no rain fell across southeastern Alabama, the southern tier

of Georgia, and most of Florida. Dryness and drought has been expanding and deteriorating quickly in these areas, especially across Florida. A majority of the Florida Peninsula is now entrenched in severe drought (D2) or worse, with extreme (D3) drought conditions identified in parts of the southern and northeastern Peninsula. Most areas from the central Carolinas northward through Virginia reported subnormal rainfall, leading to some areas of deterioration, mostly into moderate drought (D1) there. Over the last 60 days, most of the central and southern Florida Peninsula received less than half of normal rainfall, with a few areas recording less than one-quarter of normal.

South

The heaviest rain in the Contiguous United States fell on a band from central Oklahoma southwestward across the Red River (south) into part of northwestern Texas. An area covering several counties recorded 4 to locally 8 inches of rain. Lesser but still heavy amounts (over 2 inches) fell on many areas across the rest of northern, central, and eastern Texas, portions of Louisiana and Mississippi, part of southern Tennessee, and a few scattered locations across Arkansas. Rainfall during the current and past few weeks led to large areas of improvement across the central, northern, and eastern portions of the Texas dryness and drought coverage, in addition to north-central Oklahoma and the western portions of the state outside the Panhandle. Dryness and drought remains widespread across most of Texas outside the northeast and over western portions of Oklahoma, with some deterioration to D2 (severe drought) noted in the Oklahoma Panhandle, which missed the weeks heavy rains. A broad area of exceptional drought (D4) remained entrenched across a large swath in central and western Texas, though there was some erosion of its eastward extent. East of this area of solid drought coverage, most areas are free of dryness and drought, and locally heavy rains reduced the coverage even further in part of southeastern Mississippi. Small, isolated areas of abnormal dryness (D0) elsewhere were limited to northwestern Mississippi and eastern Tennessee. Arkansas is entirely free of any dryness or drought.

Midwest

Areas of heavy rain covered much of Iowa and Minnesota, continuing a wetter-than-normal pattern that has been in place for the last several weeks. Broad areas of widespread improvement were noted through northern Minnesota and a large part of interior Iowa. After the weeks improvements, severe drought (D2) is limited to a small part of the east-central Lower Peninsula of Michigan, and is completely removed from the Mississippi Valley. Dryness and drought coverage has not been as widespread across northern Missouri, central and northern Illinois, southern and northern Wisconsin, part of the central and southern Lower Peninsula of Michigan, and central Indiana. There was very little change to the drought depiction in these areas, although some small-scale adjustments were made based on recent precipitation observations.

In the areas of improvement across northern Minnesota and interior Iowa, precipitation surpluses exist for the last 90 days in sum, although longer-term moisture deficits continue.

High Plains

Precipitation totals varied significantly across this region this week, but more areas were hit by heavy rains and improving conditions than dryness and deterioration. The dry week led to deterioration across southwestern Kansas, southeastern Colorado, and much of the central tier of Colorado. Farther north and east, however, widespread heavy rains were noted in several swaths of the Plains and Wyoming, leading to reductions in the intensity and extent of dryness and drought. Improvements were most widespread across central and northwestern Kansas, and most of the state of South Dakota, where heavy rains were most widespread. Still, despite the improvement in many areas, 60-day precipitation totals were under 25 percent of normal in southwestern Kansas and southeastern Colorado, with less than half of normal reported in adjacent areas plus parts of central Kansas, central and northeastern Nebraska, and a few other scattered areas.

West

A band of moderate to heavy precipitation (1 to 3 inches) fell across southeastern and south-central Montana, plus isolated spots in eastern Idaho. The rest of the West Region was dry this past week, outside a narrow corridor of heavy rain in east-central New Mexico. As a result, dryness and drought eased its grip in these areas. In addition, some limited improvement was brought into northern and western Washington, and small parts of northern Montana, based on a re-assessment of conditions. Most observed changes, however, were for the worse. Conditions were broadly downgraded across interior northern Montana, and increasing moisture deficits led to the expansion of D0 (abnormal dryness) into southwestern Washington and much of northwestern Oregon. In addition, surface moisture depletion has become increasingly obvious across several areas in New Mexico, leading to a significant increase in D3 (extreme drought) coverage there. The dryness was more climatologically seasonable across Arizona, Nevada, and California, where conditions were unchanged this week.

Caribbean

Precipitation was unremarkable across the Commonwealth, and the region continued to be free of dryness and drought.

The U.S. Virgin Islands have received decent precipitation this week.

CoCoRaHS stations for St. Croix Island have recorded anywhere from 0.96 to 2.66 of rain for the week. Well water levels for the Adventure 28 well remained steady at 17.108 ft. St. Croix Island remains free of drought and dryness.

St. John Island received 0.09 to 2.2 of rain this week, according to the CoCoRaHS stations around the island. This rain has caused well water levels to rise compared to last week, as the Susannaberg DPW 3 well is now at 9.74 ft. St. John Island remains free of drought and dryness.

St. Thomas Island also remains drought free. Precipitation observations from CoCoRaHS ranged from 0.2 to 2.11. The Grade 3 School well is now at 3.44 ft., which is about a half-foot increase compared to last week.

Overall, much-needed rain has reached each of the islands, keeping them drought and dryness free.

Pacific

In northern parts of Southeast Alaska, April was quite wet and precipitation for the year is now not far from normal, so D0 has been removed from there. The central and southern D0 areas have not been quite as wet, and low mountain snowpack remains a concern, so D0 remains there.

Precipitation was closer to normal this week than last, with somewhat above-normal totals in western sections and subnormal amounts farther east. Amounts were not sufficient to improve conditions anywhere in the state. Persistently subnormal rainfall is stressing vegetation, crops, and grazing lands in northeastern parts of the Big Island according to ground reports and NDVI data. Therefore, D2 coverage has been expanded in northeastern sections.

The Republic of Palau received 1.5 inches at Koror for the week and 6.48 inches for the month, maintaining normal conditions.

The Mariana Islands saw another week of less than an inch of rainfall this past week. Saipan was degraded to extreme drought (D3-S) following several weeks of low precipitation and well below the necessary monthly 4 inches of precipitation. While Capitol Hill did see 1.22 inches and Saipan International Airport 0.49 inches this week, monthly totals were 2.16 inches and 1.76 inches, respectively. Tinian Airport only saw 1.63 inches for the month of April. Rota Airport saw 0.68 inches this week and is up to 2.72 inches for April, maintaining abnormally dry (D0-S) conditions for now. Guam saw between 0.4 inches at Agat Bay and 0.63 inches at Guam International Airport, with

respective monthly precipitation totals of 1.9 inches and 2.06 inches. The continued lack of substantial rainfall led to the introduction of moderate drought (D1-S) to Guam.

The Federal States of Micronesia were mixed. Most locations received more than 1.5 inches, maintaining their previous conditions. Pingelap received no precipitation this week following the past two weeks of little to no precipitation, leading to severe drought conditions (D2-S).

The Republic of the Marshall Islands (RMI) continues with the pattern of dryness that has been observed the last two weeks. Utirik and Wotje saw one-category degradations due to continued lack of adequate precipitation (0 and 0.12 inches, respectively). Ailinglapalap, Jaluit, Majuro and Mili received two or more inches of precipitation this week, though only Majuro has seen adequate precipitation for the month at 8.41 inches.

American Samoa has received below-average weekly precipitation. Pago Pago received 0.45 inches of rain this week. Its monthly precipitation totaled 6.59 inches, falling short of the required minimum weekly and monthly precipitation amounts and causing abnormally dry (D0-S) conditions.

Looking Ahead

During May 1-5, 2025, heavy rain (2 to locally 5 inches) is forecast for central and northeastern Texas, northern Louisiana, and southern Arkansas. Moderate to locally heavy totals (1 to 2.5 inches) are expected over much of Mississippi and Alabama, the central and southern Appalachians, the middle and upper Ohio Valley, Pennsylvania and adjacent New York and New Jersey, and a small portion of the central Great Lakes. Light to moderate totals (a few tenths to locally over an inch) is expected across the remainder of the eastern Contiguous United States, with the lowest amounts expected across coastal South Carolina, most of Georgia, and the northern and western sections of the Florida Peninsula. Several tenths to an inch are also forecast from the central and southern Plains westward through much of the Rockies, Nevada, and most of California, with locally higher amounts in some higher elevations of the Sierra Nevada and Great Basin. Little or none is forecast across the northern tier from the upper Mississippi Valley westward to the Pacific Coast, and in some climatologically drier parts of the Southwest. Warmer than normal weather is expected from the western Great Lakes through the northern Rockies and Intermountain West, with daily highs averaging 10 to 13 deg. F above normal in the northern Plains and adjacent areas. Meanwhile, cooler than normal conditions are anticipated from central and southern California through the Great Basin, southern Rockies, and central and western Texas. Highs are expected to average 8 to 10 deg. F below normal from western Texas through portions of the Great Basin and central through southern California.

The Climate Prediction Centers 6-10 day outlook valid May 6-10, 2025 favors subnormal precipitation across the Great Lakes, middle and upper Mississippi Valley,

the Ohio Valley, the interior Southeast, the mid-Atlantic region, the lower Northeast, and western New England. In contrast, enhanced chances for wetter than normal conditions cover Florida and the immediate southern Atlantic Coast, the Gulf Coast, the lower Mississippi Valley, the central and southern Plains and Rockies, most of the Great Basin, the Southwest, southeastern portions of Alaska, and Hawaii. Higher than normal temperatures are favored across roughly the northern two-thirds of the Contiguous United States, with odds exceeding 70 percent in the northern Plains and adjacent Mississippi Valley. Enhanced chances for warmer than normal weather also extend across Hawaii, especially central and western parts of the island chain. Increased odds for subnormal temperatures cover Florida, central and western Texas, the central and southern Four Corners region, and southeastern Alaska. Chances for significantly cooler than normal conditions exceed 50 percent across central and southern New Mexico.

Author(s)

Richard Tinker, NOAA/NWS/NCEP/CPC

Lindsay Johnson, National Drought Mitigation Center