

National Drought Summary for November 26, 2024

Summary

This U.S. Drought Monitor (USDM) week saw widespread improvement in drought-related conditions across areas of the Pacific Northwest and Northern California in response to a series of strong Pacific storms including a powerful atmospheric river that delivered significant rainfall accumulations to the lower elevation coastal areas and heavy mountain snow. In the coast ranges of Northern California, 7-day rainfall totals exceeded 25+ inches in some areas, according to preliminary data from the National Weather Service (NWS) California-Nevada River Forecast Center. The series of storms boosted mountain snowpacks above normal levels across the Cascades (Oregon, Washington), Blue Mountains (Oregon), Sawtooth Range (Idaho), and the northern and central Sierra. In the Desert Southwest, drought expanded and intensified on the map across areas of southern Nevada and Arizona in response to persistent dry conditions and record warm temperatures during the past 6-month period. In the Midwest, improving short-term conditions due to recent precipitation events across areas of the region led to widespread improvements in drought-affected areas. In the Northeast, light-to-moderate precipitation accumulations, including beneficial snowfall, led to a reduction of areas of drought coverage in Pennsylvania and West Virginia. In the Southeast, rainfall last week and overall improving conditions (soil moisture, streamflows) led to the removal of areas of drought on the map in Alabama, Georgia, and Florida.

In terms of reservoir storage in areas of the West, Californias reservoirs continue to be at or above historical averages for the date (November 25) with the states two largest reservoirs (Lake Shasta and Lake Oroville) at 111% and 105% of their averages, respectively. In the Southwest, Lake Powell is currently 37% full (59% of typical storage level for the date) and Lake Mead is 32% full (53% of average), with the total Lower Colorado system 42% full as of November 18 (compared to 43% full at the same time last year), according to the U.S. Bureau of Reclamation. In Arizona, the Salt River Project is reporting the Salt River system reservoirs 75% full, the Verde River system 57% full, and the total reservoir system 73% full (compared to 81% full a year ago). In New Mexico, the states largest reservoir along the Rio Grande is currently 7% full (17% of average). In the Pacific Northwest, Washingtons Franklin D. Roosevelt Lake is 90% full (103% of average for the date), Idahos American Falls Reservoir on the Snake River is 35% full (86% of average), and Hungry Horse Reservoir in northwestern Montana is 82% full (100% of average).

Northeast

On this weeks map, improvements were made in areas of Pennsylvania, West Virginia, and Maryland in response to precipitation observed during the past week. In Pennsylvania, much-needed rain and snow helped ease the wildfire threat and provided

a boost in soil moisture and hydrologic conditions. However, despite this weeks rain and snow, significant precipitation deficits (ranging from 4 to 12 inches during the past 120 days) and impacts remain across areas of the Northeast region. In New York, Governor Hochul declared a statewide drought watch (November 18) and elevated 15 counties to a drought warning status in response to precipitation deficits and declining streamflow and groundwater levels. In terms of snowpack conditions, the NWS National Operational Hydrologic Remote Sensing Center (NOHRSC) is reporting that the Northeast region is currently 28.8% covered by snow (area) with an average depth of 0.7 inches and a maximum depth of 18.2 inches.

Southeast

During the past week, light-to-moderate rainfall accumulations were observed across the region with the heaviest accumulations (ranging from 3 to 4 inches) observed in areas of the Florida Panhandle, northeastern Alabama, and northwestern Georgia. In response to the rainfall this week, as well as improving streamflow and soil moisture levels, areas of Severe Drought (D2) and Moderate Drought (D1) saw reductions on the map. Conversely, continued short-term dryness (1 to 4 inch rainfall deficits during the past 30-day period) in southeast Florida led to the expansion of Abnormally Dry (D0) areas. In terms of average temperatures for the week, the greatest anomalies (3 to 5+ degrees F) were observed across Virginia as well as in northern portions of Alabama, Georgia, and North Carolina, while Florida experienced unseasonably cool temperatures ranging from 2 to 6 degrees F below normal.

South

Across the region, generally dry conditions prevailed this week, especially in the western portion of the region, with little or no precipitation observed across the western half of Texas and Oklahoma. However, light to moderate rainfall (2 to 4+ inches) was observed in isolated areas of southern Louisiana and Mississippi leading to minor improvements in drought-affected areas of southeastern Mississippi. For the week, average temperatures were near normal across the southern extent of the region while northern portions ranged from 3 to 6 degrees F above normal. On the map, deterioration occurred in isolated areas of Texas including the Trans Pecos, South Texas, and the southern Edwards Plateau, while improvements were made in the Panhandle and east Texas. Looking at reservoir conditions in Texas, Water for Texas (November 26) was reporting statewide reservoirs at 72% full, with many reservoirs in the eastern part of the state in good condition, while numerous reservoirs in the western portion of the state were experiencing continued below-normal levels.

Midwest

On this weeks map, widespread improvements were made in response to improving conditions during the past 30-day period including beneficial rain and snowfall across areas of the region. Light to moderate snowfall accumulations (1 to 7 inches) were reported across northern Minnesota, northern Wisconsin, and Upper Peninsula Michigan. According to NWS NOHRSC, the Northern Great Lakes region is currently 43.4% covered by with an average depth of 1.1 inches and a maximum depth of 6.2 inches. For the week, average temperatures were above normal across the region, with anomalies ranging from 1 to 10 degrees F above normal and the greatest departures observed in northeastern Minnesota and Michigan's Upper Peninsula.

High Plains

On this weeks map, only minor changes were made in the region including in eastern Nebraska and western North Dakota. For the week, precipitation across the region was generally light and primarily restricted to eastern portions of the Dakotas and Nebraska as well as western and northern portions of Kansas. However, some isolated moderate-to-heavy snowfall accumulations were observed in the Dakotas last week, including 14 inches reported at Lake Metigoshe State Park in northern North Dakota. In terms of average temperatures, cooler-than-normal temperatures (3 to 9 deg F below normal) were observed across the Dakotas, while the southern portion of the region experienced temperatures 1 to 5 deg F above normal in eastern Nebraska and Kansas.

West

Out West, a series of powerful Pacific storms delivered heavy rain and mountain snow accumulations to the Pacific Northwest and Northern California. Impacts from the series of storms included damaging winds, major power outages, flash flooding, road closures, landslides, and debris flows. In the Coastal Range, an NWS observing station northwest of Santa Rosa, California reported a 7-day total of 24 inches of rain. Overall, the series of storms led to widespread removal of areas of drought on the map across the Pacific Northwest as well as areas experiencing short-term dryness across Northern California. Looking at the regional snowpack situation, the NRCS SNOTEL network is reporting (November 25) the following region-level (2-digit HUC) SWE levels: Pacific Northwest 179%, Missouri 78%, Upper Colorado 96%, Great Basin 125%, Lower Colorado 127%, Rio Grande 145%, Missouri 78%, Souris-Red-Rainy 128%, and Arkansas-White-Red 157%. In the Desert Southwest, areas of Extreme Drought (D3) expanded on the map this week in northwestern Arizona, extending northward into southern Nevada, in response to a combination of short and long-term precipitation deficits and record heat observed during the past 6-month period. Elsewhere in the region, the atmospheric river

last week boosted snowpack conditions in Montana, helping to improve drought-affected areas in the northwestern part of the state.

Caribbean

On this weeks map, no changes were made in Puerto Rico.

A polar trough and tropical wave brought rain to the U.S. Virgin Islands (USVI) during this U.S. Drought Monitor (USDM) week (November 20-26). Rainfall amounts varied from a few tenths of an inch on the northern islands to over 2 inches in the south on St. Croix. November has been very wet, with monthly rainfall totals so far about two times normal, and groundwater levels remain high. All 3 islands continued free of drought and abnormal dryness.

Pacific

On this weeks map, no changes were made in Alaska.

On this weeks map, no changes were made in Hawaii.

In the U.S.-Affiliated Pacific Islands (USAPI), sufficient rain has fallen over the last several months to keep most islands free of drought and abnormal dryness. Some southern parts of Micronesia have experienced a drying trend in the last month or two. During this U.S. Drought Monitor (USDM) week (November 20-26), several surface troughs moved in the easterly trade winds across Micronesia. They interacted with the Inter-Tropical Convergence Zone (ITCZ) over the Marshall Islands, producing abundant rainfall over the Marshalls and some portions of the Federated States of Micronesia (FSM), while an active trough brought frequent rain to American Samoa. The troughs were not as vigorous to the west and north, so weekly rainfall totals (as of the date of this analysis) were an inch or less over the Marianas and central to eastern parts of the FSM.

Recent weeks have been dry (below the weekly minimum of 2 inches needed to meet most water needs), and November has been dry (below the monthly minimum), at Chuuk and Kapingamarangi, where D0-S (abnormal dryness) continues, and at Kosrae, where D0-S began this week. No analysis could be made at Fananu due to missing data, but D-Nothing (no drought or abnormal dryness) continued at all other locations in the FSM due to a wet month or wet conditions in recent weeks.

The month of November has been wet (above the monthly minimum) in the Marianas and Republic of Palau and at Tutuila (American Samoa), so D-Nothing continues there. In the Marshall Islands, Jaluit was wet this week but previous weeks were dry and

November is below the monthly minimum, so D0-S continued. No analysis could be made at Mili and Utirik due to no data. The other Marshall Island locations were either wet this week or have had a wet November, so D-Nothing continued.

Looking Ahead

The NWS Weather Prediction Center (WPC) 7-Day Quantitative Precipitation Forecast (QPF) calls for light-to-moderate precipitation accumulations ranging from 1 to 2 inches (liquid) across areas of the Intermountain West including the Colorado Rockies and ranges in central and southern Utah. Lighter accumulations are expected in the southern Sierra, North Cascades, and areas of the northern Rockies. Along the Gulf Coast of Texas and Louisiana, light accumulations (<1 inch) are forecasted for the 7-day period. In the Upper Midwest and areas downwind of the Great Lakes in the Northeast, accumulations of <1 inch are expected. The Climate Prediction Center (CPC) 6-10-day Outlook calls for a moderate-to-high probability of above-normal temperatures across the West and near-normal temperatures across the Plains states. Conversely, below-normal temperatures are expected across the Eastern tier. In terms of precipitation, there is a low-to-moderate probability of above-normal precipitation across much of Texas and Louisiana as well as areas of the northern Plains. Elsewhere, below-normal precipitation is expected across much of the West, Central and Southern Plains, Southeast, Mid-Atlantic, and New England.

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