

National Drought Summary for January 5, 2021

SUMMARY

Since the release of last week's map, several storm systems impacted the Lower 48. The first spread snowfall across the Rockies and into the Plains and Midwest. The second spread snow and ice from Texas across the central U.S. and into the Northeast. Meanwhile the Pacific Northwest was battered with a series of strong Pacific storms that brought heavy rain and mountain snow. The overall effect generally brought improvements in drought conditions to the Northwest and across an area extending from Texas to Pennsylvania. Deteriorating conditions were minimal and limited to areas such as the Pacific Northwest, North Dakota and Hawaii, where moisture deficits continued to increase. In all, the percent area of the U.S. experiencing moderate drought or worse stands at 45.76%, down from 48.99% last week.

Northeast: Rain and snow this week helped erase short-term precipitation deficits across much of the region, helping return streamflow to normal conditions. Because dryness is still apparent beyond 60 days, areas of moderate drought are still depicted in northern New York, Vermont and New Hampshire. However, the designation has been switched from "SL" to "L" indicating that longer-term time scale of the drought.

Southeast: Above normal rainfall stretched from the Florida Panhandle to coastal Virginia, with totals ranging from 2 to more than 6 inches. The rain helped eliminate all but a few remaining pockets of abnormal dryness (D0) in Georgia, Florida and South Carolina where deficits remain at 90 days and longer. D0 expanded in north central Florida, which missed out on last week's rain.

South: Widespread above normal precipitation fell across the region resulting in large swaths of drought improvements. In Texas, this week's winter storm brought 1 to 4 inches of precipitation, more than what is normally received in an entire month this time of year. This resulted in one-category, and localized two-category improvements to drought areas in all but the far western part of the state, the Panhandle and South Texas. Moderate drought (D1) was removed from southeast Oklahoma and Arkansas and reduced in Mississippi and Tennessee where rainfall exceeded more than three times the normal amount. In addition to helping chip away at short- and long-term precipitation deficits across the region, soil moisture and streamflow showed recovery.

Midwest: Rain and snow in the Midwest exceed more than 200% of normal in the drought areas of northern Missouri, Illinois and Indiana. This resulted in the removal of moderate drought (D1) from Missouri. In Illinois and Indiana, the areas of moderate (D1) and severe (D2) drought remain unchanged. These areas are labeled with an "SL" to indicate that, in addition to short-term moisture deficits, long-term dryness also exists. Here, precipitation deficits of more than 5 inches are apparent at six months and streamflow and soil moisture remain low.

High Plains: With this week's band of heavy precipitation falling to the south, the drought status over much of the High Plains remains unchanged this week. Most locations received near-to-below normal amounts. Catching the northern edge of the heavy rain band, one-category improvements were made in southeast Kansas. In North Dakota, extreme drought (D3) was removed from the east central part of the state, since precipitation, soil moisture, streamflow and well data no longer supported the depiction.

Severe drought (D2) was expanded in the northwest corner of the state, where moisture deficits have been building for the last six months.

West: A series of storms brought excess rain and snow to parts of the Pacific Northwest. Washington and parts of Oregon saw precipitation in excess of 200% of normal resulting in local one-category improvements to drought areas where precipitation deficits over the last six to 12 months decreased and streamflow and soil moisture showed recovery. Conditions deteriorated in south central Oregon, with the expansion of severe drought (D3). This area has missed out on most of the rain after a very dry year. Much of the rest of the West was relatively dry last week. State drought teams noted that in areas where rain and snow fell, it wasn't enough to increase moisture availability; in areas where it didn't the dryness didn't yet warrant additional degradations.

Alaska, Hawaii, and Puerto Rico:

In Hawaii, rainfall continued to favor the east-facing windward slopes of the state while leeward areas continued to dry out. As a result, abnormal dryness (D0) was expanded on Kauai to cover all of the southern slopes of the island; moderate drought (D1) was expanded on Oahu to cover the west-facing slopes of the Waianae Range and near South Point on the Big Island. Finally, extreme drought (D3) was expanded on Maui and introduced on Kahoolawe. No changes were made to the maps this week in Alaska. The state continues to be free of drought with areas of abnormal dryness near the Wrangell Mountains, in the Far North, and on Kodiak Island. The map also remained unchanged in Puerto Rico with abnormal dryness and pockets of moderate drought (D1) in the north central part of the island.

Looking Ahead: The National Weather Service Weather Prediction Center forecast for the remainder of the week calls for continued storminess in the Pacific Northwest. Heavy rain is expected along the coastal ranges of Washington, Oregon and northern California, with snow at higher elevations. As the storms move eastward, snow is forecast for the northern and central Rocky Mountains while the northern Plains are expected to receive a wintry mix of rain, snow and/or ice. Forecasts for the southern Plains, South and Southeast call for showers and thunderstorms. Areas from the mid-Mississippi Valley to the Mid-Atlantic can also expect a wintry mix of precipitation while light snow is forecast for the Great Lakes region, Northeast and central Appalachians. Moving into next week, the Climate Prediction Center 6- to 10-day outlook (valid January 12-16) favors above normal temperatures for the Southwest and much of the northern part of the country. Below-normal temperatures are expected in the southern and Mid-Atlantic States. The greatest probabilities for above-normal precipitation are expected in the Pacific Northwest and Northern Plains.