

National Drought Summary – October 20, 2020

National Overview

Over the past week, beneficial precipitation fell over the higher elevations of Washington and Oregon, in much of Montana (particularly the mountainous western half), in the Lower Missouri River and Ohio River valleys, and in New England, leading to improving conditions in parts of these regions. Meanwhile, the southeast United States (with the exception of the Florida Peninsula) was mostly dry. Dry weather also continued across much of the central and southern Great Plains this week, as well as most of the southwestern United States. With background dry conditions in many areas that did not receive rain, combined with high evaporative demand over much of the High Plains and western United States, widespread worsening of drought conditions occurred from the Great Plains to the Southwest.

Northeast

Precipitation exceeding 2 inches fell over most of New England this week, following a wet end to the previous week, thus improving short- and long-term precipitation deficits there. As a result, drought intensity and coverage lessened over much of New England. Starkly drier weather occurred in eastern Pennsylvania and West Virginia. Temperatures in the Mid-Atlantic were generally within 3 degrees of normal, while temperatures ranging from 3 to 6 degrees warmer than normal occurred in northern New England.

Southeast

Drought-free conditions continued for another week in the Southeast, although the weather was much drier this week outside of South Florida. A narrow swath of a half inch or more of rain fell from central North Carolina to the Mid-Atlantic, and rainfall amounts exceeding 2 inches fell in South Florida. Temperatures were generally near normal in the Appalachians and in Alabama, while temperatures in coastal sections of South Carolina, Georgia, and Florida ranged from 3 to 6 degrees warmer than normal for the week.

Midwest

Widespread precipitation also fell from southern Missouri through the Ohio River Valley this week amid cooler than normal temperatures. Temperatures ranged from 3 to 6 degrees cooler than normal in the Ohio River Valley and in Missouri. In the Upper Midwest, even cooler conditions prevailed, as anomalies from 6 to 12 degrees below normal were widespread in Wisconsin, Iowa, Minnesota, and the Michigan Upper Peninsula. The precipitation amounts in the southern part of the Midwest region ranged from half an inch to locally over 2 inches. Given the improvements to short-term precipitation deficits, some of the moderate drought that had been present from St. Louis eastward ceased. However, in parts of Illinois and Indiana that received less rainfall, conditions worsened, leading to the expansion of moderate drought in some areas, and the introduction of severe drought in central Illinois. Parts of southwest Missouri, where agricultural impacts have been widespread, also saw worsening drought conditions in locations that saw less rain this week.

South

Except for northwest Tennessee and adjacent northeast Arkansas, dry weather occurred in the South this week. Near-normal temperatures occurred in most of Oklahoma, northern Texas,

Arkansas, Louisiana, Mississippi, and Tennessee, while temperatures ranging from 3 to 9 degrees warmer than normal took place in southern Texas. Drought conditions generally worsened in the region, in particular in northwest Arkansas, Oklahoma, and central and western Texas. In the southern high plains, the lack of precipitation this week occurred in a region that has had very high evaporative demand over the last few months, leading to further loss of soil moisture in areas where winter wheat is planted.

High Plains

Weather in the High Plains region was generally cooler than normal this week. Temperature anomalies ranged from normal to 6 degrees below normal in Kansas to 6 to 15 degrees cooler than normal in North Dakota. Areas of light to moderate precipitation were scattered about Nebraska, South Dakota, North Dakota, and northeast Wyoming, though amounts exceeding an inch were uncommon outside of the Black Hills. Degradation of drought conditions in the region was widespread this week south of Interstate 80, where dry weather combined with recent warm, dry, and windy conditions, leading to continued loss of near surface moisture.

West

In the West this week, widespread precipitation fell in some of the mountainous areas of western Washington and Oregon, Idaho, and Montana. In some locations in western Washington, western Oregon, and northwest Montana, the recent precipitation was enough to improve drought conditions, due to lessened precipitation deficits. To the south, however, widespread expansion of extreme and exceptional drought occurred in Utah, Arizona, Colorado, and New Mexico. To the west of the Rocky Mountains, temperatures were warmer than normal this week; readings of 9 degrees or more above normal were found in parts of California and Arizona. Meanwhile, central and eastern Montana were much colder than normal, as much of the eastern part of the state experienced temperatures 9 degrees (or more) colder than normal. Similar to much of the Great Plains, very high evaporative demand has gripped these states over the last several months and combined with the short- and long-term precipitation deficits to continue to worsen conditions. The wildfire danger has also continued across parts of the region as a result of these conditions, and portions of Arapahoe and Roosevelt National Forests in Colorado have been closed in response.

Alaska, Hawaii, and Puerto Rico

No changes were made to the drought depiction in Alaska this week. In Puerto Rico, abnormal dryness continued along the south-central coast, but drought-free conditions remained. In Hawaii, extreme and severe drought grew in coverage in southeast portions of Maui, where short-term precipitation deficits continued to mount. Moderate drought grew in coverage on the Big Island of Hawaii, where recent rainfall was low and streamflow returned to lower values.

Forecast

A series of storm systems and cold fronts is forecast to affect the western two-thirds of the continental United States through Monday, October 26, bringing chances of welcome mountain snow to Colorado, precipitation locally exceeding a half inch to the northern tier of the continental United States, and heavier precipitation from central Oklahoma to the Great Lakes. By early next week, colder than normal temperatures are forecast to be entrenched across the western two-thirds of the continental United States, while above-normal temperatures occur in the east. From Tuesday, October 27 through the end of the month, colder than normal weather is favored from west of the Appalachian Mountains through most of the West, while warmer than normal weather is favored in the Southeast. The forecast also favors above-normal precipitation from southwest Colorado to the Great Lakes and East Coast, while below-normal precipitation is favored in the northern Great Plains, California, and the Pacific Northwest.

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