

National Drought Summary – October 13, 2020

Synopsis

A dry pattern continued this past week over large portions of the continental United States, with a few exceptions being areas impacted by Hurricane Delta or its remnants, parts of the Upper Midwest and middle Missouri River Valley, and parts of the Northeast. In areas of the Northeast that received an inch or two of rain, some improvements were made in the ongoing drought areas there. As a storm system and associated cold front brought showers and thunderstorms to parts of the Middle and Upper Missouri River Valley and to the Upper Midwest, some improvements were made to ongoing drought there. Abnormal dryness abated in a few areas of Louisiana and Mississippi, which received copious rainfall from Hurricane Delta. Degrations or persistence of ongoing drought was common in parts of the Midwest, Great Plains, and West that received little or no precipitation this week. Temperatures this week were warmer than normal across most of the Lower 48. The central Great Plains and middle Missouri River Valley were the warmest compared to normal, with temperatures from 9 to 12 degrees above normal common. New England experienced milder conditions this week, with a few below-normal readings taking place in northern Vermont, New Hampshire, and Maine.

West

The West generally experienced warmer than normal temperatures again this week, with most areas coming in between 3 and 9 degrees above normal for the week. Generally, the southern half of the region stayed dry, while some precipitation occurred over the north, particularly in far northwest California, western Washington and Oregon, western Wyoming, and western portions of Montana and Idaho. Due to recent precipitation, extreme drought in western Oregon reduced in coverage. In southwest Oregon, where short- and long-term precipitation deficits were worsening, severe and extreme drought increased in coverage. Extreme drought also increased its foothold in west-central Nevada, where soil moisture profiles continued to worsen along with short- and long-term precipitation deficits.

High Plains

Drier than normal conditions continued across much of the High Plains region, where temperatures were also generally 6 to 12 degrees warmer than normal. Consequently, as short- and long-term precipitation deficits grew amid warmer than normal weather, and near surface moisture and agricultural impacts worsened, widespread degradation in drought conditions occurred. Moderate, severe, and extreme drought coverage increased across most of the region, with the exception of northeast Nebraska and adjacent portions of Iowa and South Dakota, where a storm system brought locally high amounts of rain. In the areas with highest rainfall, short-term precipitation deficits improved enough such that extreme and severe drought decreased in coverage.

Northeast

Outside of New England, temperatures were mostly near or several degrees above normal, while temperatures in New England were generally near normal or a few degrees cooler than normal. Rainfall from several storm systems led to above-normal rainfall in parts of northern

New York, localized parts of northern New Hampshire and Vermont, and northern Maine. Elsewhere, rainfall was closer to normal or below normal. Severe drought decreased in coverage in parts Vermont and New Hampshire due to recent rainfall improving precipitation deficits. Meanwhile, severe drought increased in coverage in western Pennsylvania and New York, as short-term precipitation deficits worsened in tandem with decreasing streamflow and soil moisture.

Southeast

The primary weather-maker over the past week was Hurricane Delta, which made landfall in southwest Louisiana as a category two hurricane, and its remnants. Rainfall from Delta was widespread over the region, though a few places, such as scattered parts of southeast Georgia and Florida, saw more spotty rainfall. No drought existed at the beginning or end of the period in the region, though a few areas of abnormal dryness were erased or shrank in size due to Delta's rainfall. Temperatures were above normal across the entire region, with the warmest conditions (compared to normal) taking place in the Florida Panhandle, southern Alabama, and southern Georgia, where temperatures ranging from 6 to 12 degrees above normal were common.

South

Category two Hurricane Delta and its remnants delivered above-normal rainfall from far east Texas through most of Mississippi, southeast Arkansas, and southern Tennessee, leading to the reduction of abnormally dry areas in Louisiana and Mississippi. Elsewhere, dry conditions occurred, and existing areas of drought expanded. Short-term drought continued to plague the southern high plains regions of Oklahoma and Texas, where moderate, severe, and extreme drought continued to spread amid worsening short-term precipitation deficits, decreasing soil moisture, and drying vegetation. Temperatures in the region were also mostly warmer than normal, with the warmest areas (compared to normal) being found in the Oklahoma and Texas panhandles, where temperatures were 9 to 12 degrees warmer than normal.

Alaska, Hawaii, and Puerto Rico

No changes were made to the drought depiction in Alaska or Puerto Rico this week. In Hawaii, worsening pasture conditions on Kauai led to degradation to severe drought in the southwest. On Oahu, moderate drought developed over the windward slopes, where water consumption reductions were requested.

Midwest

Temperatures were warmer than normal in the Midwest this week, with the warmest readings (9 to 12 degrees above normal) taking place in Missouri, Iowa, and southwest Minnesota. Widespread rain of a half inch or more, with localized areas receiving 1-2 inches, fell from northwest Iowa through most of Minnesota, northern Wisconsin, and Michigan (excluding the far southern Lower Peninsula). Rain over a half inch also fell in the southeast half of Kentucky. Elsewhere, rainfall was generally scattered and light. Moderate drought developed in the St. Louis area, where short-term precipitation deficits grew amid warmer than normal temperatures. Severe and extreme drought grew in size in southwest Missouri as short-term precipitation deficits worsened. Moderate drought also increased in coverage in parts of Illinois and Indiana

as short-term precipitation deficits grew and soil moisture decreased. Due to recent rainfall, severe and extreme drought conditions improved in far northwest Iowa, and moderate drought was reduced in coverage near the Minneapolis-St. Paul area.

Forecast

A series of cold fronts over the next week are forecast to bring a higher chance of cooler than normal temperatures to the north-central continental United States. With the exception of the northern tier of states, much of the West is forecast to be dry through the evening of October 19. Farther east, higher rainfall amounts of a half an inch or more are possible from the Mid-Atlantic coast north, while lighter precipitation is forecast in the Midwest. Glancing ahead to the October 20-24 period, cooler than normal conditions are more likely to be widespread from the Pacific Northwest to the western Great Lakes, while in the eastern United States, warmer than normal temperatures are favored in this period. Widespread increased chances for above-normal precipitation are forecast in the northern Rockies and much of the Great Plains, Midwest, and East, while below-normal or near-normal precipitation is favored elsewhere in the Lower 48.

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