

National Drought Summary for 9/8/2020

Summary: Intense heat, low humidity, gusty winds, and little or no rain allowed for broad-scale drought intensification in most of the central Great Plains and from the High Plains to the Pacific Coast. Conditions took a dramatic turn across the Rockies and Plains as the valid period ended, with hot and dry conditions suddenly replaced by much colder weather, and snow in some areas. A number of sites from the central Rockies into the northern Plains saw temperatures drop from around 90 degrees F Labor Day to near freezing with light snow the next morning. Denver, CO went from temperatures averaging 15 degrees above normal on September 6 to 30 degrees below normal for September 8, with an inch of snowfall reported. East Rapid City, SD appears to have set a national all-time record by going from over 100 degrees F (102) to reporting measurable snow in a span of 2 days. The colder and wetter weather that developed just as the period ended had little impact on drought conditions in most areas, given the hot, dry, and windy conditions that preceded it. Wildfires continued to scorch and spread rapidly across parts of California, with some quickly breaking out and expanding in part of the Rockies as well. Denver, CO went from reporting reduced visibility due to wildfire smoke on Labor Day, to reduced visibility from falling snow the next morning. Elsewhere, several inches of precipitation across interior northeastern Texas, in a swath from eastern Iowa to central Illinois, across Ohio, and in parts of Arkansas brought significant drought relief, and lesser amounts in adjacent areas brought more limited improvement, as did moderate precipitation in parts of the northern Rockies and adjacent Plains.

Northeast: The western fringe of Pennsylvania reported 1.5 to 3.5 inches of precipitation, as did a few patches across West Virginia, the lower Northeast, and southern New England. Most locations recorded several tenths of an inch of precipitation from central New England and central New York southward, with little or none falling farther north. Conditions generally persisted from last week, except in parts of Maine and adjacent locales, where D1 and D2 conditions expanded

Southeast: Moderate to heavy rain – locally up to 5 inches -- soaked much of the Florida Peninsula, but little or none was recorded across the rest of the region. As a result, dryness was removed from the state of Florida, but scattered areas of abnormal dryness (D0) began popping up and expanding farther north from Alabama to South Carolina. Despite the dry week, however, the region remains drought free at this time.

South: Heavy rain soaked a large area across northeastern Texas, dramatically easing or ending drought and abnormal dryness. Some 2-category improvements were noted in the wettest areas. Heavy precipitation was less widespread in Arkansas and some adjacent areas, reducing the extent of abnormal dryness there. Across western Texas and farther east in Mississippi, dryness and drought expanded and intensified. Much of western Texas is now in extreme drought, with a small area of exceptional D4 drought in the interior Big Bend area. Parts of this region have received only a few tenths of an inch of precipitation since early August. Farther east, moderate drought was introduced in part of interior northeastern Mississippi where less than half of normal rainfall was recorded during the last 60 days.

Midwest: Generally 3 to 6 inches of precipitation fell from eastern Iowa to central Illinois, and in parts of central and northern Ohio, bringing significant relief to dry areas there. In contrast, little or none fell on most of Missouri, western Iowa, central and northern Minnesota, central and northern Wisconsin, most of the Upper Peninsula of Michigan, the southern half of Indiana, and most of southern Illinois, allowing for dryness and drought expansion in a few parts of these areas. Light to moderate precipitation elsewhere kept conditions generally unchanged from last week.

High Plains: The dramatic change to cold and wet (often snowy) conditions late in the period only brought notable improvement to southwestern North Dakota and part of interior southeast Colorado. Elsewhere, a few tenths of an inch of precipitation fell on the central Dakotas, scattered parts of Nebraska, and much of Wyoming, but given the hot and dry weather that prevailed until the end of the period, no areas experienced notable improvement. In fact, sizeable parts of northern North Dakota, the southern half of Wyoming, central and western Colorado, and Nebraska deteriorated. As a result, a large area of extreme drought (D3) now covers central and western Colorado and the central tier of Wyoming. Smaller areas of D3 are in north-central Wyoming and part of the Colorado Plains, with a small area of exceptional D4 drought persisting in the latter area. Conditions generally improve moving north and east of the D2 to D3 regions in the central Rockies and west-central Plains, though some severe to extreme drought expanded across central Nebraska while D2 to D3 persisted adjacent to Iowa.

West: Another dry and, until the end of the period, hot week led to broad areas of drought intensification. The most widespread deteriorations were noted across Utah, Arizona, and to a lesser extent New Mexico. Exceptional D4 drought was introduced in central Utah, and a large area of extreme drought now envelops most of Utah, Arizona, northern and eastern New Mexico, and farther northwest through much of Oregon and adjacent California. Only parts of southwestern California, western Washington, central and southern Idaho, and adjacent areas remain free of abnormal dryness and drought. Fires continued to rage in portions of California, now having scorched over 2,000,000 acres in the state. Less than 30,000 acres were consumed by fire in 2019 through early September.

Alaska, Hawaii, and Puerto Rico: Increased precipitation helped the dry conditions in parts of Alaska. A few spots recorded a normal September's worth of precipitation in the first week of this month. Still, given the prior dryness, improvements robust enough to depict on the Drought Monitor were limited to some D0 in central areas and in the Yukon Valley. Areas of moderate drought remained unchanged.

Subnormal rainfall continued affecting parts of southeastern Puerto Rico, prompting some northward expansion in the D0 area formerly limited to near the coast.

Unfavorably dry conditions continued across most of Hawaii, leading to the introduction of extreme drought (D3) on western parts of Molokai and southwestern Maui near the Maalaea Bay. Also, some D0 to D2 expansion occurred in central and northwestern parts of the state

Looking Ahead:

During the next 5 days (September 10-14), WPC's QPF forecasts little or no precipitation (and thus persisting or intensifying drought) across the northern Plains and most areas from the Rockies to the Pacific Coast, save higher elevations in New Mexico and southern Colorado (0.5 to 1.5 inch). Similarly, light precipitation at best is expected across southern half of the Mississippi Valley and the western Ohio Valley. The heaviest precipitation (2 to 4 inches) is expected in a broad swath from southwestern Oklahoma through much of the Rio Grande Valley. Farther north, between 1.5 and 2.5 inches are expected from northern Missouri northeastward into western Wisconsin – part of a broader area expecting over 0.5 inch through much of central and western Texas, the central Great Plains, the Upper Mississippi Valley, and most of the Great Lakes region. Moderate precipitation, from 0.5 to 1.5 inches, should cover most of New England, New York, and the dry portions of Pennsylvania. Similar amounts are expected in the Southeast from Alabama eastward, with heavier amounts (1.0 to locally 2.5 inches) forecast in the Carolinas. From the central Gulf Coast through most of the eastern U.S., near-normal daytime temperatures should average a few degrees above normal at night. Temperatures should average a few degrees below normal from the southeastern Rockies through most of the central and southern Plains and the Great Lakes region, but near- to somewhat above-normal across most of the northwestern quarter of the country.

The Climate Prediction Center's 6-10 day outlook (September 15-19) favors above-normal rainfall from the Ohio Valley, Middle Mississippi Valley, and central Texas eastward to the Atlantic Coast. Wet weather is also expected in the Northwest while odds again favor subnormal precipitation in much of the Great Basin, Four Corners States, and northern half of the Plains. In addition, surplus moisture is expected along the southern tier of Alaska, but subnormal precipitation is anticipated in the northern reaches of the state. Portions of central and southwestern Texas, plus eastern Alaska, should record below-normal temperatures while the near- to above-normal readings prevail elsewhere .

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