**National Drought Summary for 9/1/2020**

**Summary:** The big weather news this past week surrounded the rain and wind from Hurricane Laura as it pushed through the lower Mississippi Valley, then northeastward south of the Ohio River to the central Appalachians. Southwestern Louisiana was most severely impacted. Winds gusted to 135 mph in Lake Charles, LA before the anemometer failed. Rains totaled 5 inches to locally over a foot along central and western Louisiana, adjacent Texas, much of Arkansas, and southeastern Oklahoma for the 7-days ending Tuesday morning. Other areas accumulating more than 4 inches included parts of Alabama and Mississippi (especially in the northern reaches) and scattered sections of the central Appalachians and eastern Ohio Valley, central Wisconsin, the western Florida Peninsula, and part of interior North Carolina. In contrast, little or no precipitation fell on most of the Carolinas and eastern Georgia, the upper Midwest, most of the central and southern Plains, and from the central Rockies to the Pacific Coast.

**Northeast:** Anywhere from a few tenths to a few inches of precipitation fell on the region, with the heaviest totals (3 to 5 inches) soaking interior southwestern Pennsylvania. Moderate amounts exceeding 1.5 inches dampened other parts of western Pennsylvania, southern New Jersey, portions of New York, and Downeast Maine. Overall, improvement was more common than deterioration, with severe drought improved to moderate in northern and Downeast Maine. In addition, moderate drought improved to D0 in most of southwestern Pennsylvania, part of the St. Lawrence Valley, sections of southwestern New England, and eastern Long Island. A few spots deteriorated into severe drought, most notably Rhode Island and adjacent Massachusetts. For July-August, rainfall deficits of 4 to 6 inches accumulated in southeast New England and parts of central to western Pennsylvania evaded by the heavy rains. In addition, abnormal warmth has exacerbated dryness and hindered recovery. Most locations averaged 6 to 9 degrees F above normal in August.

**Southeast:** This is the region least impacted by moisture deficits. This past week was slightly cooler than normal outside Florida and adjacent Georgia, where most sites were a degree or two warmer than normal. The rains in the west-central Florida Peninsula ended D0 conditions north of Tampa Bay, and patches of D0 remained in large parts of central Mississippi and scattered patches of Alabama, southeastern Georgia, and far southern South Carolina.

**South:** Thanks in large part to Hurricane Laura, only patchy D0 conditions exist from central Oklahoma and eastern Texas eastward despite temperatures averaging 3 to 7 degrees above normal this past month. In contrast, serious drought is plaguing western Oklahoma and the central and western portions of Texas, with small areas of exceptional drought (D4) just south of the Texas Panhandle and over the interior Big Bend region. Precipitation shortfalls of 4 to 6 inches for the past 60 days – and 6 to 8 inches for June-August -- cover parts of the Big Bend. Two- to five-inch deficits for the past 60 days were measured in the rest of central and western Texas, while June-August totals 4 to 6 inches less than normal affect most of central Texas and parts of western Oklahoma.

**Midwest:** Southern and western parts of the region fared much better than other areas. Dryness and drought decreased in a strip across central Wisconsin and southern Michigan, as well as large sections of Ohio. In contrast, drought expanded and deteriorated from central and southern Iowa eastward into northwestern Indiana. A sizable area in central and southwestern Iowa (where extreme drought expanded) received 6 to 10 inches less rain than normal during June-August while adjacent moderate to severe drought areas recorded shortfalls of 3 to 6 inches. Further, hot weather has been common this summer, and temperatures averaged 6 to nearly 12 degrees above normal the last two weeks, exacerbating the effects of the dryness and stressing some crops.
**High Plains:** Between 0.5 and 2.0 inches of rain fell on parts of the Dakotas, much of Minnesota, and central to southwestern sections of Kansas. Several tenths of an inch at best fell elsewhere. As a result, some improvement was noted in parts of eastern South Dakota and west-central Kansas, but dryness and drought persisted or intensified elsewhere. Deterioration was most widespread from central and southern Wyoming eastward through Nebraska as the effects of several weeks to a few months of drier and warmer than normal conditions are taking their toll. As a result, most of Colorado and the central and eastern parts of Wyoming are enduring severe to extreme drought, along with the Nebraska Panhandle and parts of southwestern Kansas and the eastern half of Nebraska.

**West:** Little or no rain was observed region-wide this past week. This is a relatively dry time of year in many areas, especially in California, but a weak monsoon season and periods of excessive heat have led to widespread severe to extreme drought in a large area covering northern and eastern New Mexico and most of Arizona, Utah, Nevada, northern California, Oregon, and central Washington. Only eastern and western Washington, central Idaho and the Panhandle, central and west-central Montana, southwestern California, and part of central New Mexico are free of dryness and drought as of this writing. Wildfires continued to scorch parts of the region, although fires spread more slowly recently in northern California than during the prior few weeks.

**Alaska, Hawaii, and Puerto Rico:** June-August brought only 50 to 85 percent of normal precipitation to much of northern and interior southwestern Alaska, and August brought less than half of normal to many spots in the northern parts of the state. To wit, abnormal dryness was expanded to cover roughly the northwestern quarter of Alaska and some additional areas around Anchorage. Moisture deficits were most acute in part of the northwest near Kotzebue and on Kodiak Island, and moderate drought now covers both of these areas.

Dryness and related impacts increased in significant portions of Hawaii this past week, prompting D1 expansion through eastern sections of the Big Island, and increased D2 coverage in the middle part of the state.

**Looking Ahead:**

During the next 5 days (September 3-7), WPC’s QPF forecasts little or no precipitation (and thus persisting or intensifying drought) to the north and west of Texas. Similarly, light precipitation at best is expected across the interior Southeast and much of the northern Ohio Valley. Moderate precipitation (several tenths to 1.5 inches) should fall on the Great Lakes, upper Midwest, the Northeast, and most of Florida. Heavy precipitation is expected over a large swath across central and northeastern Texas, where totals from 1.5 to locally over 4 inches are expected. Robust precipitation is also forecast in a band stretching from Arkansas to West Virginia, where many areas should record 1.5 to 2.5 inches. Meanwhile, well-above-normal temperatures are expected from the High Plains to the Pacific Coast. High temperatures should average more than 12 degrees above normal from the Rockies to near the Pacific Coast, exceeding 18 degrees above normal in the Great Basin. Farther east, conditions will be less remarkable. Nighttime lows will be a few degrees above normal across the East, Southeast, and South-Central regions, and near normal in the Great Plains and upper Midwest. During the day, temperatures should top out a few degrees below normal on average in the northern Plains, and closer to normal in other parts of the eastern half of the contiguous states.

The Climate Prediction Center’s 6-10 day outlook (September 8-12) favors above-normal rainfall in the central and southern Plains and from the Mississippi Valley eastward. The odds also tilt toward surplus precipitation in most of Alaska, outside the Panhandle. In contrast, subnormal precipitation is expected in the northern Plains, the southern High Plains, the Rockies, and the Pacific Northwest. At the same time, below-normal temperatures are heavily favored in the Plains and surrounding areas, and odds tilt toward
cooler than normal weather from the Rockies to the Appalachians. From the Appalachians eastward and from the Intermountain West to the Pacific Coast, warmer than normal weather is expected. Across Alaska, the northern tier should average cooler than normal while above-normal temperatures are favored along the southern tier.

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