

## National Drought Summary

**Summary:** While Hurricane Irma pummeled Florida and (to a lesser extent) other parts of the Southeast, most other parts of the contiguous 48 states caught little if any precipitation, save for scattered moderate to isolated heavy precipitation in parts of the Northeast. Irma brought intense rains (approaching 1.5 feet in some spots) and powerful wind gusts (measured at 140 mph at one place on the West Coast of the Florida Peninsula) that removed any suggestion of dryness from the Southeast. Enough precipitation fell on part of eastern Maine to shave down areas of D0 and D1 from the west, but most of the country -- from the Ohio and lower Mississippi Rivers westward to the Pacific Coast -- recorded little precipitation, if any. Only isolated patches in the eastern Great Lakes Region and the lower Colorado River Valley recorded more than an inch of rain.

**Northeast:** Moderate precipitation (1.5 to 3.0 inches) fell on parts of central and eastern Maine, reducing the westward extent of D0 and D1 conditions in the state, save the northwestern portion. Elsewhere, conditions were essentially unchanged from the previous week.

**Southeast:** Hurricane Irma swept up the west side of the Florida Peninsula and into the Southeast as it slowly spun down, dropping heavy to excessive rains on existing D0 areas in Georgia and South Carolina. Abnormal dryness was wiped out in those states, but less precipitation fell farther north in North Carolina and southwest Virginia, leaving abnormal dryness there intact.

**South:** Dry weather dominated Texas last week, like much of the rest of the contiguous 48 states, prompting some expansion of D0 to D1 conditions in southwestern and west-central parts of the state.

**Midwest:** Another dry week led to broad development of D0 and more limited expansion of D1 to D3 conditions from Iowa and Missouri eastward through southern Wisconsin, Illinois, and adjacent Indiana. Precipitation totaled less than 2 inches over the past month in the D0 areas of southern Michigan, southern Wisconsin, eastern Iowa, much of Illinois outside a band across the middle of the state, southwestern Indiana, and parts of southern and eastern Missouri. Although below-normal temperatures have mitigated some potential impacts from the marked short-term dryness, declining streamflows and topsoil moisture have slowly become more evident

**Plains:** The dry week in the central Plains led to a significant expansion of D0 and (to a lesser extent) D1 in northern Oklahoma, Kansas, and southern Nebraska. Farther north, the most notable change was the broad development of D1 in most of eastern North Dakota and adjacent northwestern Minnesota, with scattered small areas in the Dakotas declining into severe or extreme drought. Farther west in the High Plains, light precipitation at best has fallen over the last 30 days, keeping dryness and drought essentially intact, with D0 developing in central and eastern sections of the Denver to Ft. Collins, CO.

**West:** The last 30 days have been quite dry from the Rockies westward to the Pacific Coast. Totals exceeding 0.5 inch were limited to parts of the southeastern Rockies, the Colorado River Valley, the higher elevations of central Arizona, and a swath along the Montana/Wyoming border. For the last 3 months, precipitation totals were among the lowest 2 percent on record in a broad areas from most of Montana westward across central and northern Idaho, Washington, and the northern half of Oregon. The

most marked change introduced this week was the expansion of D1 conditions across the northern tier of Oregon, part of central Idaho, and some of interior Washington, though an area in central and south-central parts of that state (where year-to-date precipitation totals are higher than in surrounding areas) remained at D0. In addition, D2 and D3 were expanded in parts of northern Montana, and several other small areas of deterioration were introduced in Idaho and southern Montana.

Dry conditions have abetted the development and rapid spread of wildfires across the northern Rockies and adjacent areas, and (more seasonably) in portions of the Great Basin and California. So far, over 8.2 million acres have been scorched by wildfires nationally, approaching 150 percent of the 10-year average for the year-to-date. Of the 8.2 million acre total, almost 40 percent (3.2 million acres) have been in the northern Rockies and Great Basin.

**Alaska, Hawaii, and Puerto Rico:** In Hawaii, deteriorating pastures and vegetation brought D1 conditions into southwest Kauai while below-normal rainfall on 1- to 3-month time scales led to D0 development on the lower Kona slopes on the Big Island. D1 also expanded westward from Maui across Kaho’Olawe Island. In contrast, relatively heavy August rains led to the removal of D1 from western Lanai, and improvement to D1 in southwestern Maui. Finally, limited improvement to former D2 and D1 conditions was noted on northeast parts of the Big Island.

In Alaska, moderate precipitation, in conjunction with a wetter pattern in recent weeks, led to the removal of D0 conditions statewide, except for part of the Copper Basin. Gulkana, AK has recorded 72% of normal precipitation since June 1.

Likewise, a wet week across Puerto Rico was enough to bring an end to D0 conditions in southwestern parts of the commonwealth.

**Looking Ahead:** Beneficial precipitation is expected during September 14 – 18, 2017 across much of the drought-afflicted areas in the northern Plains and Rockies. Between 1.5 and 3.5 inches are expected across all but the western and northern tiers of Montana, and central and southwestern sections of North Dakota. Moderate rains (0.5 to locally 1.5 inches) is expected in the Upper Midwest and the central Plains, as well as the far Pacific Northwest west of the Cascades. Light precipitation at best is anticipated in other areas of dryness and drought.

The ensuing 5 days (September 19 – 23, 2017) look to bring a reversal in the temperature pattern recently observed across the 48 states, with odds favoring cooler than normal weather from the northern High Plains and southern Rockies to the Pacific Coast, and warmer than normal conditions expected in the central and eastern parts of the country. There are enhanced chances for above-normal precipitation from central and northern sections of the High Plains westward to the Pacific Coast, most of the Great Plains north of Texas, and the middle and upper Mississippi Valley. Odds also favor above-normal precipitation in the Copper Basin of Alaska. Meanwhile, subnormal precipitation is favored in the East, Southeast, most of Texas, and the southern Rockies.

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