

National Drought Summary for (April 18, 2017)

Summary

An active weather pattern provided above-normal precipitation during the USDM period (April 11-18) in much of the Southern Plains, West, Northwest, and parts of the Midwest. Below-normal precipitation dominated the Rockies, Southwest, Southeast and Northeast. Average daytime temperatures were generally above normal across much of the CONUS with the exception of the Northwest where temperatures were generally 3 degrees cooler than normal. Much of the Mid-Atlantic, Ohio Valley and Central Plains were 9-12 degrees above normal for the period. Drought conditions expanded and intensified for much of the Southeast where the lack of rains have begun to parch the soils. In the South, Texas continues to see above normal precipitation resulting in a continual decrease in overall area covered in drought (D1-D4). Meanwhile in the West, the onslaught of Pacific storms continue to bring copious amounts of moisture to the region, swelling the reservoirs, threatening snowpack records and padding the record high precipitation amounts. Additional information on the indices, impacts and changes in drought status can be found in the regional sections below.

Northeast

The DM period was dry for much of the region with light precipitation falling in the extreme northern area of the region resulting in half inch totals. The dryness is only at the short term as much of the region has had 2 inches or more of precipitation during the last 30-days resulting in near normal conditions. Central Vermont and southwestern New Hampshire are two areas that have had below-normal precipitation during the last 30-days. There was no change in the D0-D2 levels in that area this period. In Connecticut, reservoirs across the state averaged 93 percent in March and increased to 97 percent in mid-April. Groundwater levels are near to above normal. These indicators were enough to warrant the eradication of severe drought (D2). No additional changes to the drought monitor were made in the Northeast this period.

Southeast

Recent dryness in central and southern Georgia prompted the expansion of Dx in the area. While a majority of streamflow gauges are at running at normal levels at 7 days the 1-, 14- and 28-day average flows are in the 10-20 percentile category. Only 1-3 inches of rain has fallen in central and southern Georgia during the past 30 days, less than 50 percent of normal. SPI's at 60 and 90 days are showing D1-D3 drought. As a result, D2 was introduced in southwest and southeast Georgia. In central Georgia, topsoil's are drying out (56 percent short to very short of moisture across GA) as precipitation is around 50 percent of normal during the last 30 days. Stream flows are less than 10 percent at the 28-day period. This area was one of the epicenters of the Southeast drought of 2016 and just recovered in January and February of this year. Moderate drought (D1) was introduced this week in central Georgia linking with the newly introduced D1 in eastern Alabama. In Alabama, dryness is reflected in the low stream flows, some of which are showing D2-D4 levels of drought. Precipitation in the southern part of the state is 50 percent of normal during the last 30 days. Abnormally dry conditions (D0) were introduced in Mobile County and expanded south in the central part of the state. Elsewhere in Alabama, Dx was expanded due to the recent dryness. No changes were made in North Carolina, however it was noted that the beneficial rains in late March into early April resulted in some good short-term improvements, however,

hydrologic conditions appear to be shifting back towards below-normal levels. This is a situation that is being closely monitored.

South

Heavy rain across the Oklahoma and Texas border late in the USDM period led to the contraction of drought. In northeast Texas, there were reports of 1-6 inches while in southeast Oklahoma a swath of 2-3 inches was recorded. These recent rains helped alleviate some long term deficits across much of Oklahoma. One-category improvements were made in the Panhandle as well as the eastern half of Oklahoma. Much of the western half of Oklahoma has seen above normal precipitation amounts (200-300 percent of normal) for the 30-day period. In Tennessee, stream flows at all levels are struggling to rebound from the dryness of the past 12-months. Flows in central Tennessee are averaging 10-20 percent at the 14- and 28-day periods. Heavy precipitation continues to miss this area as amounts are 75 percent of normal at 30-, 60-, and 180-day intervals. This drought / dryness propagates westward into eastern Arkansas and northwestern Mississippi where 30-day departures are 1-2 inches below normal. There was little rainfall during the period in Alabama, exasperating conditions there. Average 28-day streamflow values are registering below 30 percent as precipitation is 50 percent of normal at the 30- and 60-day time periods. The conditions are most dire in the east central part of the state where D1 was expanded. Moderate drought (D1) expanded in the northern part of Alabama as well.

Midwest

After a wetter than normal 30-day period in a large swath stretching northeastward from northern Missouri and southern Iowa into northern Illinois and southern Wisconsin and the entire Upper Peninsula of Michigan, the pattern shifted slightly northward. Wetter than normal conditions during the past 7-days were concentrated along southern Minnesota, much of Wisconsin and the Upper Peninsula of Michigan. Precipitation totals in that area were 400 percent of normal. The precipitation surplus can be traced back to the last 12-months (April 2016-March 2017), Minnesota's third wettest and Wisconsin's fifth wettest such period in 122 years. Within this region, there are two areas of drier than normal conditions. The first area of below normal 30-day precipitation is along the Kentucky, Indiana, and Illinois border. Parts of the area have received less than 2 inches of rain the past 30 days, 50 percent of normal. Another, larger area is covering most of Minnesota where deficits are generally about 1.5 inches below normal the past 30 days. No changes were made in this region however, the D0 area east of the Mississippi River is being monitored for possible improvement next week.

High Plains

Precipitation in the High Plains region for the period was quiet for the most part with the exception of precipitation in eastern South Dakota and eastern Nebraska. Totals there amounted to about an inch or less, near to slightly above normal. Elsewhere was dry as the frontal systems that made it through were starved of moisture. In eastern Colorado, moderate drought (D1) was lifted along the Colorado and Kansas border as short and long term indicators appear to have mostly rebounded from the drought that began in that area last autumn. Also in eastern Kansas, D0 was trimmed back following the above normal precipitation at 60 days.

West*

New Mexico had its warmest start to the year through March, while Arizona had its fourth warmest start. It was reported that the grasses in southeast Arizona are drying up quickly after greening up earlier than usual. For New Mexico as a whole, 61 percent of top soils are short or very short of moisture. The abnormally dry conditions prompted the expansion of D0 across the southern borders of both Arizona and New Mexico. In western Colorado, snowpack was generally above normal for the season and with an early and fast melt occurring, stream flows are generally much above average. However, the Yampa/White Basin was one of the only areas in the Upper Colorado River Basin that did not reach average peak snowpack. It was reported that not only is the snow melting early, but the crops are coming out of dormancy earlier than usual. Because of the warmer than normal temperatures, low elevation snow pack as disappeared much earlier than normal. Due to the above mentioned conditions, D0 was expanded to the north and west stretching across the Wyoming border. In California, Pacific storms continue to bring precipitation in the form of high elevation snow and valley rains to the region. These moisture laden storms are crucial for summer water resources as the runoff feeds into the streams and reservoirs. Forecasted stream flows for California river basins generally show much above normal volumes through the summer months. No other changes were made in the West.

*For details on Eastern Colorado and Eastern Wyoming, refer to the High Plains region.

[Alaska, Hawaii, Puerto Rico](#)

In Alaska, there was a modest expansion of D0 in the east (to the north) and in the southwest (towards the Panhandle). The expansion closely follows the 30-day precipitation percent of normal and SPIs. Snowpack levels in these areas are 70-90 percent of normal as of April 1. It was reported that Anchorage lost their measureable snowpack on April 18th which is close to normal. No changes were made in Hawaii or Puerto Rico this period.

[Looking ahead](#)

During the next 5 days, temperatures are forecasted to be near to below average for the Northwest, High Plains and South. Warmer than average temperatures are expected in the Mid-Atlantic, Southeast and Southwest. During the same period, precipitation is forecasted to be the heaviest (3-5 inches) in an area stretching from Oklahoma east through the Tennessee Valley. Much of the Midwest and Northeast is also expected to see about an inch of precipitation. The 6-10 day outlooks call for an increase in probability that above normal temperatures are expected in the Southwest and South stretching into the Midwest and below normal temperatures in the Northwest, Northeast and parts of the High Plains. The odds are in favor of wet conditions in the Northwest, Northern Rockies and High Plains while the West and East Coasts dry out.

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