National Drought Summary – May 16, 2017

Synopsis: An active weather pattern continued to result in widespread showers, with some of the heaviest rain falling across the Plains, Midwest, and mid-South. Another area of significant precipitation stretched across the middle and northern Atlantic States, while showers also dotted the Northwest. In contrast, mostly dry weather prevailed from California to the lower Rio Grande Valley, as well as large sections of the lower Southeast. Drought changes from last week were a mix of improvement and deterioration. Specifically, warm, dry weather and short-term rainfall deficits in Texas led to significant increases in the coverage of abnormal dryness (D0) and moderate to severe drought (D1 to D2). Also, hot, mostly dry conditions led to further expansion of moderate to extreme drought (D1 to D3) across southern Georgia and Florida's peninsula. Elsewhere, patchy improvements in the drought situation were noted in a few areas, including parts of the Southeast.

The Northeast: Another soaking storm further reduced the coverage of lingering, long-term dryness (D0). Vestiges of dryness, reflected mainly in spotty groundwater shortages, remained in Maryland, Pennsylvania, and Connecticut. Pastures, however, have recovered from last year's drought and on May 14 were rated 100% good to excellent in Connecticut, Massachusetts, and Rhode Island, along with at least 80% good to excellent in Maryland, New Jersey, and Pennsylvania.

Southeast: Spotty showers brought a mix of slight improvement, no change, or deterioration in areas from Alabama to the southern Atlantic Coast. Florida, with an expanded area of extreme drought (D3) across the central part of the peninsula, led the nation on May 14 in topsoil moisture rated very short to short (77%) and pastures rated very poor to poor (51%), according to the U.S. Department of Agriculture. Southern Georgia also saw an expansion of D3. Through May 16, year-to-date rainfall in Orlando, Florida, totaled a record-low 3.34 inches (27% of normal). In a May 14 report, USDA noted that Florida's citrus growers "are irrigating daily to keep moisture on the trees" and that "ditches and canals are very dry in all [citrus] areas." In addition, Florida's livestock producers "continue to feed hay, and many need to have it shipped in." Further, wildfires remain a threat across the lower Southeast. The West Mims fire, near the Florida-Georgia line, has been burning for more than a month after being started by lightning on April 6. The fire has consumed more than 150,000 acres of timber, brush, and grass east of Fargo, Georgia, mainly in the Okefenokee National Wildlife Refuge. Hot weather has aggravated the effects of rainfall deficits, with Florida locations such as Fort Myers (97°F) and Tampa (96°F) reporting daily-record high temperatures on May 16.

Midwest: The Midwest remained drought free, although a period of warm, dry weather across the western Corn Belt promoted a torrid planting pace. In Minnesota, 49% of the intended corn acreage and 43% of the soybeans were planted during the week ending May 14. Overall planting progress in Minnesota on that date reached 84% for corn and 47% for soybeans. In contrast, just 5% of the corn and 4% of the soybeans were planted during the week ending May 14 in Indiana, where flooded lowlands and soggy soils have curtailed most fieldwork in recent weeks.

High Plains: Wet weather continued across southern sections of the High Plains region and moved into northern areas as the monitoring period ended on May 16. (Rain that fell after 7 am

CDT on May 16 will be reflected on next week's map.) In north-central Colorado, coverage of moderate drought (D1) was greatly reduced by recent and ongoing wetness. Farther north, there was some modest expansion of dryness (D0), mainly in North Dakota, although conditions were highly favorable for fieldwork. During the week ending May 14, nearly half (45%) of the corn acreage was planted in South Dakota, along with 35% in North Dakota. However, South Dakota also led the northern U.S. in topsoil moisture rated very short to short (40% on May 14), as well as rangeland and pastures rated very poor to poor (20%).

South: Warm, windy weather and intensifying short-term rainfall deficits led to significant expansion of abnormal dryness (D0) and moderate drought (D1) in Texas and southern Oklahoma. New pockets of severe drought (D2) were introduced in north-central and Deep South Texas, respectively. On May 14, the U.S. Department of Agriculture noted that topsoil moisture was rated 50% very short to short in Texas. Topsoil moisture was 100% very short to short in the lower Rio Grande Valley.

West: With little drought coverage in the West, changes were minimal. Specifically, short-term precipitation deficits led to expanded coverage of abnormal dryness (D0) in eastern Utah and western Colorado. The dry weather, accompanied by periods of warmth, has led to an earlier-than-normal loss of snow in several river basins. Meanwhile, moderate drought (D1) was added to the remainder of southern Arizona, as drought impacts and precipitation deficits at various time scales in the former abnormally dry (D0) area were not appreciably different than those in the D1 region. Farther east, New Mexico's topsoil moisture was rated 58% very short to short on May 14, according to the U.S. Department of Agriculture.

Hawaii, Alaska and Puerto Rico: Further assessment of late-April downpours on the Big Island of Hawaii led to addition reductions in drought coverage. Specifically, severe drought (D2) was removed from the leeward section of the Big Island, in part due to improving pasture conditions. In addition, there were Big Island reductions in the coverage of abnormal dryness (D0) and moderate drought (D1). Meanwhile, Puerto Rico remained free of dryness and drought, while no changes were made to the D0 coverage in Alaska. From March 1 – May 16, rainfall in San Juan, Puerto Rico, totaled 14.18 inches (146% of normal). Mild weather has prevailed in recent weeks across Alaska, where daily-record highs have included readings of 69°F (on May 16) in Bettles and 54°F (on May 12) in Kotzebue.

Looking Ahead: An extremely active weather pattern, featuring heavy rain, severe thunderstorms, and local flooding across the nation's mid-section, will continue for the next few days. During the weekend, rainfall intensity will gradually diminish as showers shift into the eastern U.S. Five-day rainfall totals could reach 2 to 5 inches from the southern Plains into the upper Midwest, with 1 to 3 inches possible as far east as the Appalachians. Little or no rain will fall, however, along the Atlantic Seaboard. Significant precipitation, including high-elevation snow, will continue into Thursday across the Rockies and environs, but dry weather will prevail from southern California into the Desert Southwest. A period of very cool weather will trail the storminess, but warmth will return to the Pacific Coast by Friday and expand eastward during the weekend.

The NWS 6- to 10-day outlook for May 23-27 calls for the likelihood of below-normal temperatures from the Plains to the western slopes of the Appalachians, while warmer-than-normal weather can be expected west of the Rockies and along the southern Atlantic Coast. Meanwhile, below-normal precipitation from the Pacific Northwest into the upper Midwest should contrast with wetter-than-normal weather across the southern and eastern U.S.

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