SOUTHERN PLAINS DROUGHT UPDATE

OCTOBER 26, 2018





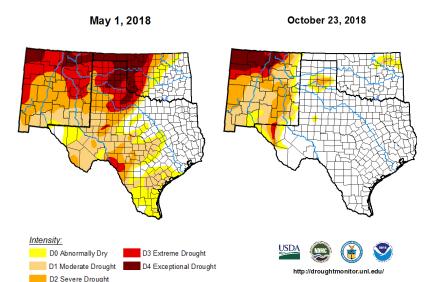


Southern Plains Under El Niño Watch

- In Oklahoma and Texas, drought peaked in early May. Only a few small areas in the Texas Panhandle and northeast Oklahoma still show Abnormally Dry Conditions (Fig. 1).
- Major concerns continue for streamflows and reservoir levels in New Mexico. Another snow drought could cause devastating impacts to the state.
- There is a 70% to 75% chance that El Niño will develop and persist through the winter; however, it is expected to be weak.

Fig 1. US Drought Monitor for the Southern Plains Region May 1, 2018, and October 23, 2018. Source: US Drought Monitor.

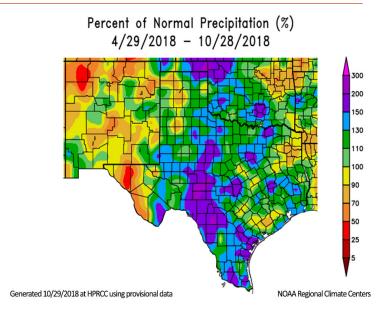
U.S. Drought Monitor Southern Plains



CURRENT CONDITIONS

- The Southern Plains drought began in October 2017 and peaked in early May 2018. Impacts of the drought included significant wildfires and impacts to winter wheat crops, pasture and rangelands, and low streamflows and reservoir levels.
- Since May 1, 2018, nearly all of western Oklahoma and most of Texas have experienced 130% to 200% of normal precipitation, which has ameliorated the drought. Most of eastern New Mexico has seen 70% to 100% of normal precipitation in this time period, resulting in more spotty improvement (Fig. 2).

Fig 2. Percent of Normal Precipitation June 24, 2018, to October 21, 2018. Source: High Plains Regional Climate Center



IMPACTS

- Concerns remain for New Mexico streams and reservoir levels (Fig. 3). For example, Rio Grande River flows were abnormally low, leading to a 30-year record low in Elephant Butte Reservoir, which stands at 3% of capacity. This limited irrigation allotments this year and may affect legally-required delivery of water to Texas and Mexico.
- Despite significant rainfall after June 1, 2018, Amarillo, Texas, experienced its fourth driest Water Year (October 2017 to September 2018) on record in 125 years of data (approximately 55% of normal).

■ Below Average ■ At or Above Average ■ Average Capacity of Reservoirs Reported (1000 Acre-Feet) 38.129 36,569 632 2.493 7.244 3.218 14.400 9.075 100 90 80 **Percent of Usable Contents** 70 60 50 ot 40 30 20 10 NM OR 27/46

Reservoir Storage as of October 1, 2018

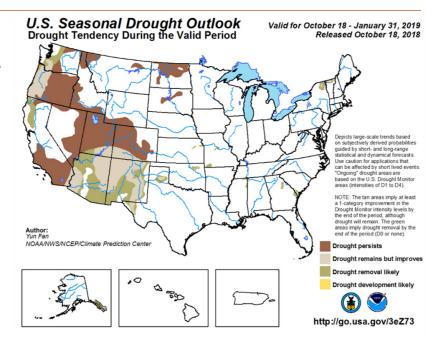
Fig 3. Reservoir Storage as of October 1, 2018. Source: USDA Natural Resources Conservation Service.

OUTLOOK

- Currently under El Niño Watch, with nearly 75% chance that an El Niño will form in the next few months and continue through the 2018-2019 winter in the region. This should greatly diminish chances for another "snow drought" this winter.
- The Seasonal Drought Outlook for December through February depicts improving conditions across the region (Fig. 4).



Fig 4. Seasonal Drought Outlook October 18, 2018, to January 31, 2019. Source: NOAA NWS Climate Prediction Center.



This drought status report was developed from a webinar presented on October 26, 2018, by Victor Murphy, Climate Services Program Manager, National Weather Service Southern Region, and Kyle Brehe, Regional Climatologist and Director of the Southern Region Climate Center.

This webinar recording is available here. Additional webinars are available at www.drought.gov.















