

SOUTHWEST DROUGHT WEBINAR

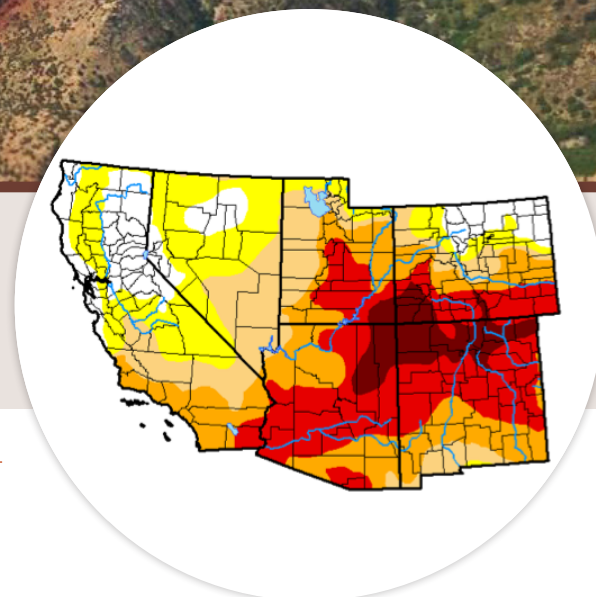
MAY 23, 2018



Below is a summary of the 23 May webinar led by Brian Fuchs, Climatologist with the National Drought Mitigation Center, and Ed Delgado, National Program Manager, Predictive Services, National Interagency Fire Center. The webinar explained drought conditions and outlook, as well as drought and wildfire in the region.

Drought Status

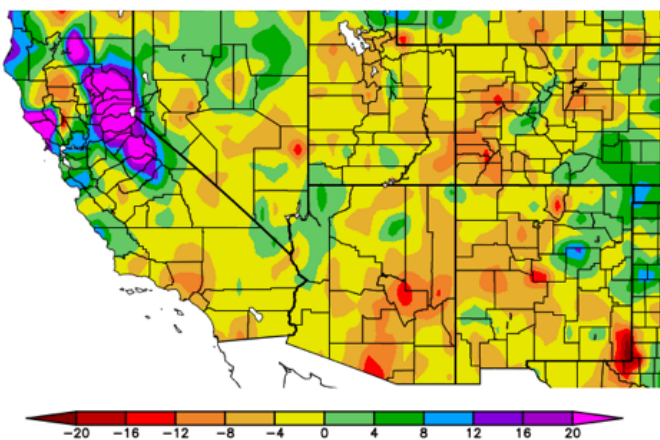
The 15 May US Drought Monitor is “alarming” with 68% of the Southwest region in drought, 51.4% in “Severe Drought” or worse; 30.21% in “Extreme Drought” or worse. This is a 4 to 5-class degradation in drought status since October 2017 for much of Southwest. Temperatures of 4-6 degrees above normal since Oct 2017 have contributed to the drought.



▲ Fig 1. U.S. Drought Monitor for May 15. Source: droughtmonitor.unl.edu

Meteorological Conditions and Indicators

Slight precipitation over the last three weeks did not compensate for accumulated precipitation deficits over the Water Year (October 2017 to the present) (Fig. 2).



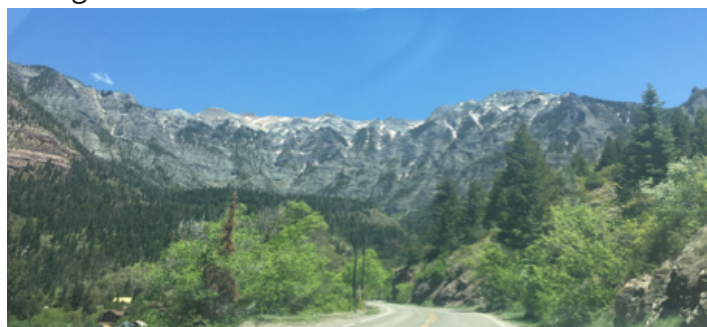
▲ Fig. 2. Departure from Normal Precipitation (inches) for 5/23/2016 - 5/22/2018. 000 Data: NOAA Regional Climate Centers

▶ Fig. 3. (Top) Shiprock, New Mexico. Credit: Zach Schwalbe, Colorado Climate Center. (Bottom) Red Mountain Pass, south of Ouray, CO. Credit: Zach Schwalbe, Colorado Climate Center

What does ‘D4: Exceptional Drought’ look like?



What does ‘D3 Extreme Drought’ look like? Significantly less snowpack than normal in upper elevations, which will lead to rapid deterioration in drought conditions.



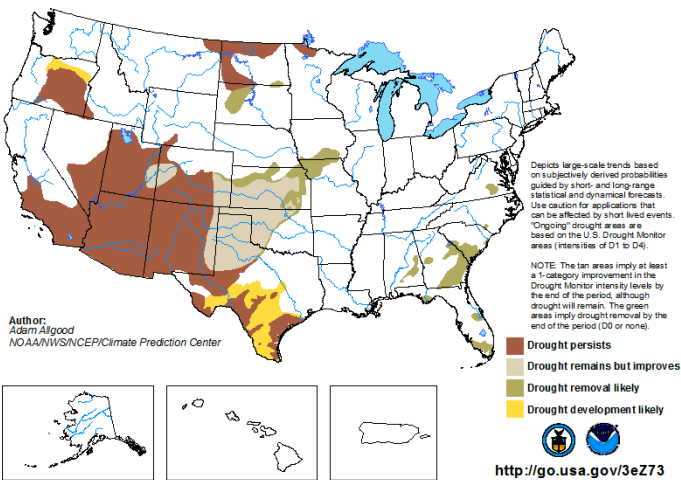
Wildfire and Other Drought Impacts

As of mid-May wildfire activity was in the range of normal, but this year's low snowpack, high temperatures, and reduced soil moisture has led to drying of fuels, which may start the fire season earlier. Lack of rainfall is a "double-edged sword" for wildfire: low precipitation inhibits growth of fine fuels (grasses and brush) that ignite and spread fire, but it also stresses larger fuels - including trees - making them more receptive to fire.

Drought impacts are "piling up" in the region: water levels are dropping; water is being hauled for stock; and streamflows are less than 25% of average in New Mexico, southern Colorado, and most of Utah.

Regional Drought Outlook

The May - August 2018 Seasonal Drought Outlook indicates that drought will persist in the region, with a small area between Colorado and Utah where "drought remains but improves".



▲ **Fig. 4.** U.S. Seasonal Drought Outlook valid for May 17 - August 31, 2018. Released on May 17, 2018.

Temperatures: There is above-normal probability for above-normal temperatures continuing through August.

Precipitation: Through June, there is not a strong signal for either above- or below- normal precipitation; starting in July, above-normal chances for above-normal precipitation in the Rockies may lessen drought severity. There is 60% probability of El Nino developing in the Pacific by November, which may bring more precipitation to the region.

About the Drought Webinar Series

Recordings and written summaries for the drought webinars are available at: www.drought.gov/drought/dews/intermountain-west

Wildfire: The Wildland Fire Outlook through June is approaching record levels" to "elevated fire danger levels in the early summer for parts of the Southwest, the Great Basin, and California.. In July, the anticipated monsoon may increase humidity, mitigate fire starting conditions, and normalize the fire regime.

▼ **Fig. 5.** Significant Wildland Fire Potential Outlook for May 2018 (top) and June 2018 (bottom).

