

# SOUTHWEST DROUGHT & MONSOON UPDATE

JUNE 25, 2018

National Integrated Drought  
Information System  
Drought.gov



## Exceptional Drought Continues in Southwest. Wet Monsoon Slightly Favored.

- The region is still mired in severe to exceptional drought due to record-high temperatures and record-low precipitation in the winter and spring
- Impacts include vegetation stress, extremely low streamflow, major wildfires, increased flood risks, and national forest closures
- Outlook favors wetter-than-normal monsoon precipitation setting in around 6-9 July

### CURRENT CONDITIONS

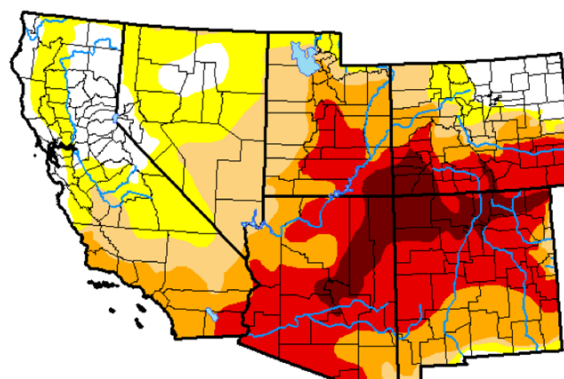
- Over half of the region is in severe (D2) to exceptional (D4) drought
- Since October, temperatures across the region have been well above normal: either top 10% or warmest on record since 1895
- Most of the region has received well-below-normal precipitation. Some areas have been the driest on record since 1895
- The persistent, above-normal temperatures have increased potential evaporative demand across the Southwest, resulting in reduced soil moisture and crop stress

### IMPACTS

- Streamflows: 28-day averaged streamflows are much below normal (less than 10%) for most of the Upper Colorado River Basin and below normal (10-24%) for most of the Lower Colorado River Basin
- Lake Powell reservoir level has dropped to well-below normal
- Fire: There are ongoing fire restrictions in every state in the region, leading to the closure of seven national forests; since mid-May, 28 active fires have burned more than 170,00 acres

### U.S. Drought Monitor Southwest

June 19, 2018  
(Released Thursday, Jun. 21, 2018)  
Valid 8 a.m. EDT



D0 Abnormally Dry  
D1 Moderate Drought  
D2 Severe Drought  
D3 Extreme Drought  
D4 Exceptional Drought

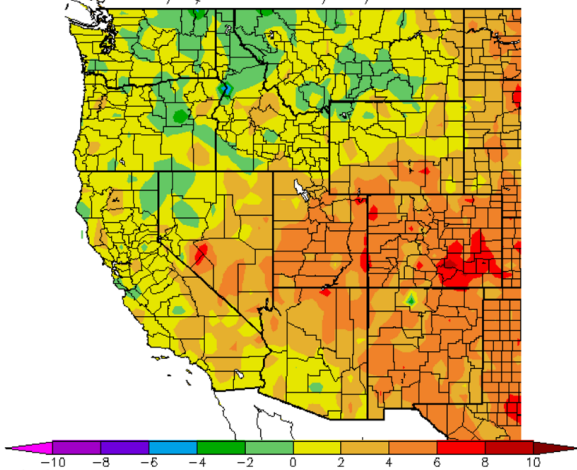
USDA  
http://droughtmonitor.unl.edu/

▲ **Fig 1.** All levels of drought from moderate (D1) to exceptional (D4) exist in the Southwest, with severe drought (D2) or worse in Arizona, Colorado, New Mexico, and Utah. Source: U.S. Drought Monitor

*“The ecosystem has been starved for a long time.”*

- Royce Fontenot,  
describing the New Mexico  
drought

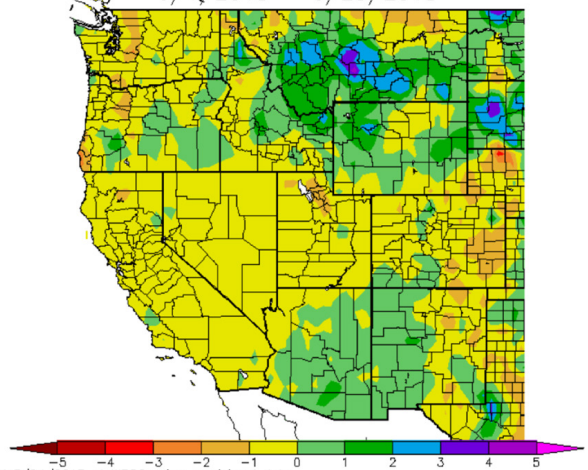
Ave. Temperature dep from Ave (deg F)  
6/1/2018 – 6/23/2018



Generated 6/24/2018 at WRCC using provisional data.  
NOAA Regional Climate Centers

▲ **Fig 2.** Temperature Departure from Average (Fahrenheit), June 1-23, 2018. Source: Western Regional Climate Center

Precipitation Departure from Average (in.)  
6/1/2018 – 6/23/2018



Generated 6/24/2018 at WRCC using provisional data.  
Regional Climate Centers

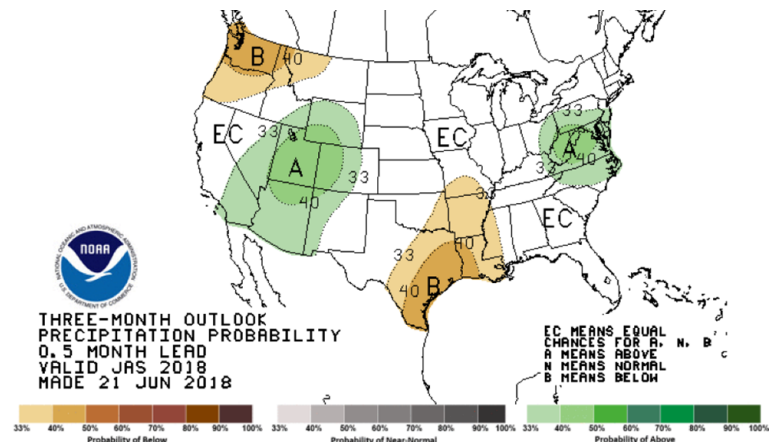
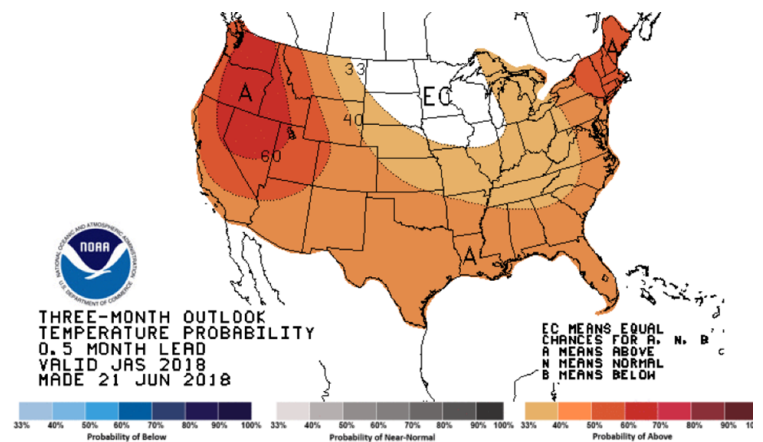
▲ **Fig 3.** Precipitation Departure from Average (inches), June 1-23, 2018. Source: Western Regional Climate Center

## OUTLOOK

- Temperatures July to September: Increased possibility of above-average temperatures
- Monsoon: The Monsoon pattern is likely to set in by July 6-9, with a slight favoring of a wetter-than-normal monsoon period from July through September. These months are key: a significant portion of the region's annual precipitation falls in this timeframe, so a wetter-than-normal monsoon could improve the drought. Conversely, areas burned by wildfire could see an increased risk of flash flooding with monsoon rains.

▲ **Fig 4.** Temperature Probabilities for July to August, 2018. Source: Climate Prediction Center

▶ **Fig 5.** Precipitation probabilities for July to September 2018. Source: Climate Prediction Center.



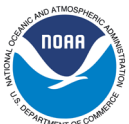
## Special Thanks

This webinar was presented by Becky Bolinger, Colorado Assistant State Climatologist, and Brian Klimowski, Meteorologist-in-Charge at NWS Flagstaff.

## Next Update

The next Southwest Drought Status Update will be on July 25. Speakers include: Nancy Selover, Arizona State Climatologist, and Ed Delgado, National Interagency Fire Center, Predictive Services Manager. Contact Elizabeth Weight for more information.

Drought and Climate Outlook Webinars are offered for regional Drought Early Warning Systems, more information can be found at: <https://www.drought.gov/drought/calendar/webinars>



WESTERN WATER ASSESSMENT  
A NOAA RISA TEAM