## SOUTHWEST DROUGHT STATUS AND EL NIÑO UPDATE

FEBRUARY 2019

National Integrated Drought Information System Drought.gov







# Long-term drought in the Southwest will continue to impact reservoirs and water supply Southwest - Precipitation

- Weak El Niño conditions developed in January; an "El Niño Advisory" is in effect as of 14 February 2019.
- Since October 2018, the region has experienced mostly wetter and cooler conditions than 1981-2010 normals (Fig 1).
- Extreme and Exceptional Drought in the Southwest has decreased in extent from 25% in October 2018 to 5% in February 2019 (Fig 2).
- Several years of above-average precipitation and run-off will be needed to alleviate the water supply deficits resulting from the extreme drought.

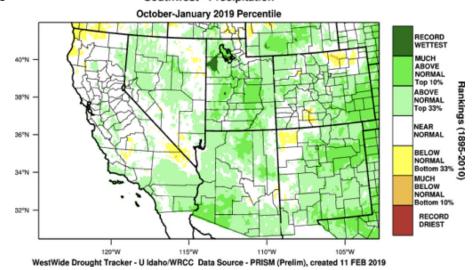
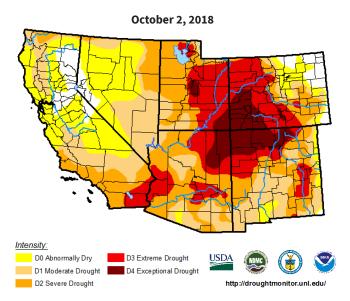


Fig 1. October 2018-January 2019 Precipitation in the Southwest Percentile Ranking. Source: WestWide Drought Tracker



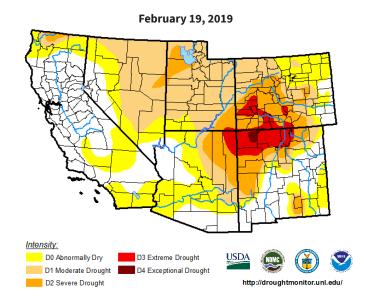


Fig 2. Comparison of US Drought Monitor Maps for the Southwest region, 2 October 2018 and 19 February 2018. Source: National Drought Mitigation Center

#### **CURRENT CONDITIONS**

- Snowpack is near or above average in Colorado and Utah.
- Water restrictions are still in place in San Juan County, New Mexico.
- Groundwater levels in Arizona are low and will take time to recover.

**Reservoir levels vary.** Many are starting the water year well below average and will likely remain low because soils are dry from the drought.

Lake Mead (AZ):

40%

of capacity (lower than one year ago)

Lake Powell (AZ):

40%

of capacity (lower than one year ago)

Elephant Butte and El Vado (NM):

7%

of capacity

Navajo (NM):

51%

of capacity

#### **OUTLOOK**

- El Niño is expected to continue through spring 2019 (~ 55% chance). There is significant uncertainty regarding El Niño persisting into summer.
- Typical El Niño pattern in the Southwest region tilts towards above-average precipitation during the winter and early spring.
- The Seasonal Drought Outlook (February 21 through May 31) shows drought improvement in most of the Southwest (Fig 3).

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

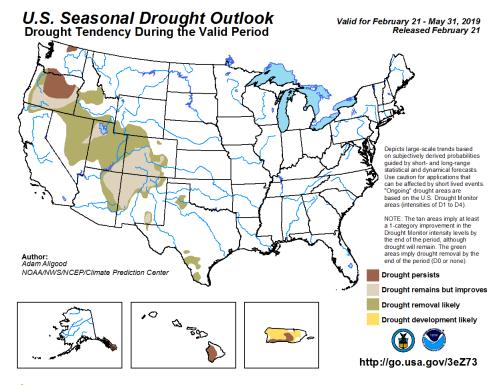


Fig 3. Seasonal Drought Outlook from February through May 2019. Source: NOAA

### **Special Thanks**

This drought status report was developed from a webinar presented on 14 February 2019 by Nancy Selover, Arizona State Climatologist, and Mike Halpert, Deputy Director, NOAA Climate Prediction Center.















