National Integrated Drought Information System Drought.gov

CALIFORNIA-NEVADA DROUGHT OUTLOOK JULY 2018

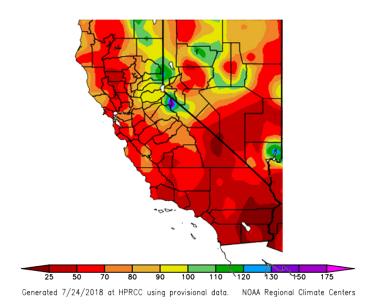
Current Drought Conditions

Summer in California and Nevada is the climatological dry season, with the exception of monsoon-impacted regions of southeastern California-Nevada. According to the U.S. Drought Monitor, drought conditions have not changed over the last 2 months, except for expansion of abnormally dry (D0) to moderate drought (D1) conditions in northern California due to meteorological drought. As of July 24 (Fig. 1), ~39% of California-Nevada was in moderate-extreme (D1-D3) drought and another ~45% was abnormally dry. Most drought areas are expected to persist into the fall with above-normal temperatures likely.

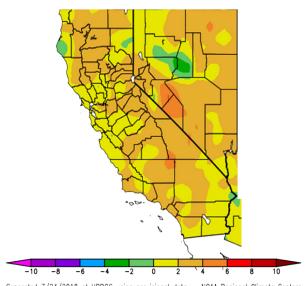
Fig 1. U.S. Drought Monitor for July 24. Source: <u>http://droughtmonitor.unl.edu</u>

Regional Climate Update

As California and Nevada continue through their climatological dry season, water year totals through July have remained below normal across both states. Southern Nevada and California are at 50-70% (or less) of the 1981-2010 normal water year precipitation, with just pockets of northern California and Nevada receiving above-normal precipitation (Fig. 2). Monsoonal precipitation over the southeast portions of California-Nevada has helped, but has not alleviated drought conditions. June-July temperatures left California-Nevada 2-6°F warmer than normal (Fig. 3). The July 6-7 heat wave was record-breaking in California, including maximum highs of 121°F in San Bernardino and 118°F in Los Angeles counties. Smoke from wildfires has been an issue, although not atypical for this time of year, including most recently from the Ferguson fire that started July 13th (Fig. 4) and has closed parts of Yosemite National Park. Reservoir levels are generally at or just below historical averages, due to carry over from last year's wet winter and this year's wet March.



▲ **Fig. 2:** Percent of normal precipitation (%) for the 2018 water year to July 23, 2108. Source: <u>HPRCC</u>



Generated 7/24/2018 at HPRCC using provisional data. NOAA Regional Climate Centers

Fig. 3: Departure from Normal Temperature (°F), May 25 - July 23, 2018. Source: <u>HPRCC</u>

Drought & Climate Outlook

- ENSO: Conditions are ENSO-neutral as equatorial sea surface temperatures are near-to-above normal across most of the Pacific Ocean, and the coupled oceanic and atmospheric conditions reflect ENSO-neutral. Given recent oceanic warming, <u>NOAA's ENSO alert system</u> status is currently an El Niño Watch as the forecaster consensus favors the onset of El Niño during the Northern Hemisphere fall (65% chance) through winter (70% chance).
- **Temperature**: Warm temperatures are favored over California-Nevada through the fall. According to NOAA Climate Prediction Center (CPC), there is a 45-65% chance of above-normal August-October temperatures over the region, with the greatest chances over eastern Nevada (Fig. 5).
- **Precipitation**: According to NOAA CPC, most of California and Nevada have equal chances of above, below, and normal August-October precipitation (Fig. 5). Drought is forecasted to persist through the fall, with potential drought relief where above-normal monsoonal precipitation is slightly favored in southeastern California-Nevada.
- Wildfire: The National Significant Wildland Fire Potential Outlook shows above-normal wildfire potential in August-September over north-central California-Nevada as well as coastal California (Fig. 6). Elevated fire potential will extend from the higher elevations of California, across most of the Northwest, and most of the Great Basin.

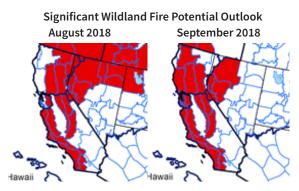


Fig. 6: National Significant Wildland Fire Potential Outlooks issued July 1, 2018. Red indicates above-normal significant wildland fire potential. Source: <u>NIFC Predictive Services</u>

About this Outlook

On July 23, 2018, NIDIS and its partners held this webinar as part of a series of drought and climate outlook webinars designed to provide stakeholders in the region with timely information on current drought status and impacts, as well as a preview of current and developing climatic events.

A video of and presentations from this webinar can be accessed here: <u>https://www.drought.gov/drought/calendar/events-california-nevada-drought-climate-outlook-webinar-july-23-2018</u>





Fig. 4: Fire and smoke from the Ferguson Fire on July 19, 2018, from NASA MODIS. Source: <u>https://www.nasa.gov/image-feature/</u> goddard/2018/ferguson-fire-jumps-to-near-23k-acres-in-size

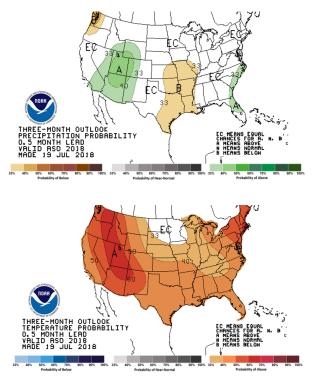


Fig. 5: Temperature and precipitation probabilities for August to October, 2018. Source: <u>Climate Prediction Center</u>. A = chances of Above Normal; EC = equal chances of Above, Below, or Normal; B = chances of Below Normal

Contributors

Facebook

Dave Simeral, WRCC/DRI Amanda Sheffield, NOAA/NIDIS Ed Delgado, NIFC Julie Kalansky, CNAP/SIO





For more information about NIDIS, visit www.drought.gov

Twitter

YouTube