



June 2025: Southwest Climate Outlook

Stacie Reece July 2, 2025



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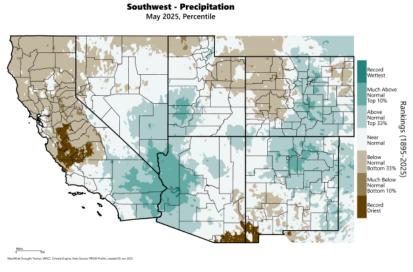
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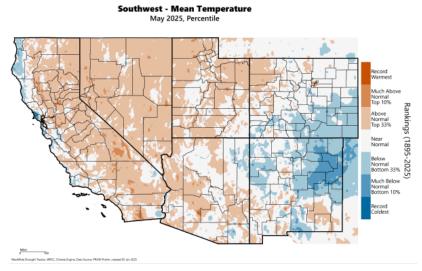
Precipitation and Temperature

May precipitation was above normal or much-above normal for parts of western Arizona, northern New Mexico and eastern New Mexico. Precipitation was near normal for much of the rest of the region, to below normal in southern parts of both states, with some areas near the border receiving recordlow May totals.



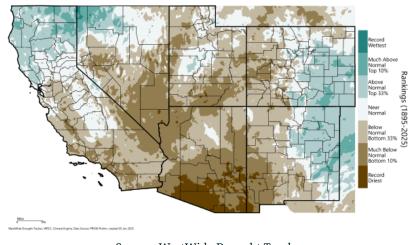
Source: WestWide Drought Tracker

May temperatures were near normal to above normal across Arizona; in New Mexico temperatures averaged below normal in many areas, and much-below normal for much of the northeast quarter of the state.



Source: WestWide Drought Tracker

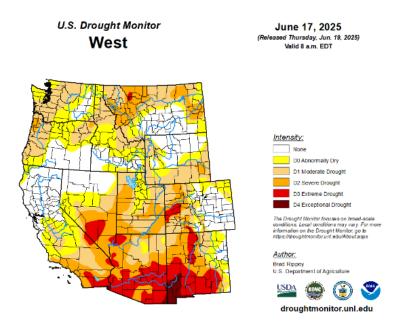
Precipitation totals for the water year so-far (October 2024 – May 2025) range from above normal for parts of eastern and northern New Mexico, to below normal and much-below normal for western New Mexico, southern New Mexico, and all of Arizona. It was the driest October – May season on record for parts of southern Arizona and southwestern New Mexico. Southwest - Precipitation October 2024 - May 2025, Percentile



Source: WestWide Drought Tracker

Drought

Drought conditions classified as severe (D2), extreme (D3), or exceptional (D4, the highest level of drought classification) are affecting areas amounting to two-thirds of New Mexico's area, and three-fourths of Arizona's area. Extreme to exceptional drought is most extensive across the southern parts of the two states, and also along the Rio Grande from Valencia County north through Rio Arriba County.



Source: U.S. Drought Monitor

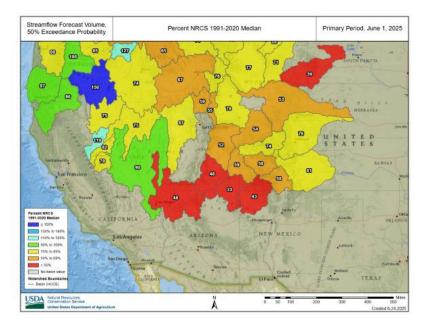
NIDIS Improved and Expanded State Pages on Drought.Gov

New Mexico

Arizona

Snowpack & Streamflow

Streamflow forecasts predict below normal or much-below normal flow for Colorado River Basin tributaries and the Rio Grande. Aggregated across Upper Colorado River Basin tributaries, the forecast's best estimate is for 61% of normal streamflow.



USDA-NRCS: National Water and Climate Center

Water Supply

Reservoir storage in Arizona is generally down over last year; Lake Mead and Lake Powell remain much-below long-term average levels, but Salt River system reservoirs are near normal levels. New Mexico reservoirs in the eastern part of the state are generally near or above normal levels, but everywhere else in the state reservoirs reflect drought conditions that have persisted over the past year; levels in Heron, El Vado, and Elephant Butte are much-below the longterm average.

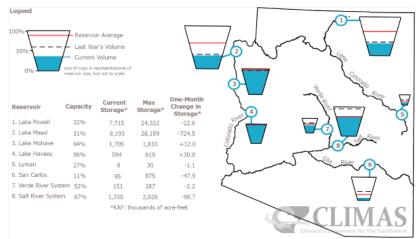


Figure 1. Arizona reservoir volumes for the end of May 2025 as a percent of capacity. The map depicts the average volume and last year's storage for each reservoir. The table also lists current and maximum storage, and change in storage since last month.

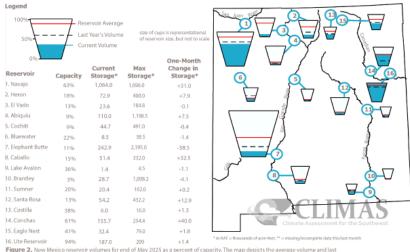


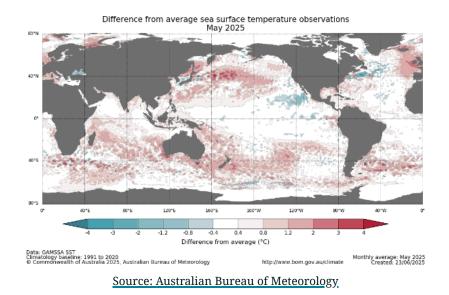
Figure 2. New Mexico reservoir volumes for end of May 2025 as a percent of capacity. The map depicts the average volume and i vear's storage for each reservoir. The table also lists current and maximum storage, and change in storage since last month.

The map gives a representation of current storage for reservoirs in Arizona and New Mexico. Reservoir locations are numbered within the blue circles on the map, corresponding to the reservoirs listed in the table. The cup next to each reservoir shows the current storage (blue fill) as a percent of total capacity. Note that while the size of each cup varies with the size of the reservoir, these are representational and not to scale. Each cup also represents last year's storage (dotted line) and the 1991–2020 reservoir average (red line). The table details more exactly the current capacity (listed as a percent of maximum storage). Current and maximum storage are given in thousands of acre-feet for each reservoir. One acre-foot is the volume of water sufficient to cover an acre of land to a depth of 1 foot (approximately 325,851 gallons). On average, 1 acre-foot of water is enough to meet the demands of four people for a year. The last column of the table lists an increase or decrease in storage since last month. A line indicates no change. These data are based on reservoir reports updated monthly by the <u>Natural</u> <u>Resources Conservation Service - National Water and Climate Center (USDA)</u>

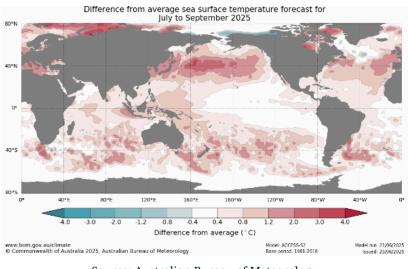
BOR: New Mexico Dashboard

ENSO Tracker

Sea surface temperatures (SSTs) along the equator in the Pacific reflect ENSO-neutral conditions; SSTs are near normal in the central and eastern equatorial Pacific.

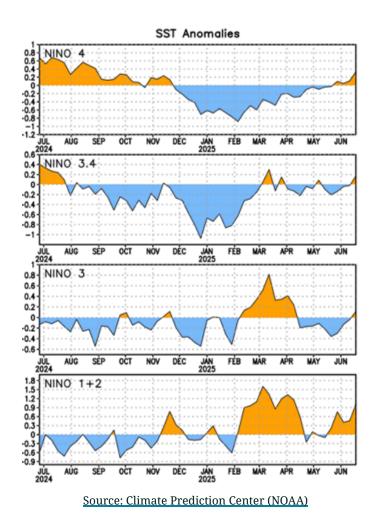


The July – September seasonal SST forecast from the Australian ACCESS-S2 model shows a continuation of ENSOneutral conditions with near normal SSTs in the central and eastern equatorial Pacific. Warmer-than-average SSTs shown in the western equatorial Pacific are associated with La Niña conditions, but here they are not accompanied by the diagnostic cooler-than-average SSTs in the central or eastern equatorial Pacific. ACCESS-S2 is just one of several different forecast models that may disagree in their predictions, but in this case, most other models agree about ENSO-neutral in July – September (see the model plume figure below).

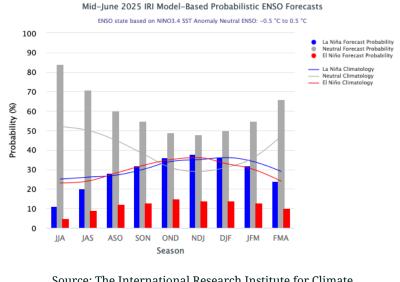


Source: Australian Bureau of Meteorology

SSTs have been in the ENSO-neutral range, no warmer or cooler than 0.5°C from average, in the key Niño 3.4 monitoring region since the fading of La Niña's cooler-than-average SSTs in February.

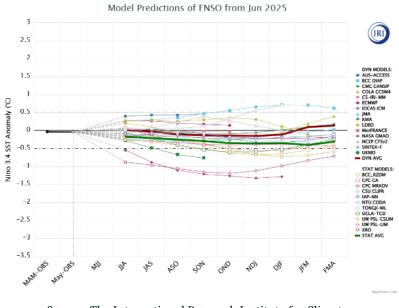


Forecast models favor ENSO-neutral conditions over a transition to El Niño or La Niña, but during the fall and winter months when the state of ENSO has a consistently meaningful impact on Southwest climate, the forecast is relatively uncertain, only leaning slightly toward ENSO-neutral over La Niña by the October – December forecast window. Chances of El Niño, however, are comparatively low, according to models right now.



Source: The International Research Institute for Climate and Society, Columbia University Climate School

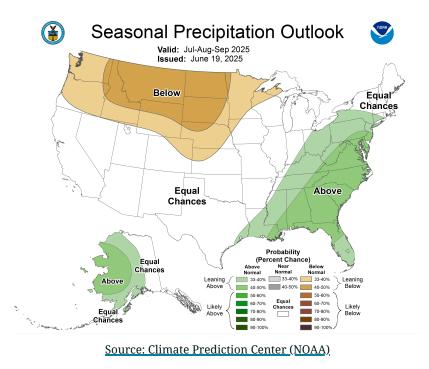
The plume of individual forecast models shows where the forecast's low chance of El Niño comes from: all but two of the models keep Niño 3.4 region SSTs in the range of ENSO-neutral (within 0.5°C of average) or La Niña (cooler than 0.5°C cooler-than-average).



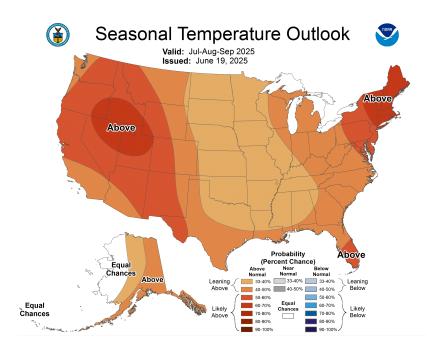


Seasonal Forecasts

The July – September seasonal precipitation forecast gives equal chances of above normal precipitation, below normal precipitation, and near normal precipitation for an area that includes Arizona and New Mexico.



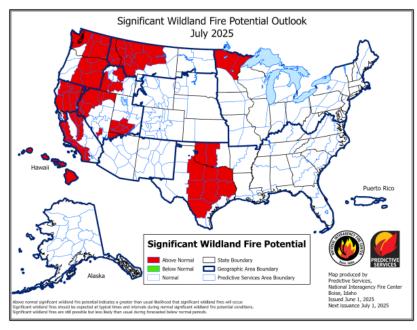
The July – September seasonal temperature forecast calls above normal temperatures likely (50-60% chance) for an area that includes much of Arizona and New Mexico. The remaining parts of the states are included in an area where the forecast leans toward (40-50% chance) above normal temperatures.



Source: Climate Prediction Center (NOAA)

Wildfire

Potential for significant wildland fire in July is expected to be near normal across New Mexico and most of Arizona; elevated potential is expected for the Arizona Strip portion of Arizona.



Source: National Interagency Coordination Center

Southwest Climate Podcast

June 2025 SW Climate Podcast - Monsoon's Gonna Monsoon



Recorded 06/24/2025, Aired 06/26/2025

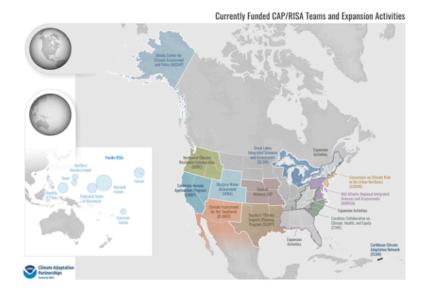
In this month's Southwest Climate Podcast we are in the final countdown to the monsoon. To get us started, host Zack Guido quizzes host Mike Crimmins on his climatology knowledge. They then cover this past month's heat ramp up, take a walk down monsoon history over the past few seasons, and look at past conditions as a precursor to get the

monsoon party started. Then close out with our current conditions and what the forecasts are saying. Will the tropical storm activity be this year's wildcard?!?

<u>Listen Here</u>

About CLIMAS

The Climate Assessment for the Southwest (CLIMAS) program was established in 1998 as part of the National Oceanic and Atmospheric Administration's Climate Adaptation Partnerships (CAP) Program (formerly known as Regional Integrated Sciences and Assessments, or RISA). CLIMAS housed at the University of Arizona's Institute of the Environment—is a collaboration between the University of Arizona and New Mexico State University. The CLIMAS team is made up of experts from a variety of social, physical, and natural sciences who work with partners across the Southwest to develop sustainable answers to regional climate challenges.



Learn more about the NOAA CAP program here



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