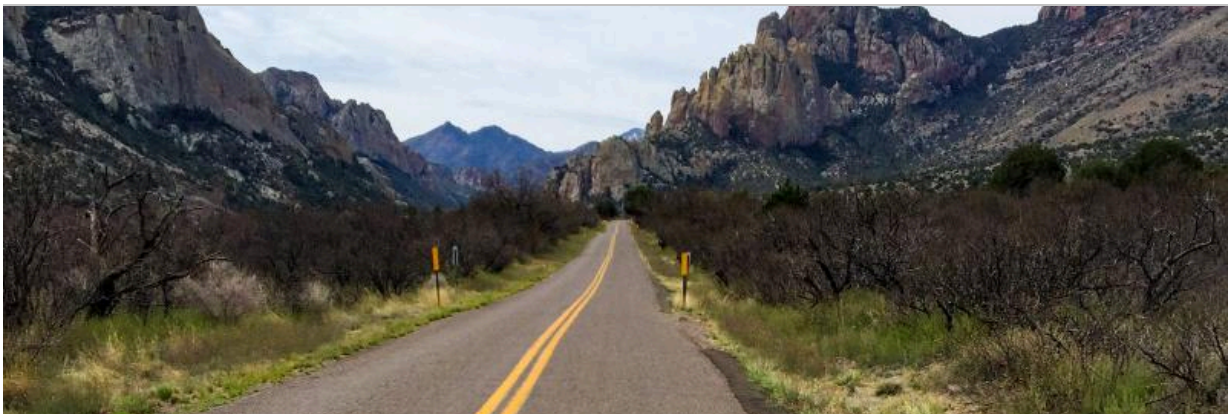


July 2025: Southwest Climate Outlook

Stacie Reece
July 31, 2025

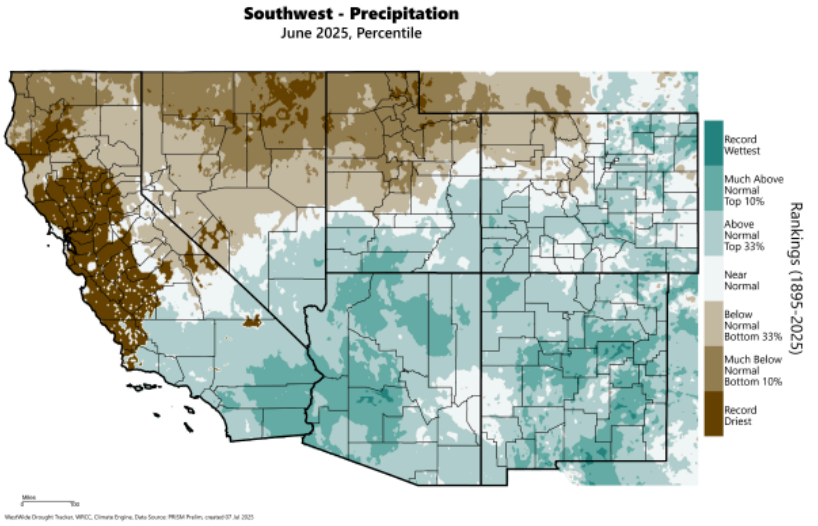
https://climas.arizona.edu/

The Southwest Climate Outlook is published by the Climate Assessment for the Southwest (CLIMAS), with support from University of Arizona Cooperative Extension, and the New Mexico State Climate office.

Questions/Contact: Stacie Reece, sreece@arizona.edu

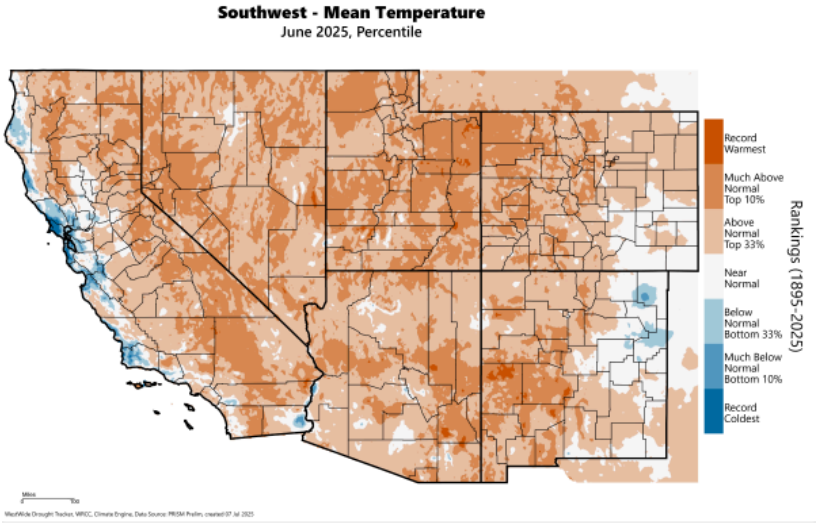
Precipitation and Temperature

June precipitation was above normal to much-above normal across much of Arizona and New Mexico. In Arizona this precipitation occurred in many places as a single-day rain event on June 1st, fed by moisture from remnants of Tropical Storm Alvin. In New Mexico precipitation tended to be distributed over several events in the latter half of the month.



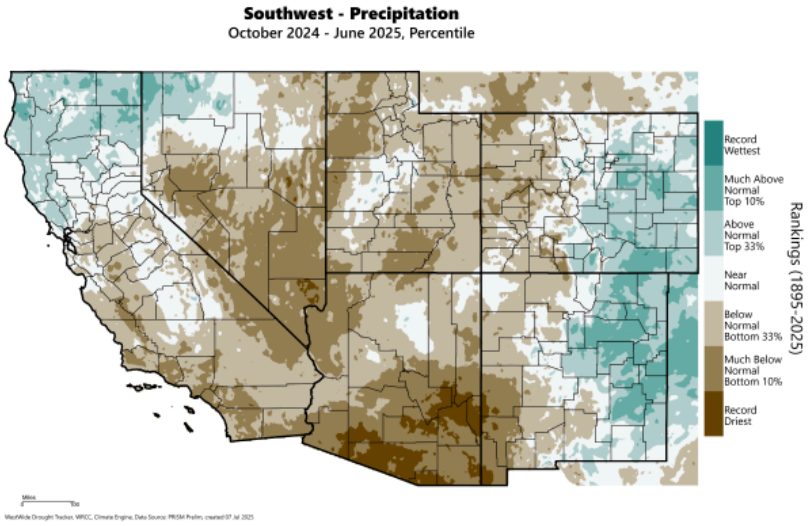
Source: WestWide Drought Tracker

June temperatures were above normal to much-above normal across Arizona and much of New Mexico. Temperatures in northeast New Mexico ranged from near normal to below normal.



Source: WestWide Drought Tracker

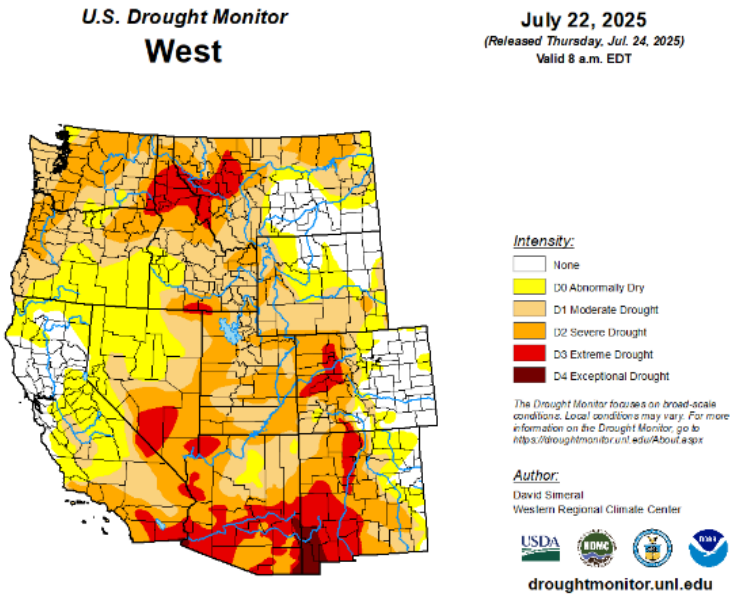
Water year so-far (October 2024 – June 2025) precipitation totals remain below normal for Arizona and western New Mexico, contrasting with above normal totals for eastern New Mexico and some adjacent areas including Santa Fe County. For parts of southern Arizona and southwestern New Mexico this has been the driest October – June on record.



Source: WestWide Drought Tracker

Drought

Drought or abnormally dry conditions continue to affect the entire state of Arizona and all but some parts of eastern New Mexico. With the arrival of the monsoon, some areas have seen their drought status reclassified to less-severe categories, but drought considered to be severe (D2), extreme (D3), or exceptional (D4), extends across an area accounting for around three-quarters of Arizona and over one-half of New Mexico. The worst drought extends from the upper Gila south through the New Mexico bootheel; extreme drought also extends throughout much of the Rio Grande and southern San Juan Mountains regions of New Mexico, and across much of southern Arizona.



Source: U.S. Drought Monitor

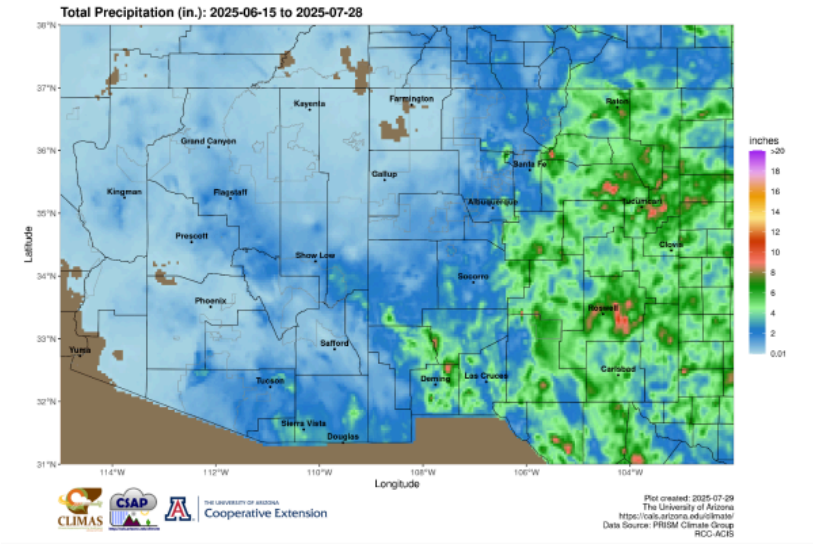
NIDIS Improved and Expanded State Pages on Drought.Gov

New Mexico

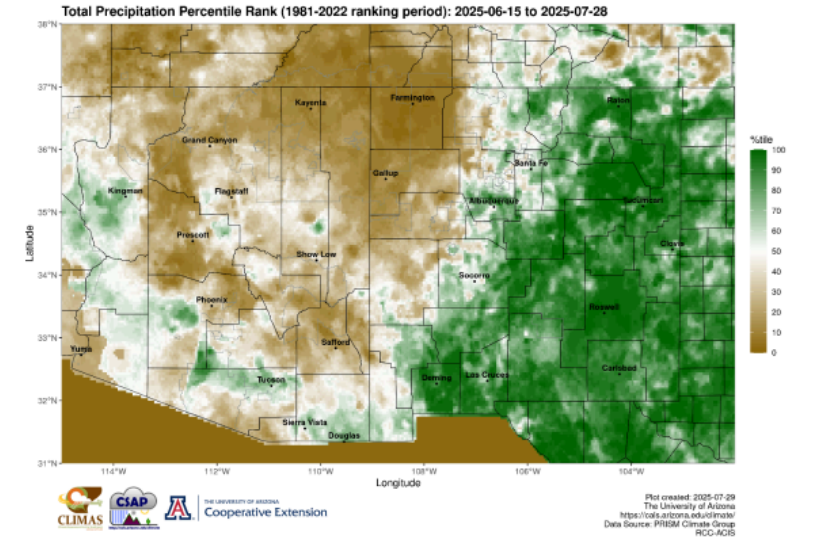
Arizona

Monsoon

Monsoon precipitation since June 15 has been above normal to much-above normal for eastern New Mexico and parts of central and southern New Mexico. Monsoon precipitation has been below normal for the Colorado Plateau and much of Arizona.



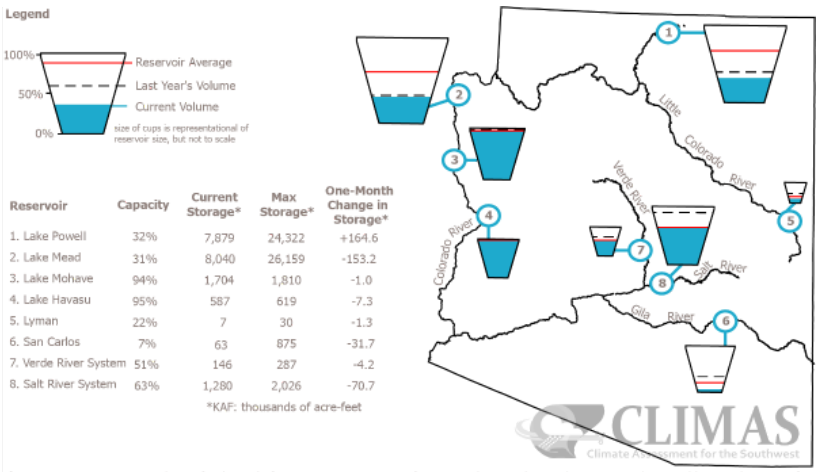
Source: University of Arizona Cooperative Extension - CSAP



Source: University of Arizona Cooperative Extension - CSAP

Water Supply

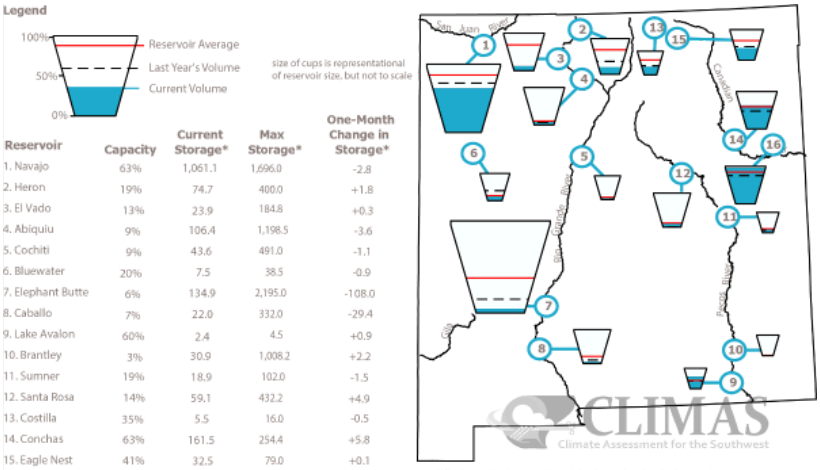
Storage in Lake Mead and Lake Powell remains much-below long-term average levels, and around one-third of what the two reservoirs combined held in 1999 before their long-term decline. In New Mexico, while some reservoirs in the eastern part of the state are in good shape, at levels above last year's or above the long-term average, generally everywhere else reservoir levels are down over last year and much below long-term averages.



Reservoir	Capacity	Current Storage*	Max Storage*	One-Month Change in Storage*
1. Lake Powell	32%	7,879	24,322	+164.6
2. Lake Mead	31%	8,040	26,159	-153.2
3. Lake Mohave	94%	1,704	1,810	-1.0
4. Lake Havasu	95%	587	619	-7.3
5. Lyman	22%	7	30	-1.3
6. San Carlos	7%	63	875	-31.7
7. Verde River System	51%	146	287	-4.2
8. Salt River System	63%	1,280	2,026	-70.7

*KAF: thousands of acre-feet

Figure 1. Arizona reservoir volumes for the end of June 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.



Reservoir	Capacity	Current Storage*	Max Storage*	One-Month Change in Storage*
1. Navajo	63%	1,061.1	1,696.0	-2.8
2. Heron	19%	74.7	400.0	+1.8
3. El Vado	13%	23.9	184.8	+0.3
4. Abiquiu	9%	106.4	1,198.5	-3.6
5. Cochiti	9%	43.6	491.0	-1.1
6. Bluewater	20%	7.5	38.5	-0.9
7. Elephant Butte	6%	134.9	2,195.0	-108.0
8. Caballo	7%	22.0	332.0	-29.4
9. Lake Avalon	60%	2.4	4.5	+0.9
10. Brantley	3%	30.9	1,008.2	+2.2
11. Sumner	19%	18.9	102.0	-1.5
12. Santa Rosa	14%	59.1	432.2	+4.9
13. Costilla	35%	5.5	16.0	-0.5
14. Conchas	63%	161.5	254.4	+5.8
15. Eagle Nest	41%	32.5	79.0	+0.1
16. Ute Reservoir	96%	192.9	200	+5.9

* in KAF = thousands of acre-feet, ** = missing/incomplete data this/last month

Figure 2. New Mexico reservoir volumes for end of June 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.

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 Natural

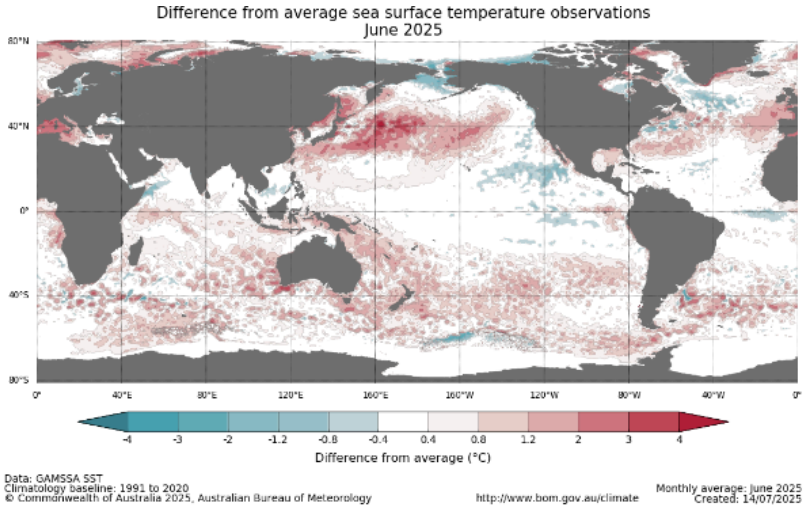
Resources Conservation Service - National Water and Climate Center (USDA)

.

BOR: New Mexico Dashboard

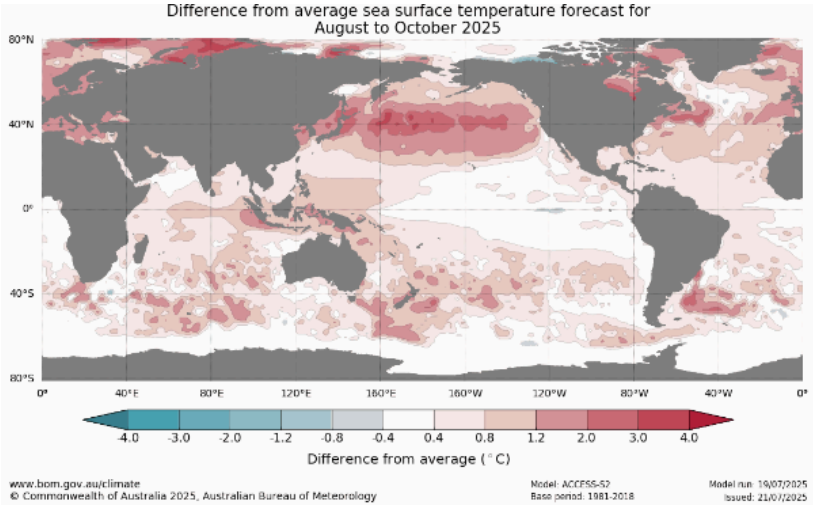
ENSO Tracker

Sea surface temperatures (SSTs) for June show near normal SSTs extending over large parts of the central and eastern equatorial Pacific, where SSTs' difference from average (anomaly) are used to indicate the state of the El Niño-Southern Oscillation (ENSO). Near normal SSTs are indicative of ENSO-neutral conditions. We keep an eye on ENSO because it has a statistical relationship with cool-season (October – March) seasonal climate in the Southwest; El Niño generally means wetter conditions; La Niña generally means drier conditions; ENSO-neutral generally means seasonal climate can go either way.



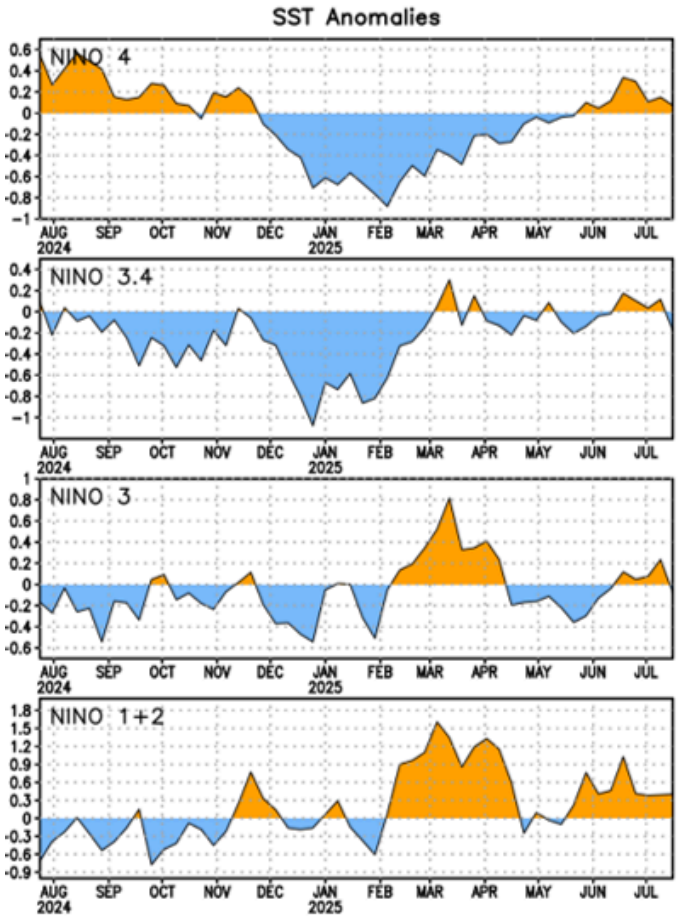
Source: Australian Bureau of Meteorology

The August – October SST forecast pattern from the Australian ACCESS-S2 model shows the ENSO-neutral SSTs persisting through the coming months. This forecast is from only one model of many models which may disagree in their simulations of future conditions, but in this case, most of the other models agree (see probabilistic forecast and plume of individual models below).



Source: Australian Bureau of Meteorology

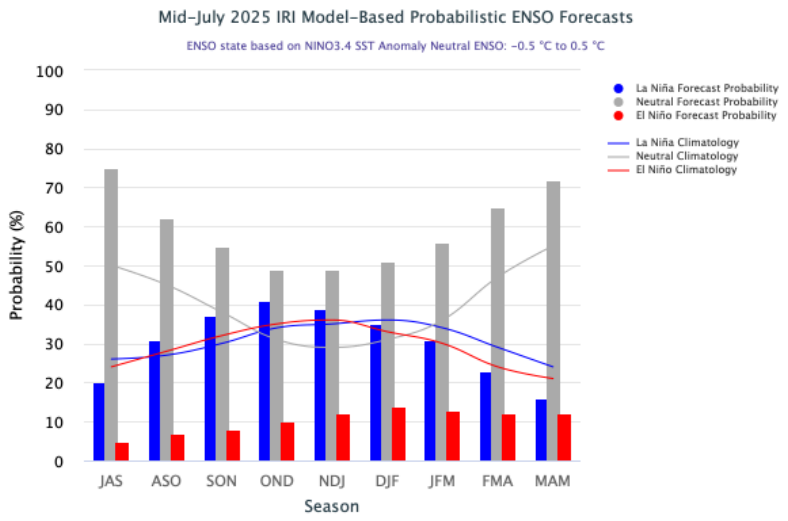
SSTs in the Nino 3.4 monitoring region, where SSTs determine official ENSO status, have not departed from average by much since the last winter's La Niña conditions ended in February as Nino 3.4 SSTs began measuring within 0.5°C of average.



Source: Climate Prediction Center (NOAA)

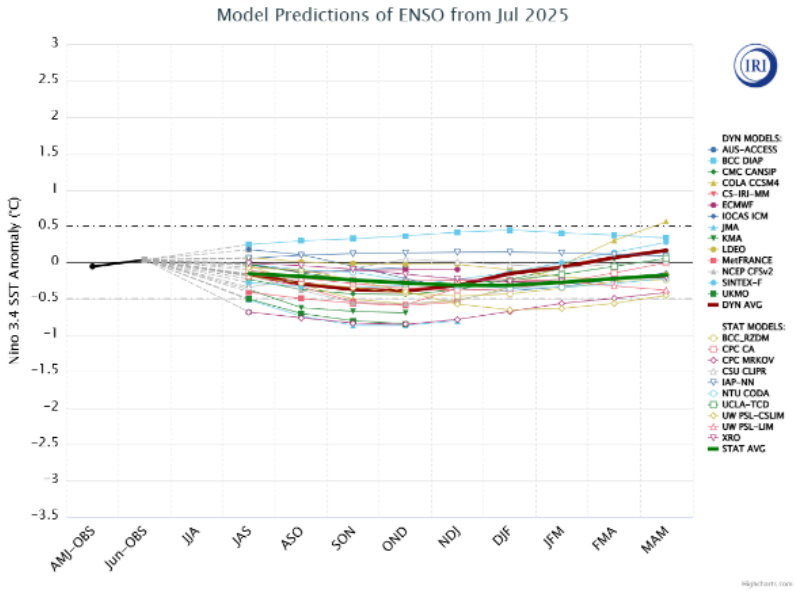
Forecast models favor ENSO-neutral conditions through the coming fall, winter, and spring—when the state of ENSO

matters for Southwest seasonal climate. But the forecast is far from certain, with probabilities of La Niña coming in a close second for the October – December and November – January forecast windows. The bottom line is that models indicate a very low probability of an El Niño, so there is not a good reason to expect wetter-than-normal, cooler-than-normal conditions this fall – spring.



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

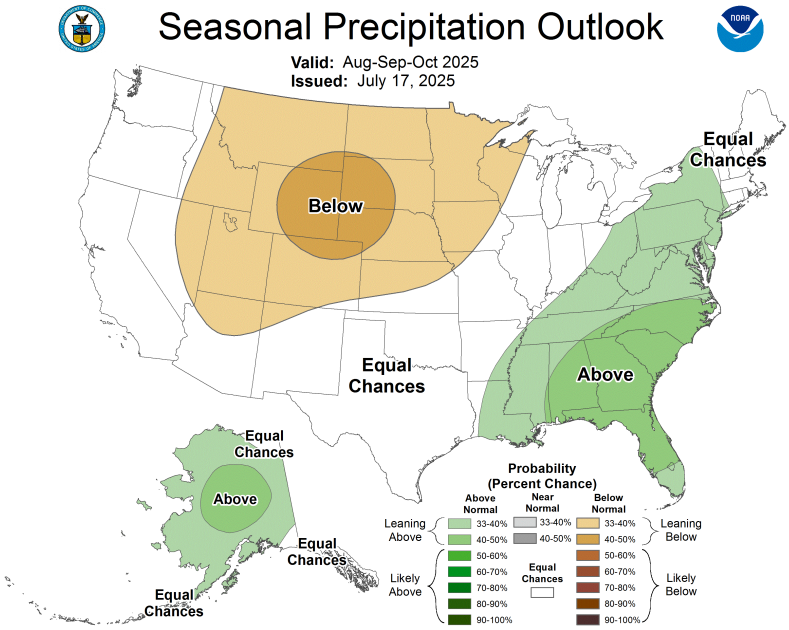
The plume of individual-model ENSO forecasts shows most models predict ENSO-neutral conditions (Nino 3.4 SSTs within 0.5°C of average) through all forecast windows, but several models predict La Niña conditions (Nino3.4 SSTs more than 0.5°C cooler than average) by the August – October forecast window. No models predict El Niño conditions, except for one, at the furthest time horizon, the March – May forecast window.



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

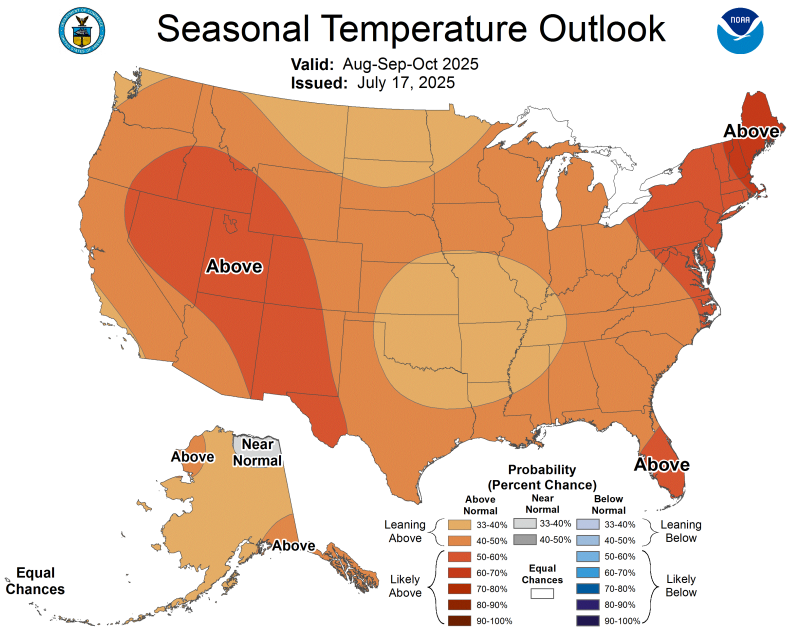
Seasonal Forecasts

The August – October seasonal precipitation forecast gives equal chances to above normal, below normal, and near normal precipitation for an area that includes most of Arizona and New Mexico. The forecast leans towards below normal precipitation (33% - 40% chance) for an area that includes northern Arizona and part of northwest New Mexico.



Source: Climate Prediction Center (NOAA)

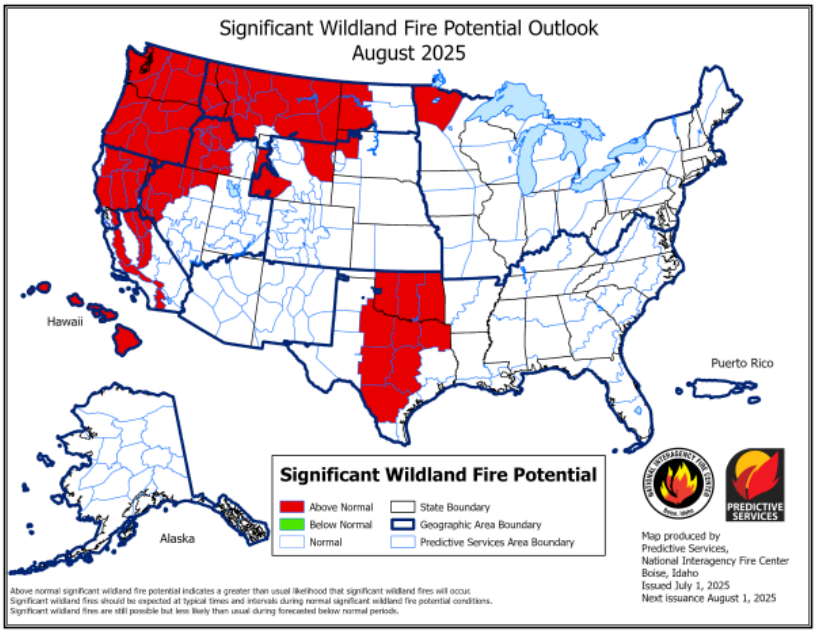
The August – October seasonal temperature forecast says above normal temperatures are likely (50 – 60% chance) for an area that includes most of New Mexico and parts of eastern and northern Arizona. The forecast leans toward above normal temperatures (40 – 50% chance) for an area that includes the remaining parts of the region.



Source: Climate Prediction Center (NOAA)

Wildfire

Potential for significant wildland fire in Arizona and New Mexico is expected to be normal for August. This year fires have burned more than 81,000 acres in Arizona and over 187,000 acres in New Mexico.



Source: National Interagency Coordination Center

SOUTHWEST AREA

2024 YEAR-TO-DATE FIRES & ACRES

Analysis of Fires and Acres By State-Wide and Agency

UPDATED: 7/24/25 5:42 PM

ACRES

	CAUSE				PERCENT OF STATE-WIDE TOTAL				PERCENT OF AGENCY TOTAL		
	HUMAN	LIGHTNING	UNKNOWN	TOTAL	HUMAN	LIGHTNING	UNKNOWN	ALL	HUMAN	LIGHTNING	UNKNOWN
ARIZONA											
AZS	10627	76	307	11010	29%	0%	22%	14%	97%	1%	3%
BIA	2595	745	2	3341	7%	2%	0%	4%	78%	22%	0%
BLM	52	600	952	1605	0%	1%	69%	2%	3%	37%	59%
BOR	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
DOD	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
DOE	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
NPS	2	23086	0	23088	0%	53%	0%	28%	0%	100%	0%
FWS	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
USFS	23007	19337	127	42472	63%	44%	9%	52%	54%	46%	0%
TOTAL	36283	43845	1388	81516							
PERCENT	45%	54%	2%								
NEW MEXICO											
NMS	30783	923	1113	32820	92%	1%	57%	17%	94%	3%	3%
BIA	650	815	500	1966	2%	1%	25%	1%	33%	41%	25%
BLM	913	57943	7	58863	3%	38%	0%	31%	2%	98%	0%
DOD	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
DOE	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
NPS	18	4	0	22	0%	0%	0%	0%	82%	18%	0%
FWS	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
USFS	1094	92464	346	93904	3%	61%	18%	50%	1%	98%	0%
TOTAL	33458	152150	1966	187574							
PERCENT	18%	81%	1%								
OK / WEST TEXAS											
NPS	0	0	0	0	0%	100%	0%	100%	0%	100%	0%
TOTAL	0	0	0	0							
PERCENT	0%	100%	0%								
SOUTHWEST AREA											
AZS	10627	76	307	11010	15%	0%	9%	4%	97%	1%	3%
NMS	30783	923	1113	32820	44%	0%	33%	12%	94%	3%	3%
BIA	3245	1560	502	5307	5%	1%	15%	2%	61%	29%	9%
BLM	965	58543	959	60468	1%	30%	29%	22%	2%	97%	2%
BOR	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
DOD	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
DOE	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
NPS	19	23090	0	23110	0%	12%	0%	9%	0%	100%	0%
FWS	0	0	0	0	0%	0%	0%	0%	0%	0%	0%
USFS	24101	111802	473	136376	35%	57%	14%	51%	18%	82%	0%
TOTAL	69741	195995	3354	269090							
PERCENT	26%	73%	1%								

Source: Southwest Coordination Center

Southwest Climate Podcast

July 2025 SW Climate Podcast - The (Unusual) Monsoon Edition

Recorded 07/23/2025, Aired 07/24/2025

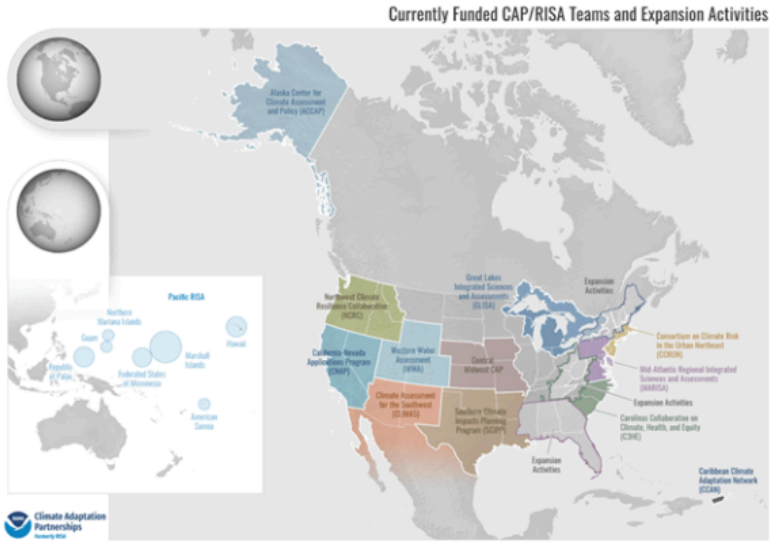
Hosts Zack Guido and Mike Crimmins in this month's Southwest Climate Podcast focus on the current unusual monsoon for the entire episode. All the ingredients are there - but it is not your typical season. They cover the southwesterly flow, what the heck is going on with the four corners high, and the low that's been sitting off the coast of California. They dive into a recent rain event that was attributed to a Mesoscale Convective Vortex (MCV) and how the monsoon has done so far across Arizona and New Mexico which is a tale of 2 states. Lastly, hear how the hosts are doing on their predictions for the Southwest Monsoon Fantasy Forecasts game.

Listen Here

You can still play if you haven't signed up yet. August Predictions for the Southwest Monsoon Fantasy Forecast game are due Thursday 7/31 before midnight - See if you can beat Mike this next month!

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

Disclaimer

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