CLIMAS
Climate Assessment for the Southwest
A NOAA RISA TEAM

EL NIÑO 2026-27

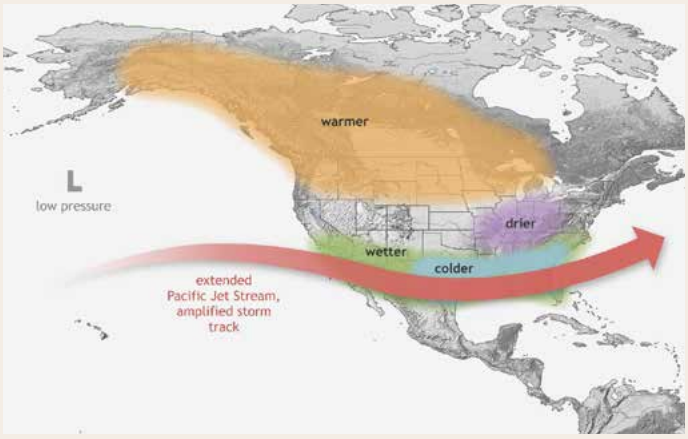
EL NIÑO 2026–27 AND THE SOUTHWEST U.S.

What a potentially historic El Niño could mean for Arizona and New Mexico

What is El Niño?

El Niño is a periodic warming of the tropical Pacific Ocean that can alter weather patterns worldwide. During El Niño winters, changes in tropical rainfall and atmospheric circulation often strengthen and shift the Pacific jet stream southward, increasing opportunities for winter storms across the southern United States.

For Arizona and New Mexico, El Niño tilts the odds toward a wetter-than-average cool season, but it does not guarantee a wet winter. The position and persistence of the storm track ultimately determine where storms travel and how much precipitation falls. Even subtle shifts in the storm track can direct the bulk of the precipitation north or south of the region or produce very different outcomes within the Southwest, such as between northern and southern Arizona.



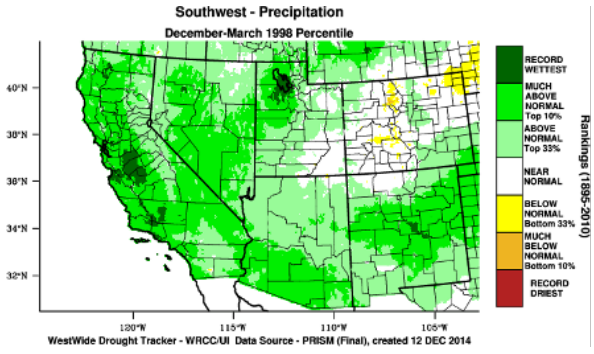
Source: NOAA Climate.gov map by Fiona Martin

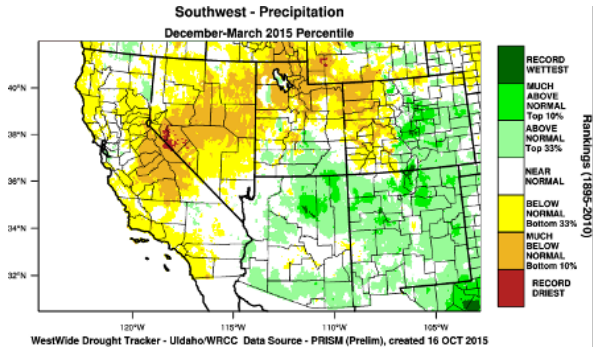
How strong could the 2026–27 El Niño become?

The 2026 El Niño has developed rapidly since last spring and is expected to continue strengthening through the fall. NOAA currently gives a greater than 90% chance that it will become a very strong El Niño during fall and winter 2026–27, potentially placing it among the strongest events in the historical record.

El Niño strength is measured by how warm ocean temperatures stay across the tropical Pacific. A stronger El Niño increases confidence that it will influence large-scale atmospheric circulation, but it **does not necessarily mean stronger or more widespread impacts across the Southwest**. Strong events do raise the odds of unusually wet conditions and precipitation extremes, but where those impacts occur still depends largely on the position and persistence of the storm track.

For example, the 1997-98 and 2015–16 events were both classified as very strong El Niños. The 1997–98 El Niño brought increased rainfall to the region, while the 2015–16 El Niño produced drier conditions in Arizona and western New Mexico.





Source: WestWide Drought Tracker

Anticipated 2026–27 El Niño Impact Timeline

El Niño strengthens
Monsoon circulation wanes as the North Pacific begins transition towards cool-season storm pattern. Occasional tropical systems bring periods of heavy rain.

Winter pattern emerges
Pacific jet shifts southward, increasing chances for winter precipitation. Subtle shifts in storm track can bring wet conditions to some areas.

Peak impact window
Historically, the period of strongest El Niño influence. Increased opportunities for winter storms, beneficial rain, and mountain snow.

Impacts extend into spring
Storm track begins to shift northward, but precipitation continues into spring.

What could El Niño mean for Arizona and New Mexico?

Possible outcomes range from a usefully wet winter to periods of extreme precipitation and localized flooding.

- **More opportunities for winter precipitation.** El Niño generally increases the odds of wetter conditions across Arizona and New Mexico by favoring a more active southern storm track during the cool season. Historically, this relationship has been strongest across southern portions of the region.
- **More storms—but not continuous rain.** A wetter winter does not necessarily mean consistently wet weather. Extended dry periods can occur between storms, even during a wet El Niño winter.
- **Greater potential for heavy precipitation.** A more active storm track can bring beneficial rain and mountain snow, but it can also increase the potential for heavy precipitation, high streamflow, and localized flooding.
- **Cooler periods and fewer warm extremes.** More frequent storms and cloud cover can favor cooler daytime temperatures and fewer unusually warm days, but El Niño does not necessarily mean a colder winter overall.
- **Potential transition to La Niña the following year.** El Niño events are often followed by La Niña, which typically favors warmer and drier Southwest winters. It is too early to know whether La Niña will develop in 2027, but it will be important to watch as El Niño weakens next spring.

Key El Niño impacts in the Southwest can include:

- **Potential water supply benefits** as winter precipitation can improve soil moisture, build mountain snowpack, reduce short-term drought conditions, and boost streamflow and water supplies. However, even a very wet winter may not fully alleviate longer-term drought impacts or persistent water-resource deficits across the region.
- **Flood risks can increase** during prolonged wet periods, when warm storms bring rain to existing mountain snowpack, or when there is heavy precipitation over recent wildfire burn scars,
- **Health impacts from increased precipitation.** Extreme precipitation and flooding can increase water-borne disease outbreaks. El Niño events can also exacerbate vector-borne diseases like the West Nile virus.
- **Mixed impacts on spring wildfire risk.** A wet winter can reduce spring fire potential in higher-elevation forested areas by increasing soil and fuel moisture and delaying fuel drying. At lower elevations, however, additional winter precipitation can promote grass and other fine-fuel growth, increasing fuel abundance and continuity and potentially elevating fire risk as those fuels dry later in the spring or summer.

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