



NOAA
Physical Sciences
Laboratory



September 2025 Southern California Sector-Specific Drought Outlook Pilot

Current Drought

Southern California¹ has experienced a persistent drought since early 2025. As of September 23, 2025, 91% of the region was in Moderate Drought (D1) or worse. Most of the region (greater than 99%) is experiencing Abnormally Dry (D0) conditions or worse (Figure 1). The period from October 1, 2024 to September 9, 2025 was the third driest and eighth warmest such period in Southern California since 1951.

Drought Prediction and Predictability

Southern California is expected to experience below-average precipitation and above-average temperatures between September 2025 and May 2026, consistent with a developing La Niña (Figure 2). La Niña is predicted to emerge in autumn 2025 and continue into early spring 2026.

Sector-Specific Outlooks



Water Utilities

Reservoir storage and groundwater levels are expected to be lower in June 2026 compared to September 2025 (high confidence).



Public Health

In southern California, poor air quality is expected in October-December 2025 and April-June 2026 due to smoke from wildfires (high confidence) and in March-June 2026 due to blowing dust (medium confidence).



Agriculture

Crop stress, which may reduce agricultural productivity, is expected through at least spring 2026 in Southern California due to a second year of below-average precipitation and above-average temperatures, especially during the dormant season post-harvest (high confidence).

About the Outlook

This outlook disseminates sector-specific drought scenarios that are based on tailored monitoring and forecasting information, which will enable users to make proactive decisions ahead of drought. The focus sectors include water utilities, agriculture, and public health in Southern California. This outlook uses data available as of September 25, 2025 at 10 a.m. PT unless indicated otherwise.

Several perspectives inform sector-specific drought scenarios, including observations of current conditions and expert interpretation of many types of forecasts to anticipate the future.

[View graphics and supporting evidence.](#)



¹ Here, Southern California includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial counties.

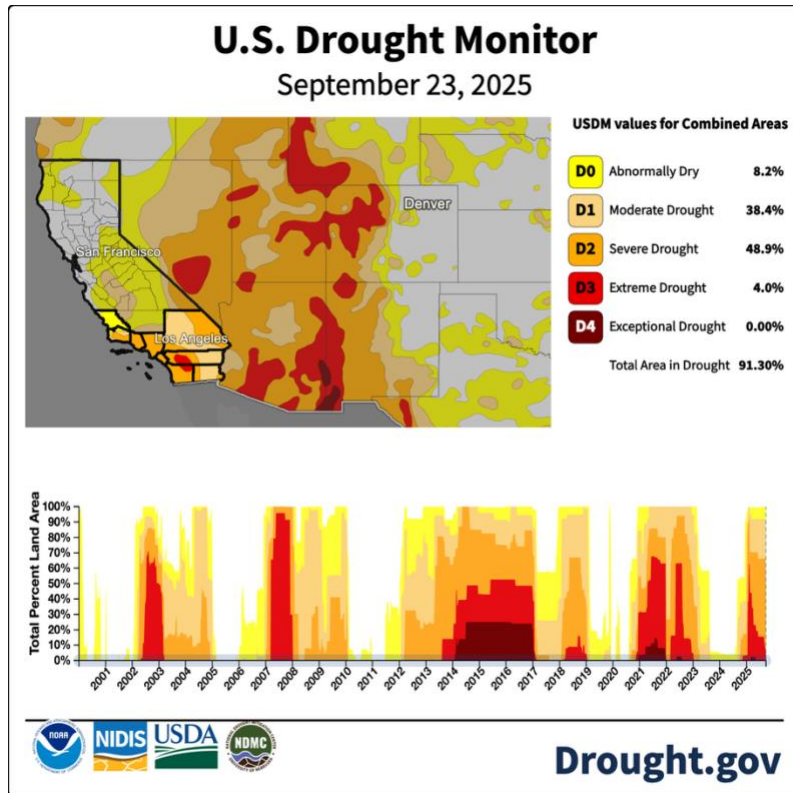


Figure 1 at left: U.S. Drought Monitor as of September 23, 2025 and (bottom) area covered by drought from the U.S. Drought Monitor in Southern California between January 2000 and September 23, 2025.

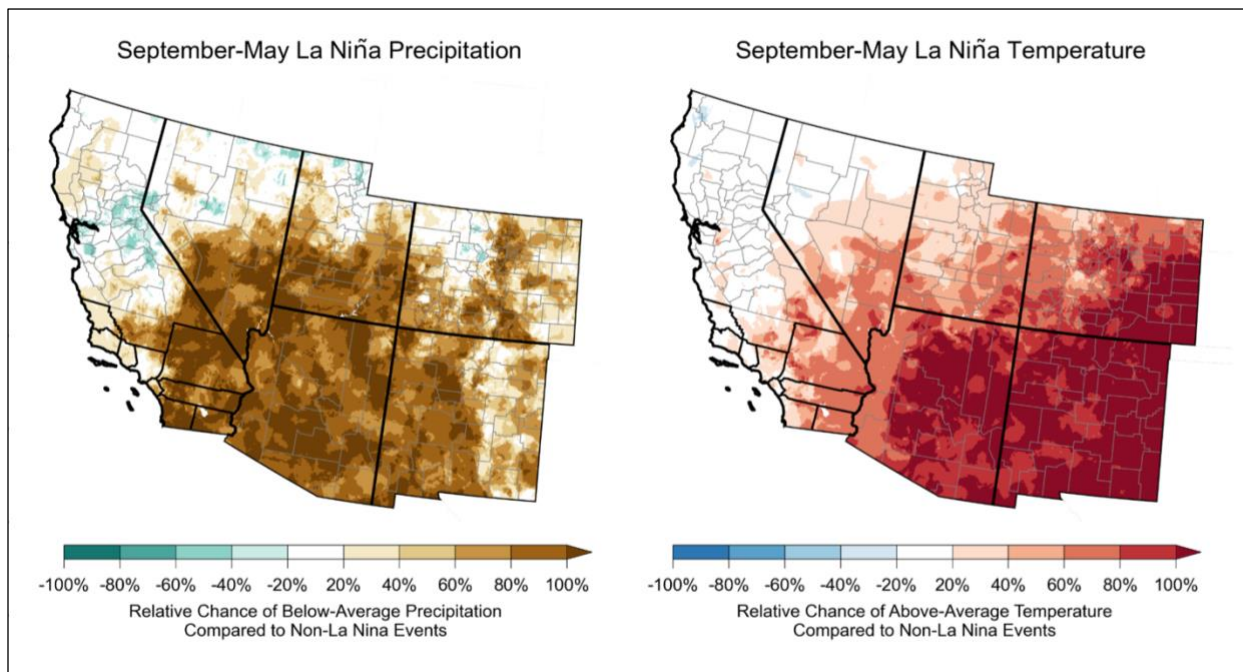


Figure 2: Relative chance of (left) below-average precipitation and (right) above-average temperatures between September and May during La Niña events compared to non-La Niña events since 1951. Below- and above-average refer to conditions in the lower and upper thirds of historical occurrences, respectively.