March 2026 Southern California Sector-Specific Drought Outlook Pilot

Current Drought

Three heavy precipitation events since October 1, 2025 eliminated drought in Southern California* (Fig. 1). However, no precipitation in the last four weeks, combined with recent exceptional temperatures and demand of water from the land surface, has raised concerns of emerging abnormal dryness in the region. Record low precipitation during this period was observed over much of the Southwest U.S., including the Upper Colorado River Basin, which supplies water to California.

Wintertime snowpack in the Southwest U.S. becomes California's water resources in subsequent months and years. As of March 25, 2026, snow water equivalent (the volume of water stored in snow) in the Southwest U.S. was significantly below median (Fig. 2) due to below-average precipitation since October 1, 2025 (Fig. 1) and above-average temperatures. Snow water equivalent in the Upper Colorado Basin is currently the lowest on record since 1991 following a rapid decline in the last three weeks (Fig. 2).

Drought Outlook and Predictability

The Southwest United States is expected to experience below-average precipitation through April 2026 and above-average temperatures through summer 2026, which would increase the possibility of low water availability in Southern California.

Sector-Specific Outlooks

Water Utilities

Reservoir and groundwater storage is expected to be average or above average in California through 2026 (high confidence). Low inflows into Lakes Powell and Mead from the Colorado River are expected this year, which could impact water supply and power generation in late 2026 and 2027 (high confidence).

Public Health

Poor air quality is expected in spring and summer 2026 due to blowing dust (high confidence) and wildfire smoke in summer and autumn 2026 (medium confidence). Conditions are favorable for increased cases of valley fever between spring and autumn 2026 (high confidence). There is a high risk of heat-related illnesses in Southern California and throughout the Southwest U.S. between spring and autumn 2026 (high confidence).

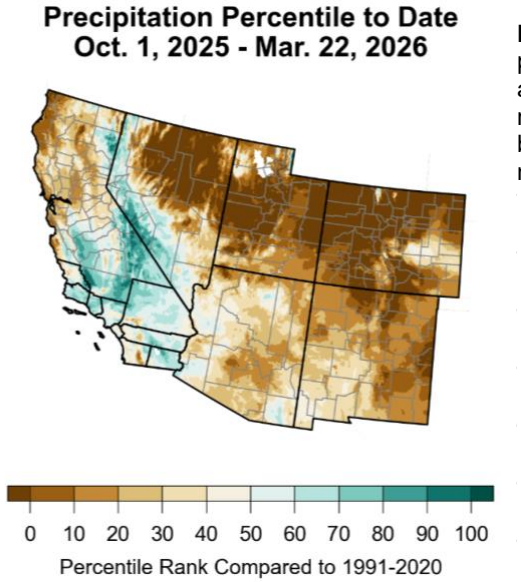
Agriculture

High agricultural productivity is expected in late 2025 and early 2026 (high confidence). An increased risk of crop stress exists in spring and summer 2026 (high confidence). With low water levels in regional reservoirs in 2025 and 2026, less water may be available for irrigated agriculture in 2026 and 2027, which would reduce agricultural productivity (medium confidence).

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

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 March 26, 2026 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.



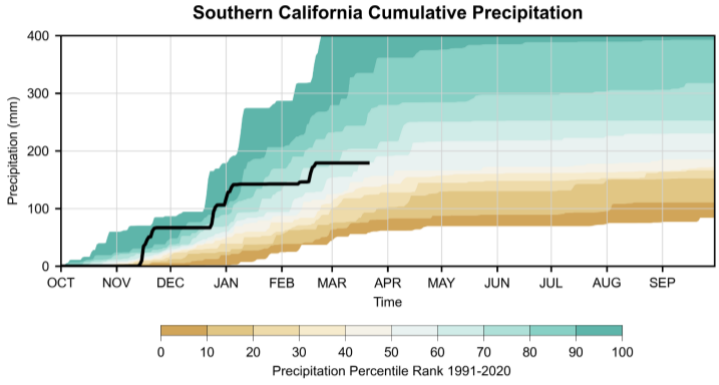
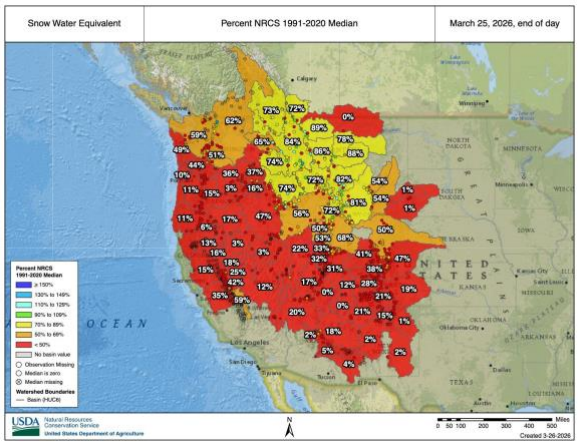


Figure 1. Left: For October 1, 2025 to March 22, 2026, precipitation percentile rank compared to 1991-2020. Right: Precipitation accumulation since October 1 for 2025-26 (*black line*) and percentile rank for 1991-2020. Source: NOAA Physical Sciences Laboratory based on NOAA National Centers for Environmental Information nclimgrid precipitation.



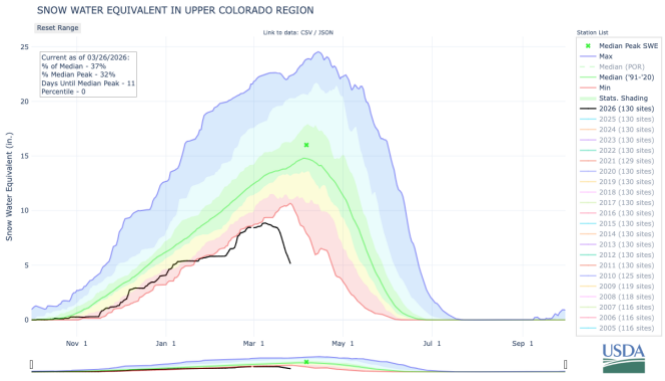


Figure 2. Left: Percent of median snow water equivalent as of March 25, 2026. Right: Time series of snow water equivalent since October 1 in inches during 2025-2026 (*black line*) and historical conditions since 1991-2020, where red indicates the 0-10th percentile, yellow indicates the 10-30th percentile, green indicates the 30-70th percentile, light blue indicates the 70-90th percentile, and dark blue indicates the 90-100th percentile. Source: USDA Natural Resources Conservation Service.