CALIFORNIA HYDROLOGY UPDATE

CONDITIONS AS OF DECEMBER 31, 2025

The California Hydrology Update is a regular summary of current weather conditions in the State of California and serves as a supplement to the data on the California Water Watch website. It is produced by the California Department of Water Resources Hydrology Section and Sustainable Groundwater Management Office teams. For tips and resources on how to make water conservation a way of life, please visit saveourwater.com.

PRECIPITATION

Water year 2026 continues to have above average accumulated precipitation when considering the state's average at the end of December. The statewide accumulated precipitation through the end of December 2025 was about 11.5 inches, which is 140% of average. At the beginning of December, California observed dry conditions across the state but this was interrupted with a series of winter storms and atmospheric rivers. During the past month in December 2025, the main periods of precipitation were generally during December 15-17, 19-26, and 31 (shown in Figure 1).

December 1-14 was abnormally dry across the entire state largely due to a strong ridge of high pressure. A shift in weather pattern began December 15 with multiple systems passing through California. During the first half of December (which started around November 24 to be widespread), dense and prolonged fog settled over Central Valley, also known as the Tule Fog. The fog over the Central Valley was the result of soil retaining moisture (due to the heavy rain events in November 2025), moisture in the air,

and high pressure resulting in above average temperatures for surrounding areas. The stable high pressure also prevented weather systems with high winds from reaching the area to help with movement of the settled fog. During December 15-17, light to moderate precipitation spread across Northern California, with higher amounts for the North Coast and Northern Sierra. A strong atmospheric river made landfall north of California and traveled south into Northern California during December 19-20. This was the start of a series of three atmospheric rivers bringing precipitation to California. The second atmospheric river made landfall around December 20, strengthened in moisture transport, and resulted in bringing additional precipitation to Northern and Central California through December 22. The third atmospheric river made landfall around December 23, with enhanced moisture from low pressure and resulted in precipitation continuing through December 24. As the third atmospheric river weakened from traveling across California, another storm developed and was fueled by a cut-off low offshore during December 25. The following day on December 26, the surface low remained offshore and continued to fuel precipitation into the state. Precipitation totals for December 20-26 include 6.0 to 30.0 inches for Northern Sierra, 4.0 to 30.0 inches for the North Coast, Shasta Basin, and Transverse Ranges, 0.5 to 6.0 inches for Central Valley, 1.5 to 6.0 inches for the Bay Area, 2.0 to 10.0 inches for Central Coast, and up to 4.0 inches for Southern California. The National Weather Service received several reports of landslides, debris flow, and flooding, which resulted in several closed roadways. There were three fatalities involving this active weather pattern including: one related to flooding, one due to fallen tree from high winds, and one due to an avalanche.

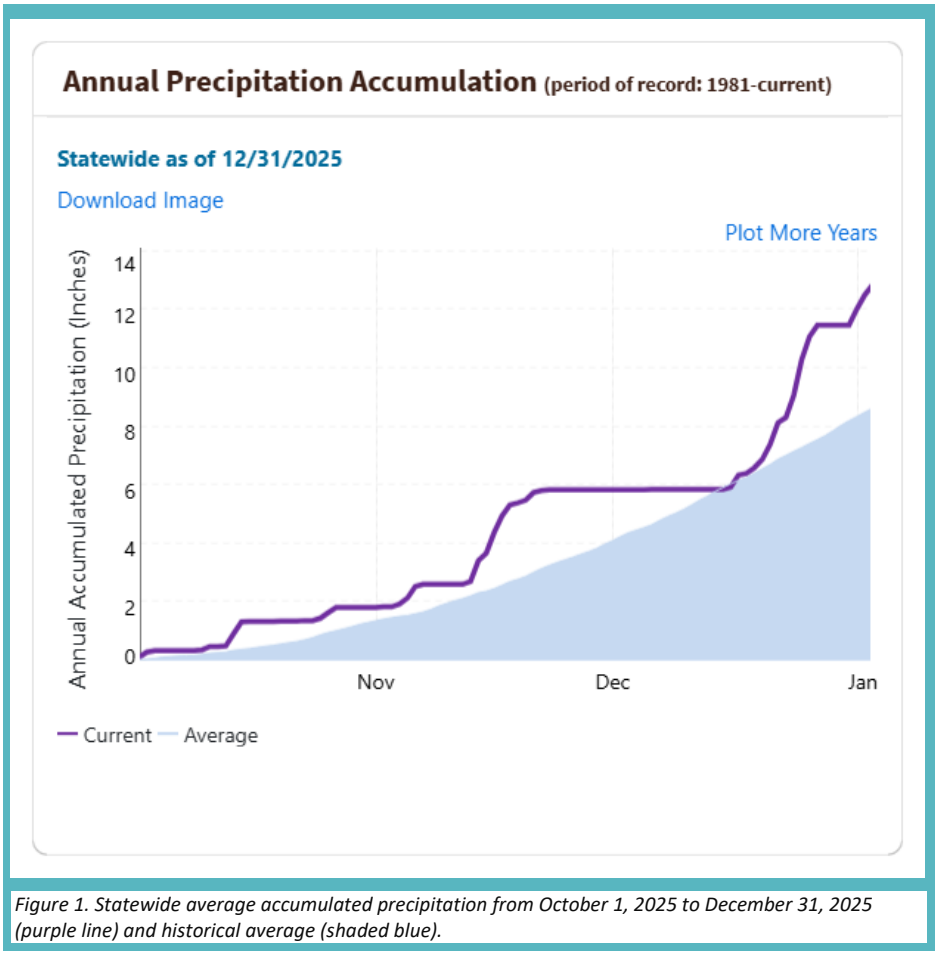

Figure 1. Statewide average accumulated precipitation from October 1, 2025 to December 31, 2025 (purple line) and historical average (shaded blue).

During December 27-30, dry conditions resumed as a ridge developed near the region. The start of the next series of storms began late December 31 to bring additional precipitation across the state for the start of the new year.

As shown in Figure 2, for water year 2026, Northern California received near to above average accumulated precipitation (excluding parts along the border with Oregon receiving below average accumulated precipitation), Central and Southern California received near to well above average accumulated precipitation.

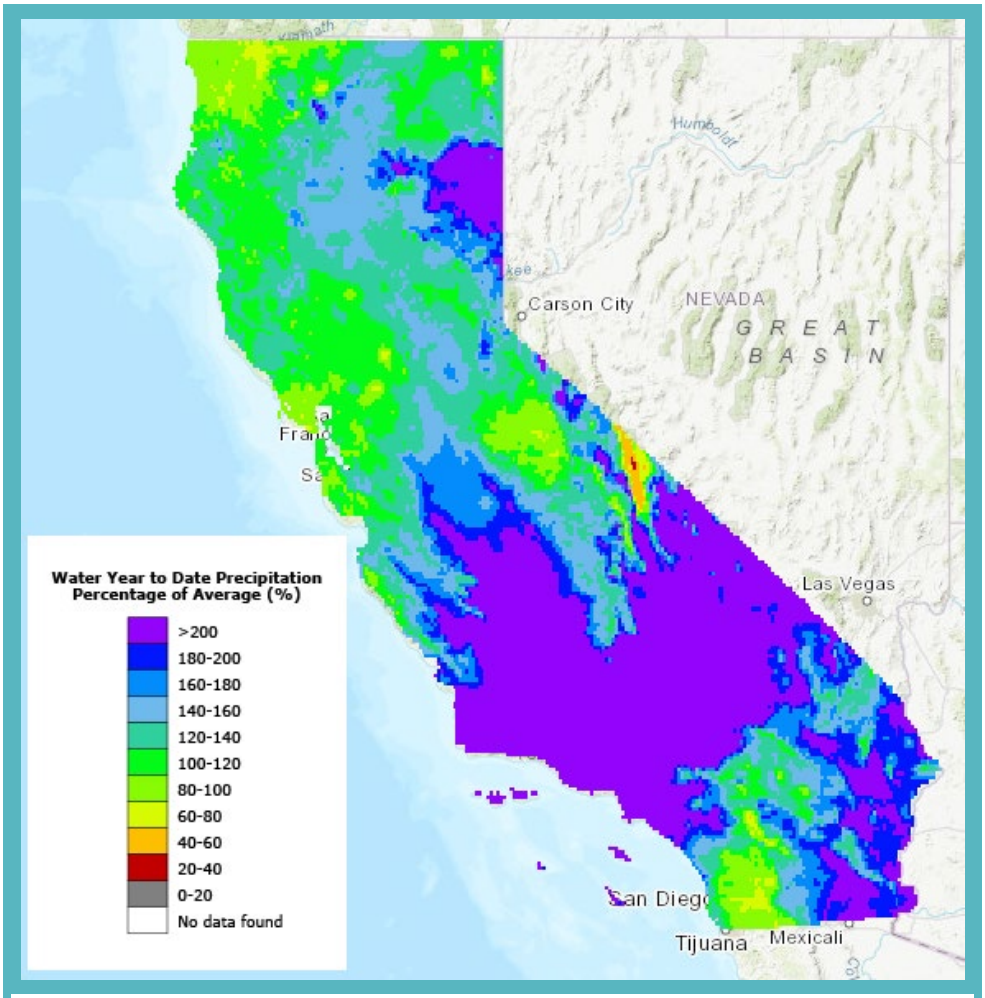

Figure 2. Percent of average for the accumulated precipitation from October 1, 2025 to December 31, 2025.

The North Coast has accumulated about 23.3 inches of precipitation for the water year through end of December, which is 112% of average. The Sacramento River region has accumulated about 17.8 inches of precipitation for the water year through end of December, which is 137% of average. The San Joaquin River region has accumulated about 11.3 inches of precipitation for the water year through end of December, which is 126% of average. The Central Coast has accumulated about 11.9 inches of precipitation for the water year through end of December, which is 186% of average. The Tulare Lake region has accumulated about 9.1 inches of precipitation for the water year through end of December, which is 187% of average. The South Coast has accumulated about 10 inches of precipitation for the water year through end of December, which is 204% of average.

Sources: Statewide Hydroclimate and Water Supply Conditions, Forecast Information, Center for Western Weather Water Extremes (CW3E) Event Summaries, California Nevada River Forecast Center (CNRFC) Data Archive, Western Regional Climate Center (WRCC) Monthly Updates

TEMPERATURE

The statewide average temperature for the end of December was 47.3°F, which is about 4.6 degrees above the historical average for this time of year. The statewide average temperature was above average for most of December, excluding from about December 1-6 and 28-29 when it was near average. The statewide average temperature was near or reached the historical maximum mean temperature from December 10-22. The two graphs in Figure 3 show the statewide mean temperatures for the water year through December 31 (on the left) and month of December 2025 (on the right).

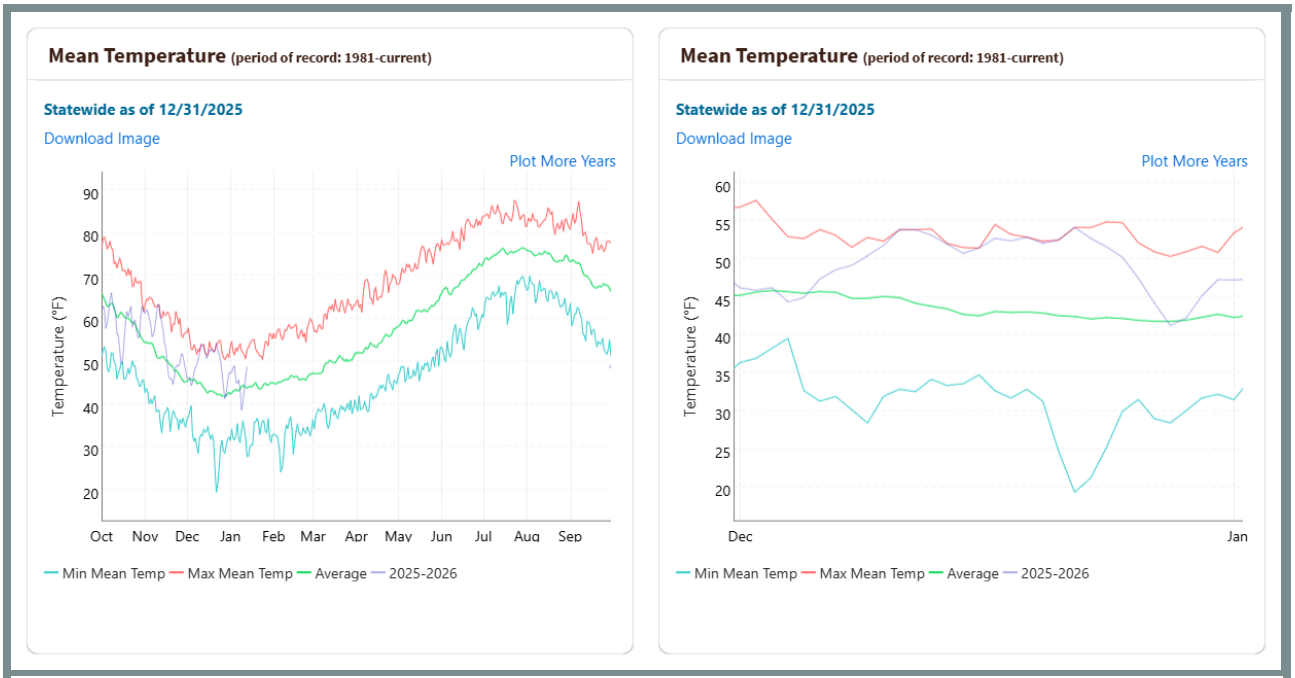

Figure 3. Water year 2026 statewide mean temperature is shown in dark blue as of December 31, 2025 (left) and displayed for the month of December 31, 2025 (right).

La Niña conditions continued during December due to below-average sea surface temperatures (SSTs) across the equatorial central and eastern Pacific Ocean. According to the Climate Prediction Center (CPC), El Niño Southern Oscillation (ENSO) will transition to neutral conditions with 75% chance sometime during January-March 2026.

Sources: Statewide Hydroclimate and Water Supply Conditions, CPC 30-Day Forecasts

RESERVOIRS

Statewide reservoir storage at the end of December was 123% of average. As shown in Figure 4, several reservoirs have near to above average storage for this time of year.

At the end of December, most flood control reservoirs were near their respective top of conservation levels, with a few slightly encroached. The eight major reservoirs slightly encroached at the end of December were Black Butte Lake (by about 15 thousand acre-feet [TAF]), Lake Mendocino (by about 3 TAF), Lake Sonoma (by about 10 TAF), Camanche Reservoir (by about 25 TAF), New Hogan Lake (by about 11 TAF), Lake Kaweah (by about 24 TAF), Success Lake (by about 8 TAF), and Lake Isabella (by about 24 TAF).

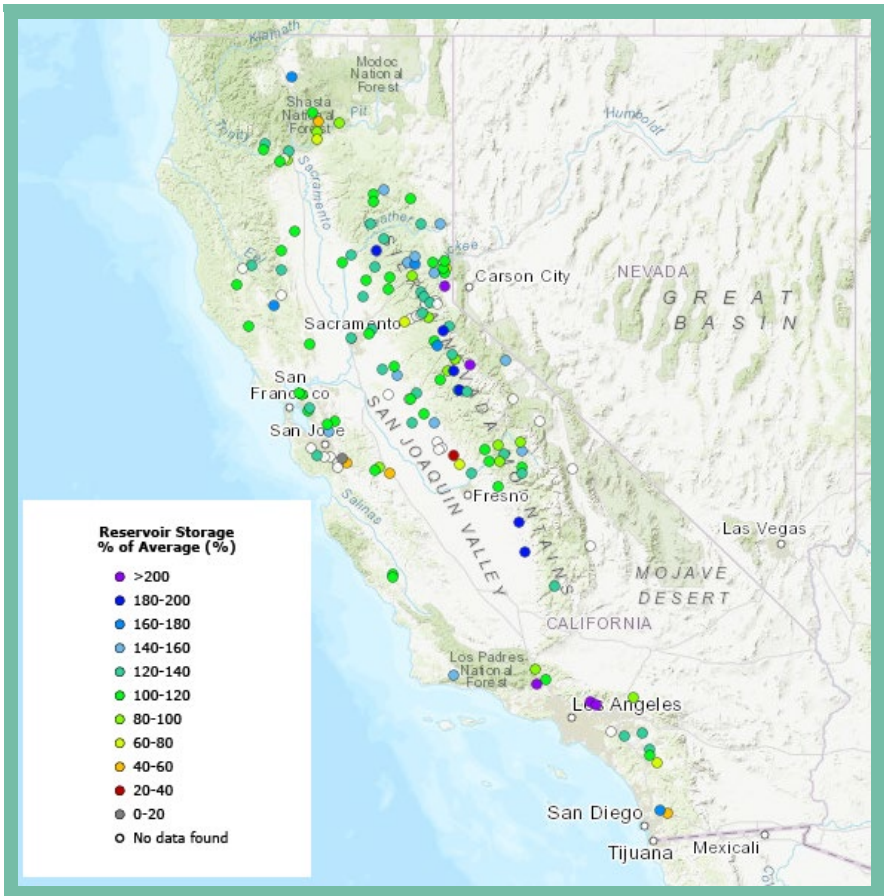

Figure 4. Reservoir storage percent of average for December 31, 2025.

Sources: California Water Watch, California Data Exchange Center Reservoirs Flood Control, CNRFC Observed Date of Peak Flow

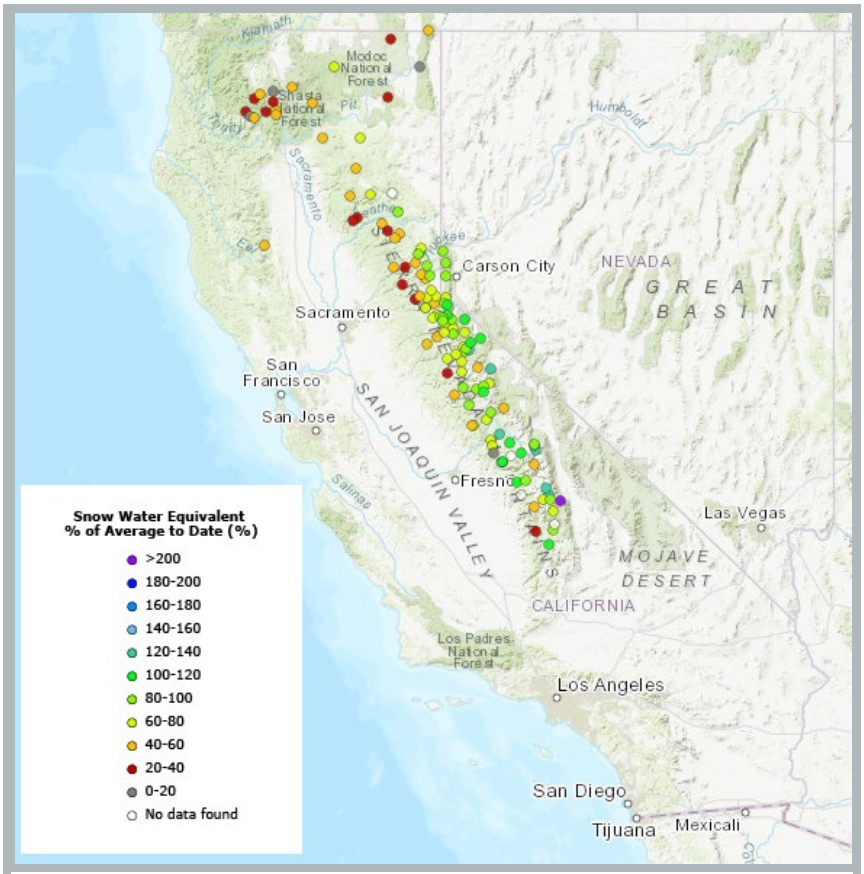

Figure 5. Snow sensor data shown for snow water equivalent (SWE) percent of average for the water year through December 31, 2025.

SNOWPACK

The statewide average snow water equivalent (SWE) was 6.4 inches for December 31, which is 69% percent of normal and 24% of April 1 average. The dry conditions in early December delayed in what is typically the start of building California's snowpack (especially for the northern region), but the storm systems and atmospheric river that traveled across California later in the month (mainly December 23-26) resulted in snow accumulation across Sierra Nevada. The snow sensor readings for SWE percent of average at the end of December for each region include 50% percent of normal for Northern Sierra and Trinity, 70% of normal for Central Sierra, and 91% for Southern Sierra.

In general, for the Sierra Nevada, snowpack accumulation begins closer to early December, grows until a peak volume around April 1, and thereafter begins to melt with longer days and longer exposure to solar radiation. Several factors involving the timing, pace, and scale of storms and their temperature characteristics through the end of March can influence the total amount of snowpack and when it will begin to melt.

Sources: California Water Watch, CDEC Snow Water Equivalent Plot

STREAMFLOW

Streamflow for about 42% of locations across California was at a normal flow rate at the end of December according to United States Geologic Survey (USGS) stream gage locations. About 51% of streamflow locations were flowing greater than average for this time of year, while about 7% of streamflow locations were flowing below normal for this time of the year. The storm systems and atmospheric rivers that traveled across California resulted in widespread precipitation and several rivers throughout the state to rise and a few to briefly exceed flood stages. The California Nevada River Forecast Center (CNRFC) forecast locations that exceeded their respective flood stages (with general dates on when it occurred) included: Mad River at Arcata (December 21 for moderate flood stage), Eel

River at Fernbridge (December 22 for moderate flood stage), Russian River at Hopland (December 21-22 for minor flood stage), Sacramento River at Tehama Bridge (December 22 for minor flood stage), Ventura River at Foster Park (December 26 for minor flood stage), and Susan River at Susanville (December 22 and December 24 for minor flood stage). The increase in routed river flow also resulted in weir flow along Sacramento River during December, which included at Moulton Weir (December 26-27), Colusa Weir (December 22-29), Tisdale Weir (December 22-31), and Fremont Weir (December 26-31). Moulton Weir and Colusa Weir allow overflow to go into the Butte Basin. Tisdale Weir (through the Tisdale Bypass) allows overflow to go into the Sutter Bypass. Fremont Weir allows overflow into the Yolo Bypass.

Sources: USGS Water Watch, California Nevada River Forecast Center (CNRFC), CDEC Daily Full Natural Flows

GROUNDWATER

Despite below-average precipitation in Water Year 2025, statewide groundwater levels remained relatively stable compared to recent years and show improvements compared to the severe drought conditions of a decade ago. While wetter years like 2019 and 2023 provided short-term relief, groundwater systems have not fully recovered, and multiple consecutive wet years combined with reduced pumping will be needed to achieve long-term aquifer sustainability.

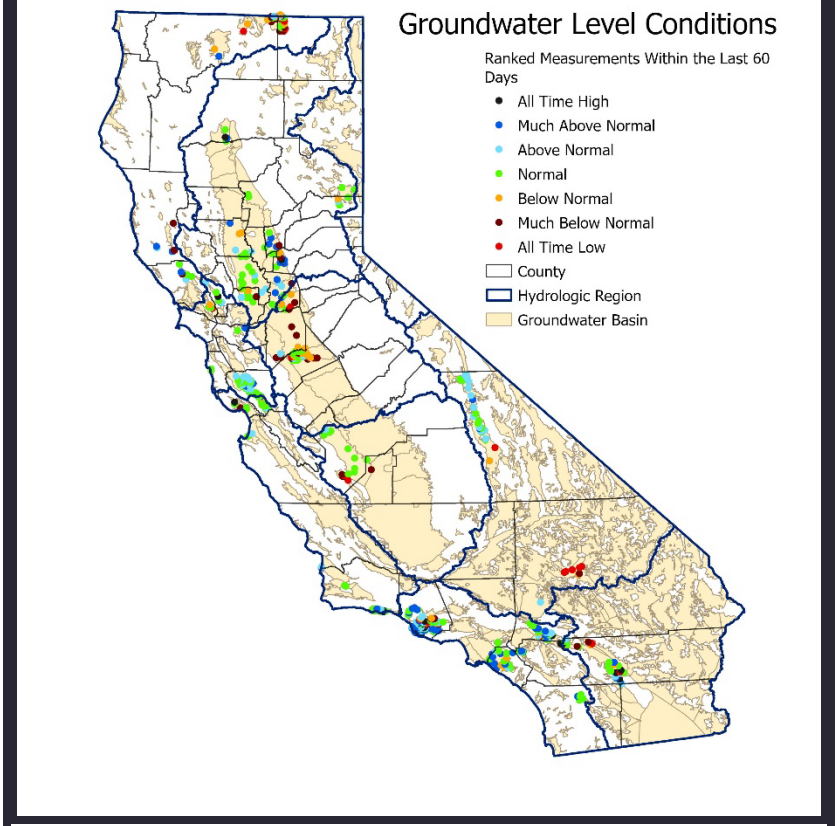

Figure 6. Map of Current Groundwater Conditions Based on Historical Averages.

Recently-measured monitoring wells show groundwater levels in 21% of monitoring wells across California are below normal, 38% are normal, and 41% are above normal. These statistics are based on 713 wells where groundwater levels have been collected for at least 10 years, and the most recent measurements were collected within the last 60 days. There was one dry domestic well reported in the last 30 days. Data reported is as of January 14, 2026. Visit DWR's California's Groundwater Live for the latest groundwater conditions across the state.

Source: DWR California's Groundwater Live

Cover page photo: A drone view of the meadow covered in snow where the California Department of Water Resources holds the first media snow survey of the 2026 season at Phillips Station in the Sierra Nevada. The snow survey is held approximately 90 miles east of Sacramento off Highway 50 in El Dorado County. Photo taken December 30, 2026.