# CALIFORNIA HYDROLOGY UPDATE

CONDITIONS AS OF MARCH 31, 2026

*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 accumulated precipitation is just below average when considering the state's average at the end of March. The statewide accumulated precipitation through the end of March 2026 was about 18.8 inches, which is 95% of average. The precipitation for the month of March 2026 has set the record for California as the driest March. Dry conditions were observed nearly the entire month. During the past month in March 2026, the main periods of precipitation were generally during March 1, 4, and 31 (shown in Figure 1).

Lingering showers from a slow-moving low-pressure system resulted in trace amounts of precipitation for Northern California during March 1. During March 4, a weak system brought minor precipitation also to Northern California. Starting March 5, a ridge began to build which resulted in higher freezing levels, higher temperatures, and dry conditions. From March 5-March 30, dry conditions were observed across the state. This was largely due to the presence of strong high pressure. During this time from around March 15-26, California experienced a record-breaking heatwave for this time of year. On March 31 was

the start of a series of storms that resulted in precipitation for most of the state. Precipitation amounts for March 31 were up to 0.5inches for Northern California, 0.25 to 3 inches for Sierra Nevada, up to an inch along Transverse Ranges, and trace amounts for Central Coast.

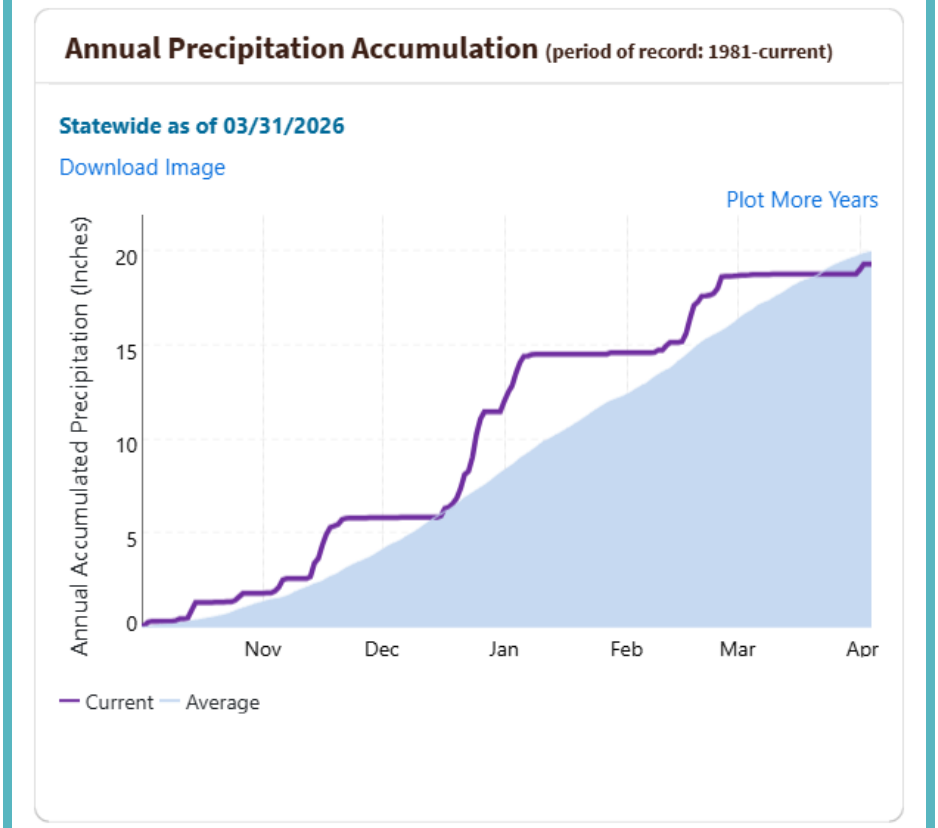


*Figure 1. Statewide average accumulated precipitation from October 1, 2025 to March 31, 2026 (purple line) and historical average (shaded blue).*

As shown in Figure 2, for water year 2026 through end of March, Northern California received below to near average accumulated precipitation, Central California received near to above average accumulated precipitation, and near to above average accumulated precipitation for the South Coast, Mojave Desert, and North Lahontan. The North Coast has accumulated about 38 inches of precipitation for the water year through end of March, which is 85% of average. The Sacramento River region has accumulated about 29 inches of precipitation for the water year through end of March, which is 96% of average. The San Joaquin River region has accumulated about 19.7 inches of precipitation for the water year through end of March, which is 86% of average. The Central Coast has accumulated about 20.9 inches of precipitation for the water year through end of March, which is 115% of average. The Tulare Lake region has accumulated about 15 inches of precipitation for the water year through end of March, which is 112% of average. The South Coast has accumulated about 16.7 inches of precipitation for the water year through end of March, which is 109% of average.

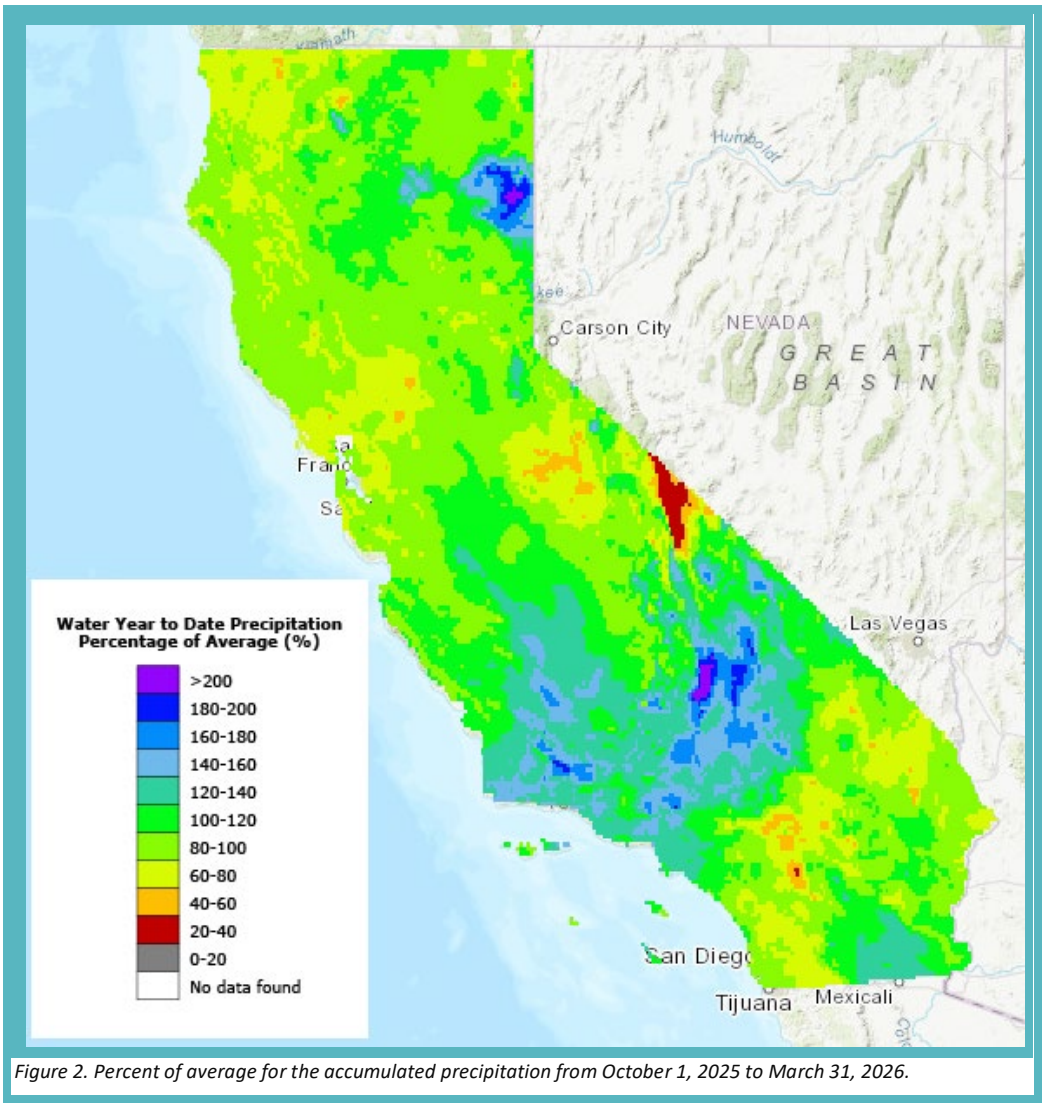


*Figure 2. Percent of average for the accumulated precipitation from October 1, 2025 to March 31, 2026.*

*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 March was 62.3°F, which is about 10.3 degrees above the historical average for this time of year. The statewide average temperature was above average for the entire month of March. The statewide average temperature reached the historical maximum mean temperature during March 1-2, 16-25, and 28-30. The historical heatwave during March 2026 has led to setting the record as the warmest March for California. Several locations across the state set temperature records for this time of year, such as Sacramento (warmest month of March). Ogilby and Winterhaven both reached 112°F on March 20 (highest March temperature recording). The first 6 months of water year 2026, October 2025-March 2026, are also the record as the warmest for this 6-month period in terms of average temperature for California. The two graphs in Figure 3 show the statewide mean temperatures for the water year through March 31 (on the left) and month of March 2026 (on the right).

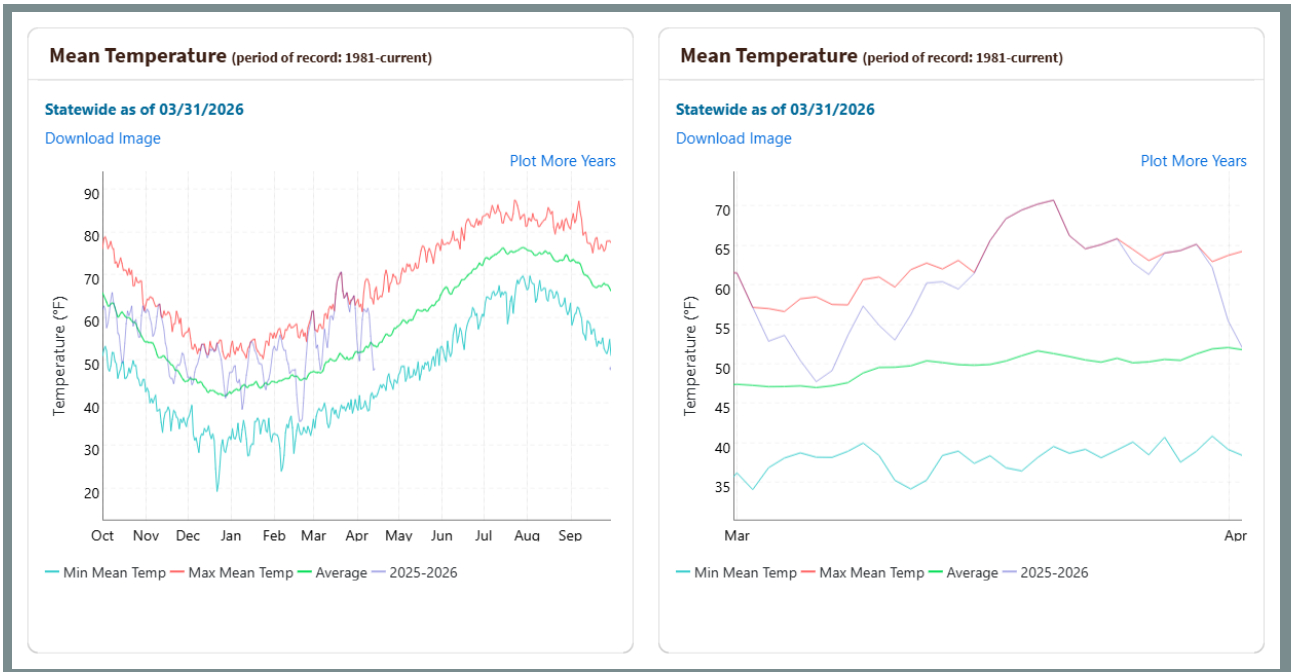


*Figure 3. Water year 2026 statewide mean temperature is shown in dark blue as of March 31, 2026 (left) and displayed for the month of March 2026 (right).*

During the last month, El Niño Southern Oscillation (ENSO) neutral conditions emerged due to near-average sea surface temperatures (SSTs) across the equatorial central and east-central Pacific Ocean. According to the Climate Prediction Center (CPC), ENSO neutral conditions will continue with 80% chance through April-June 2026. CPC forecasts El Niño conditions to emerge with 61% chance during May-July 2026 period and continue for the rest of the calendar year.

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

## RESERVOIRS

Statewide reservoir storage at the end of March was 121% of average. As shown in Figure 4, most reservoirs have near to well above average storage for this time of year. Although the month of March was dry, higher elevation river basins observed increase in flow due to snowmelt runoff.

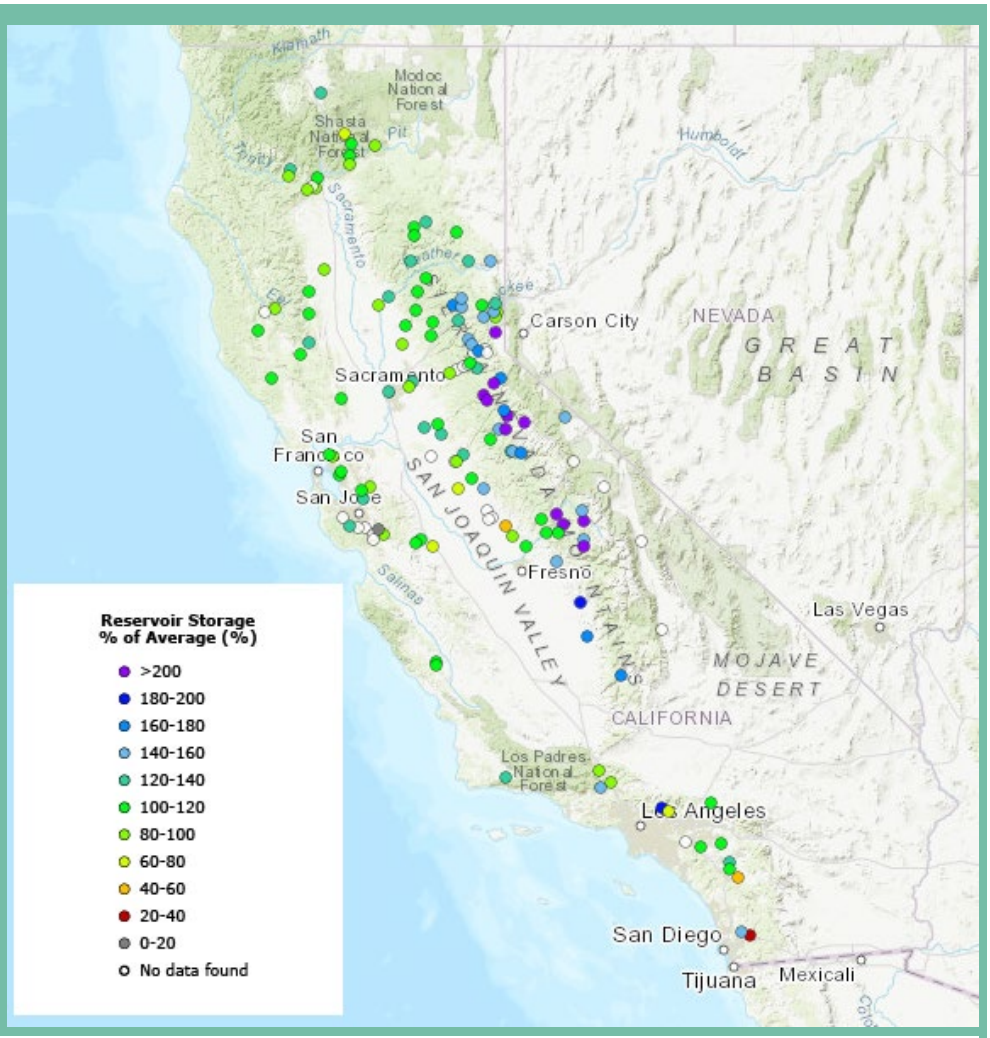


*Figure 4. Reservoir storage percent of average for March 31, 2026.*

All major water supply reservoirs are near or above their historical average for storage at the end of March. A reservoir's top of conservation level gradually increases during spring and is higher by summer as it captures the snowmelt runoff which will be used for water supply during the dry months when water demand increases across the state. Due to the early snowmelt for this year, reservoirs are capturing as much inflow allowable and making necessary releases to remain near respective top of conservation levels. At the end of March, most flood control reservoirs were near their respective top of conservation levels, with a few slightly encroached. The nine major reservoirs slightly encroached at the end of March were Lake Sonoma (by about 18 thousand acre-feet [TAF]), Lake Oroville (by about 72 TAF), New Bullards Bar Reservoir (by about 58 TAF), Folsom Lake (by about 61 TAF), Camanche Reservoir (by about 30 TAF), New Don Pedro Reservoir (by about 51 TAF), Lake McClure (by about 62 TAF), Lake Kaweah (by about 62 TAF), and Success Lake (by about 15 TAF).

The two major flood control reservoirs that were notably below their respective top of conservation storage at the end of March include Eastman Lake (by about 87 TAF) and Hensley Lake (by about 26 TAF).

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

## SNOWPACK

The statewide average snow water equivalent (SWE) was 4.6 inches for March 31, which is 17% percent of normal for March 31. The record dry conditions and high temperatures during the month of March resulted in a steady decline in California's snowpack, with an average daily melt rate of about 0.33 inches per day (this is usually observed later in the season during April or May). Typically, California snowpack builds to a peak amount around this time of the year, but unfortunately this water year's statewide averaged snowpack has peaked much earlier in the season on February 24 with 16.2 inches (which is 61% of the April 1 average).

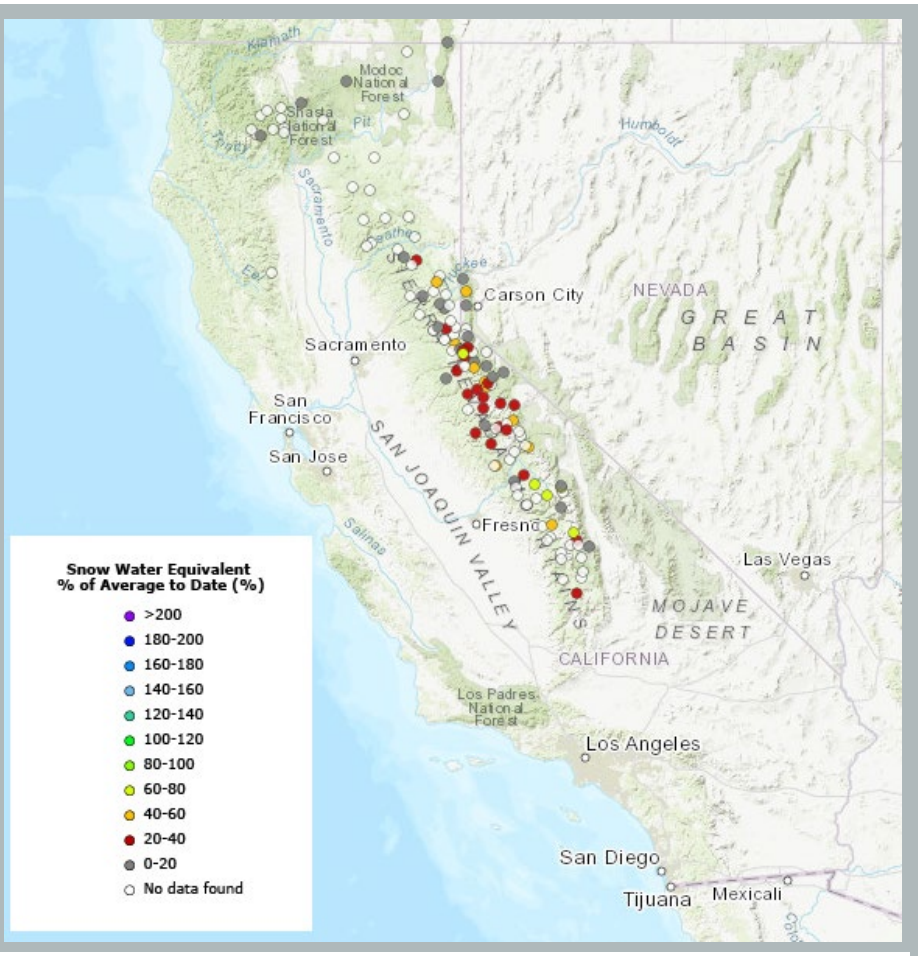


*Figure 5. Snow sensor data shown for snow water equivalent (SWE) percent of average for the water year through March 31, 2026.*

The snow sensor readings for SWE percent of average at the end of March for each region include 5% of normal for Northern Sierra and Trinity, 19% of normal for Central Sierra, and 32% of normal for Southern Sierra. Figure 6 shows regional SWE conditions at the end of February 2026 (left) and end of March 2026 (right).

In general, for the Sierra Nevada, snowpack accumulation peaks around April 1 each year, 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. The snowmelt period typically is from April through July, where the runoff is collected by major reservoirs for water supply during the dry months of summer and beginning of fall.

*Sources: California Water Watch, CDEC Snow Water Equivalent Plot*

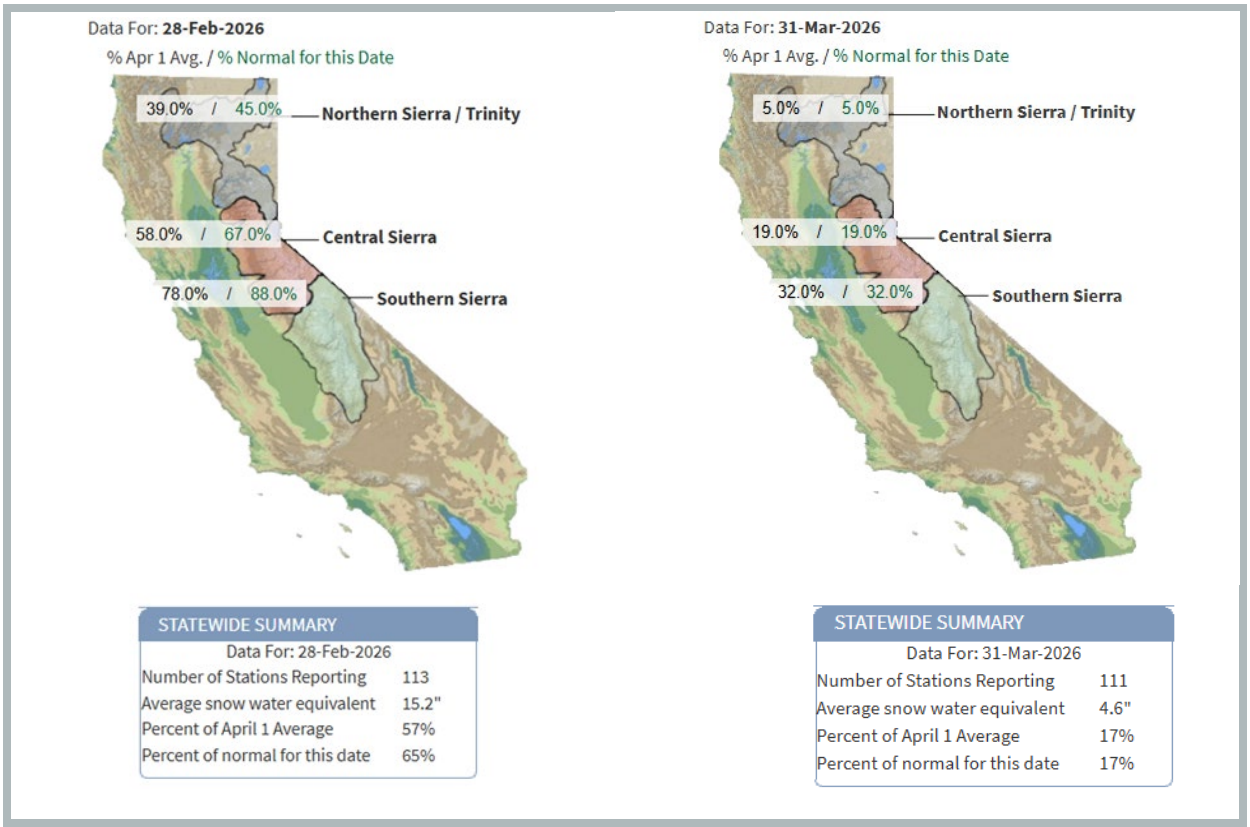


*Figure 6. Regional SWE percent of April 1 average (in black text) and percent of normal (in green text) on February 28, 2026 (left) and March 31, 2026 (right).*

## STREAMFLOW

Streamflow for about 20% of locations across California was near normal flow rate for the water year to April 15, 2026 according to California Nevada River Forecast Center (CNRFC) locations (Figure 7). About 45% of streamflow locations were flowing greater than normal, while about 35% of streamflow locations were flowing below normal for the water year to April 15, 2026. Higher-elevation river basins in Central and Southern Sierra Nevada observed above average flow due to sustained snowmelt. Although there was higher flow from snowmelt, none of the CNRFC forecast locations exceeded their respective flood stages during March.

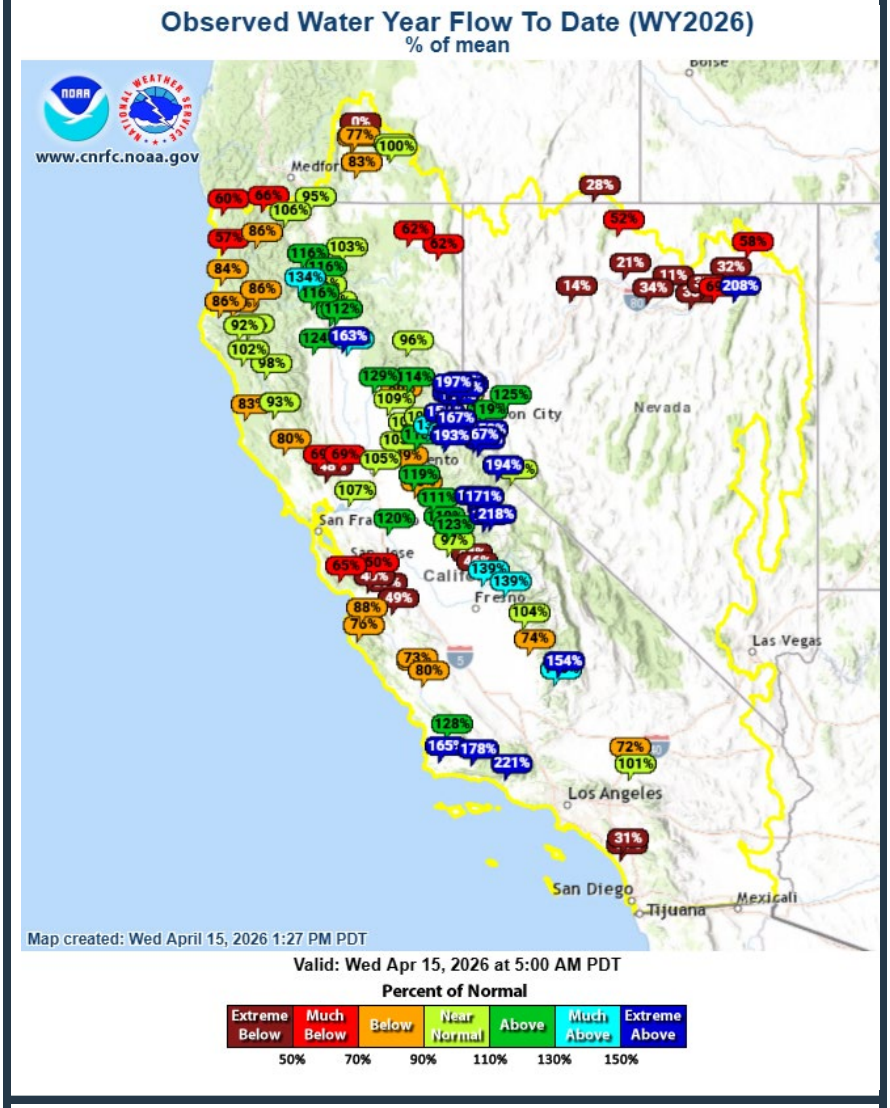


*Figure 7. Observed water year flow percent of normal to April 15, 2026. Near normal (90-110%) shown in light green.*

The beginning of March concluded weir flow for Tisdale Weir (March 1-4) and Fremont Weir (March 1-3). 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.

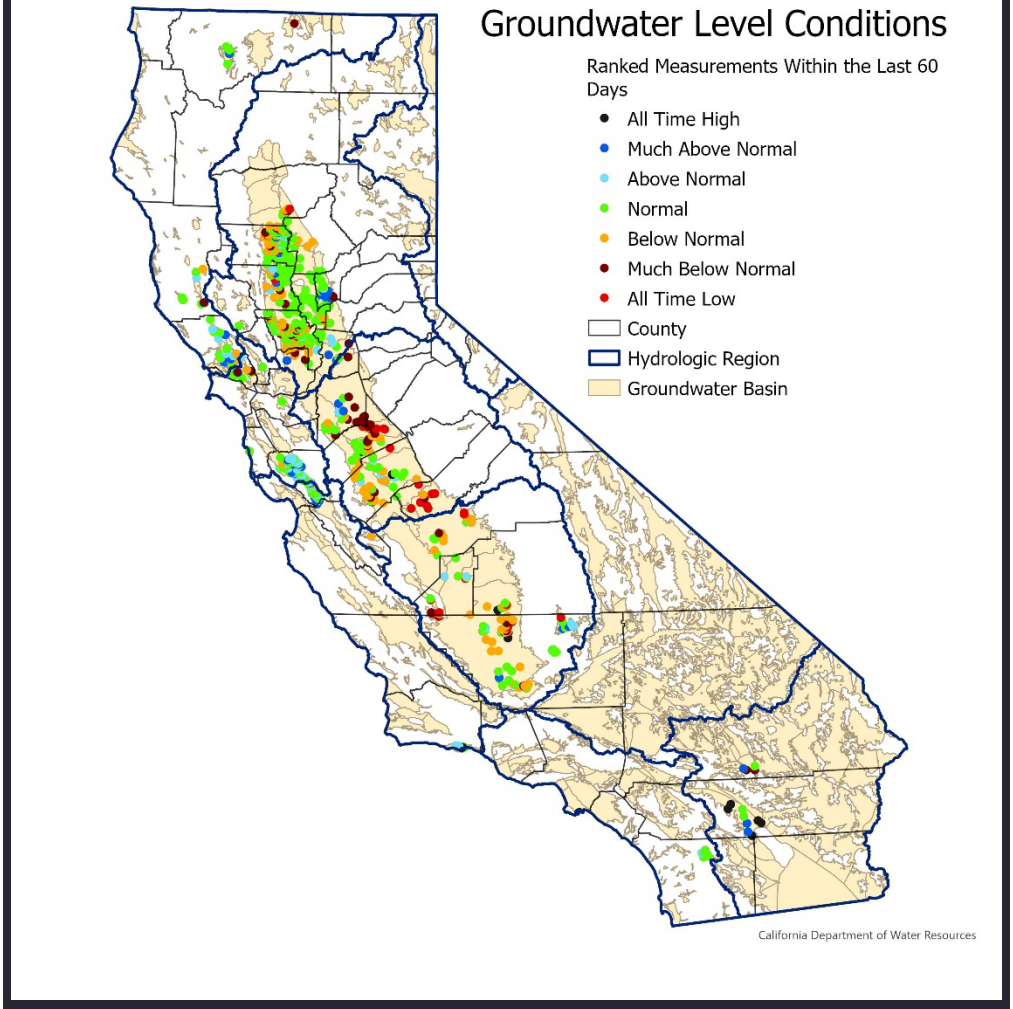


*Figure 8. Map of Current Groundwater Conditions Based on Historical Averages.*

Recently-measured monitoring wells show groundwater levels in 30% of monitoring wells across California are below normal, 53% are normal, and 17% are above normal. These statistics are based on 1,010 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 were three dry domestic wells reported in the last 30 days. Data reported is as of April 13, 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: Light snow is seen on the meadow where the California Department of Water Resources prepares to conduct the fourth 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 April 1, 2026.*