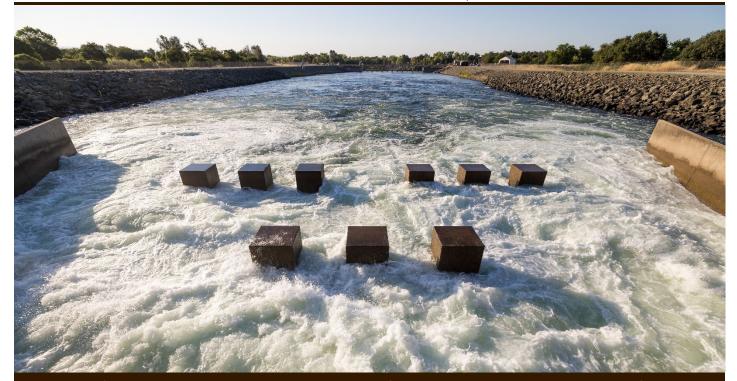


# CALIFORNIA HYDROLOGY UPDATE

CONDITIONS AS OF JULY 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 <u>California Water Watch</u> 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 <u>saveourwater.com</u>.

### **PRECIPITATION**

The statewide accumulated precipitation for the water year remains just below average at 95%, with 21.9 inches total through the end of July 2025. Aside from select isolated showers producing minor precipitation for higher elevations in Northern California and Sierra Nevada (around July 1-2, July 17-18, and July 24-26) the rest of the state was dry for the month of July (shown in Figure 1).

During July 1-2, isolated showers resulted in less than an inch of precipitation for higher elevations in Northern California. High pressure began to build after the first week of July, resulting in dry conditions across the state. During July 17-18, scattered showers and thunderstorms lead to minor precipitation in Southern Sierra and Southern California deserts. During around July 24-26, an upper low off the coast resulted in cooler temperatures and scattered precipitation up to 2 inches for higher elevations in Northern California.

As shown in Figure 2, for the water year to date through the end of July 2025, Northern California received near to above average accumulated precipitation, Central California received below to near average accumulated precipitation, and Southern California received below average accumulated precipitation. The North Coast has accumulated about 61.2 inches of precipitation for the water year through end of July, which is 117% of average. The Sacramento River region has accumulated about 38.2 inches of precipitation for the water year through end of July, which is 107% of average. The San Joaquin River region has accumulated about 20.8 inches of precipitation for the water year through the end of July, which is 78% of average. The

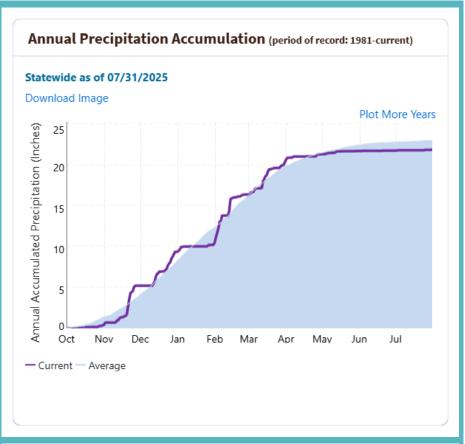
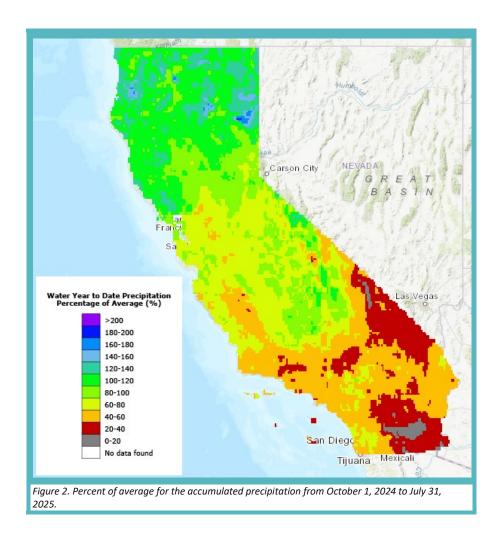


Figure 1. Statewide average accumulated precipitation from October 1, 2024 to July 31, 2025 (purple line) and historical average (shaded blue).

Central Coast has accumulated about 12.9 inches of precipitation for the water year through the end of July, which is 65% of average. The Tulare Lake region has accumulated about 12.4 inches of precipitation for the water year through the end of July, which is 80% of average. The South Coast has accumulated about 8.9 inches of precipitation for the water year through the end of July, which is 52% of average.

The Climate Prediction Center (CPC) monthly outlook issued on July 31, 2025, indicates equal chances of below, near, or above normal precipitation for across California during the month of August 2025. The CPC seasonal outlook covering the period of August 2025 through end of October 2025 indicates equal chances of below, near, or above normal precipitation for California.

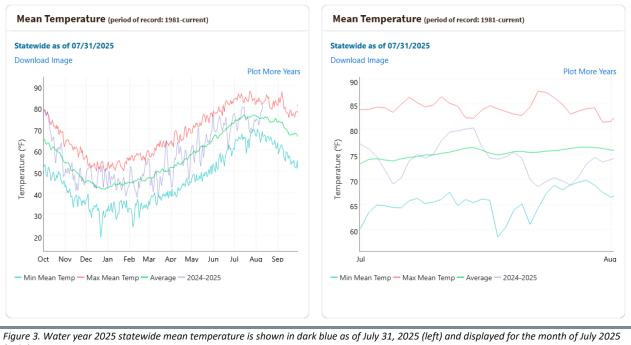
Sources: <u>Statewide Hydroclimate and Water Supply Conditions</u>, <u>Forecast Information</u>, <u>Center for Western Weather Water Extremes (CW3E) Event Summaries</u>, <u>California Nevada River Forecast Center (CNRFC) Data Archive</u>, <u>Western Regional Climate Center (WRCC) Monthly Updates</u>



## **TEMPERATURE**

The statewide average temperature for the end of July was about 71.8°F, which is about 2.5 degrees below the historical average for this time of year. The statewide average temperature was near or below average throughout July, excluding from about July 9-12 when it was above average. The statewide average temperature reached the historical minimum mean temperature during July 26-27. The two graphs in Figure 3 show the statewide mean temperatures for the water year through July 31 (on the left) and the month of July 2025 (on the right).

According to the CPC, El Niño Southern Oscillation (ENSO) neutral conditions is expected to continue with 56% chance during August-October 2025. CPC forecasts a chance of La Niña conditions sometime during this upcoming fall and winter, but also forecast nearly equal chances for ENSO neutral conditions. The CPC temperature outlook issued on July 31, 2025 indicates up to 50% chance of above normal temperature for Northern California, up to 40% chance of above normal temperature for Central California, and up to 60% chance of above normal temperature for Southern California during the month of August 2025. The CPC seasonal outlook covering the period of August 2025 through end of October 2025 indicates above normal temperatures with 40-60% chance along the border with Nevada, 33-50% chance along Central and South Coast, and 33-40% chance for the rest of California.



(right).

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

# RESERVOIRS

Statewide reservoir storage at the end of July was 108% of average. As shown in Figure 4, most reservoirs have near average storage for this time of year. In general, major water supply reservoirs have made steady releases necessary for water allocations during the current dry summer months. Most major water supply reservoirs are at about 75-95% total capacity and 85-120% of average for this time of year.

At the end of July, five water supply reservoirs that were notably below their total storage capacity were Folsom Lake (59% of capacity and 92% of historical average), Lake Sonoma (64% of capacity and 111% of historical





average), San Luis Reservoir (38% of capacity and 88% of historical average), Millerton Lake (60% of capacity and 89% of historical average), and Pine Flat Lake (35% of capacity and 74 of historical average).

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

#### **SNOWPACK**

The snowpack season for water year 2025 concluded in the past month. 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

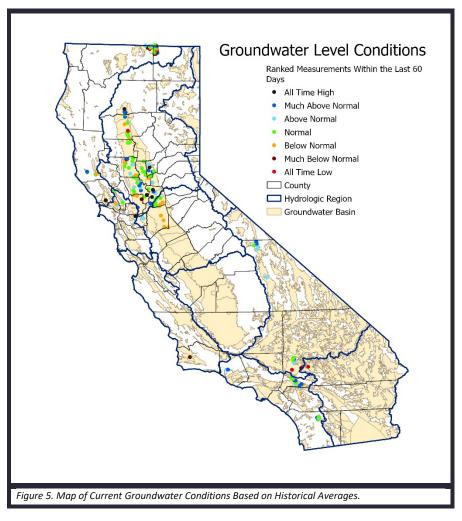
#### STREAMFLOW

Streamflow for about 57% of locations across California was at a normal flow rate at the end of July according to United States Geologic Survey (USGS) stream gage locations. About 22% of streamflow locations were flowing greater than average for this time of year, while about 21% of streamflow locations were flowing below normal for this time of the year. During the past month, flow for major rivers continued to decline towards or were near base flow (what is typically observed during summer).

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

# **GROUNDWATER**

Precipitation in water year 2024 was average compared to the last 50 years. However, there are sharp contrasts in rainfall across the state, which highlight California's ongoing climate variability. Although groundwater levels have stabilized or risen in many wells over the past year due to recent wetter conditions, long-term trends continue to raise concern. Over a 20-year period, 49% of wells statewide showed declining trends. Recently-measured monitoring wells show groundwater levels in 20% of monitoring wells across California are below normal, 40% are normal, and 40% are above normal. These statistics are based on 244 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 two dry domestic wells reported in



the last 30 days. Data reported is as of August 13, 2025. Visit DWR's <u>California's Groundwater Live</u> for the latest groundwater conditions across the state.

Source: <u>DWR California's Groundwater Live</u>

Cover page photo: Water flows past energy dissipators at the Thermalito Afterbay River Outlet toward the Feather River, as seen near the Brad Freeman Bike Trail at the California Department of Water Resources Oroville-Thermalito Complex in Butte County. Photo taken July 17, 2025.