Precipitation
As of September 13, 2022, for the current water year (October 1, 2021- September 30, 2022), statewide precipitation is 74% of average -- unchanged since the May update. On average only 10% of the water year total precipitation shows up from May through September.

While conditions have largely been dry, monsoon moisture has resulted in thunderstorms in parts of the state. A decaying eastern Pacific hurricane, Hurricane Kay, impacted southern California as a tropical storm in September, with localized heavy rains. Decaying tropical Pacific storms tend to impact California in September and October if the larger scale wind fields align.

Temperature
The statewide average temperature for October through August is 58.2 degrees Fahrenheit, which is 2.1 degrees above the period of record average based on Western Region Climate Center’s California Climate Tracker (WRCC - California Climate Tracker (dri.edu)). This ranks as the 10th warmest October through August in the 128-year period of record.

August 2022 was the second warmest August for statewide average temperature trailing only August 2020.

The first week of September included an unusually strong heat wave with many locations in California recording all-time new temperature records. Some more than 115 degrees Fahrenheit. Expectations are for temperatures to be above average into the fall.
Historically La Nina years are some of the State’s colder years. However, recent La Nina years including 2008, 2009, 2018, and 2021 have had warmer than average outcomes. This year is following that pattern. This is consistent with the warming trends that we have seen over the past decade due to California’s changing climate.

**Reservoirs**
Statewide reservoir storage continued to decrease in August. At the end of the month, storage was at 69% of average for the end of August. This is the same percent of average as the end of July indicating that the use of stored water in August was average. Storage can vary significantly based on size of reservoir and purpose. The statewide storage at this time of year is improved from last year at this time when it was 60% of average.

**Snowpack**
At the end of August, all automated snow sensors in the state report no snow. The peak of the statewide snowpack, as measured by the automated sensors, appears to have happened March 8 with about 57% of a seasonal snowpack which equates to 16.1 inches of snow water equivalent or SWE.

The April 1 snowpack ended up being one of the 10 worst on record due to the amount of snow melting in March from a lack of storms, clear skies and warmer-than-average temperatures. No snow is expected until late November to begin building the seasonal snowpack for water year 2023.

**Streamflow and Groundwater**
Streamflow and groundwater are also both well below average across much of the state. For the groundwater wells that are reporting, 64% are below average. Other areas in California are reporting streamflow in the bottom 10% of the historical distribution. It is expected that the landscape will continue to dry decreasing streamflow and groundwater levels until the first rains fall for the start of Water Year 2023.