

California Monthly Climate Summary November 2007

Weather Highlights

November 2007 was a dry month that finished with a wet flourish in the south. According to the Western Region Climate Center's [California Climate Tracker](#), the monthly average temperature was 2.2°F higher than the long-term average of 49.6°F. This is the 3rd November in a row with a monthly average temperature above the long-term mean. With a statewide average of 0.66 inches, precipitation for November was only 25.2% of the long term average. This is the 16th driest November in 113 years.

The first week of November included a high pressure ridge that led to above normal temperatures across the state. Temperatures in the southeast deserts reached into the 90s. The second week of the month started with a ridge in place and mild, dry weather. By midweek, a mid-level low brought monsoonal moisture from the subtropics. A cold front passing through in the latter part of the week brought precipitation to most of the state. After the front's passage, temperatures dropped significantly leading to nighttime lows as low as the 20s. The third week brought more ridging with some dense fog development in the San Joaquin Valley. Locally dense fog on the 19th reduced visibility in places to 100 feet. In the fourth week, a passing front brought heavy rain to the north coast followed by cool dry air and more frost advisories. A cold surface high over the Great Basin brought more Santa Ana winds to southern California. The month finished with a low pressure system off of Baja California that brought widespread showers to the south part of the state. Some mountain areas picked up over 2 inches of precipitation. Mud and debris flows occurred in some fire-scarred areas.

Preliminary records, reported on the National Weather Service Record Event Report, show that statewide there were 43 temperature records tied or broken and zero precipitation records tied or broken for the month. Of these 43 records, 37 were for new high maximum temperatures. On November 6, Redding tied a 1947 record with a high temperature of 84°F. On November 14, Santa Maria tied a 1906 record with a high temperature of 88°F. On the 15th Santa Maria broke a 1949 record with a high temperature of 87°F, one degree higher than the old record. On the 15th Paso Robles also topped a 1949 record by one degree with a temperature of 83°F.

For the California Data Exchange Center's (CDEC) network of temperature gages used in this report, 216 stations recorded a minimum temperature below freezing. Statewide extremes from the CDEC network of temperature gages are shown below. Also shown are the monthly average extremes from the CIMIS network. A table of regional average minimum, mean, and maximum temperatures from the CDEC and CIMIS networks is also shown.

Precipitation in November was back to being below normal. According to the California Climate Tracker, this is the fifth below normal November in a row. The largest amount of precipitation recorded in the CDEC precipitation gages for November 2007 was at the Gasquet Ranger Station on the north coast with a total of 9.19 inches. This is only 65% of the average monthly precipitation for November at this location. For the CIMIS network, Temecula in Riverside County topped the precipitation charts with 2.73 inches for the month. Eighteen stations in the CDEC and CIMIS databases reported zero precipitation for the month. The 8-Station Index for northern California precipitation

recorded 1.1 inches in November with seven days showing precipitation. On average 6.3 inches of precipitation is recorded for the 8-station index. This is the 10th driest November in the 8-Station Index period of record. Statewide, the average precipitation for November was 43.8% of the long-term average based on the California Data Exchange Center (CDEC) gages. Precipitation percentages by region from the CDEC gages are shown in a table at the end of this document.

The Drought Monitor maps which can be found on the National Drought Mitigation Center's (NDMC) website <http://drought.unl.edu/dm/> have held steady in their depiction of California during the month of November. These maps are largely a reflection of precipitation and soil moisture deficit estimates. Moderate drought conditions (D1) are shown for the North Lahontan, Sacramento and lower San Joaquin Valleys. The South Coast, South Lahontan, Central Coast and Sierra Nevada regions south of Lake Tahoe are depicted as severe drought (D2). Parts of the central coast and southern San Joaquin Valley/Tulare Basin are depicted by the NDMC as being in extreme drought (D3). Maps are updated weekly.

The latest U.S. Seasonal Drought Outlook from NOAA depicts conditions for the next three months. For California, the map shows near-term improvement in conditions for the most of the state and persistence of drought conditions in the southernmost part of the state. Updates are provided twice per month. Maps and information can be found at http://www.cpc.noaa.gov/products/expert_assessment/seasonal_drought.html

It's a new water year. Initial outlooks for the new water year water supply index categories are dry for the Sacramento Basin and critical for the San Joaquin. Water supply information for California can be found at http://cdec.water.ca.gov/water_supply.html. A historical listing of water year categories for both basins can be found at <http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST>.

ENSO Conditions and Long-Range Outlooks

The El Niño/Southern Oscillation (ENSO) is being classified as a moderate La Niña pattern. Equatorial sea surface temperature anomalies for the tropical Pacific are running from -0.8° C to -2.4° C. Both statistical and dynamical models forecast La Niña conditions lasting into the first part of 2008. More information on the topic can be found at the Climate Prediction Center's web site:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/. Updates are posted weekly. Current climate indicators including ENSO conditions indicate a warmer than average December through February period for the southern half of California and equal chances of above or below average conditions elsewhere. The precipitation outlook shows above normal totals for the next three months for only the northernmost part of the state and below normal precipitation for the rest of the state. Long-range outlook plots of precipitation and temperature can be found at: <http://www.wrcc.dri.edu/longrang/>. General weather information of interest can be found at <http://www.noaawatch.gov/>. For anomaly information please see http://www.wrcc.dri.edu/anom/cal_anom.html.

Agricultural Data

Many harvests started to wind down during the month of November. Rice, dry bean and corn harvests were completed during the month. Wine and juice grape harvests were winding down. Vegetable crop harvests continued across the state. Navel orange

harvest was picking up with cooler weather benefiting fruit size and maturity. Wildfire damage was still being assessed during the month of November. A significant amount of irrigation equipment was damaged or destroyed in the fires. Milk production continued at a high level. Beef cows in foothill pastures are receiving supplemental feed and nutrients as the rains in November were not enough to improve pasture conditions. Stock sheep and goats were grazing in harvested fields. Bees were moved to winter staging locations. For further crop information see <http://www.nass.usda.gov/index.asp>.

Other Climate Summaries

[California Climate Tracker](#) (new product of Western Region Climate Center)

[Golden Gate Weather Service Climate Summary](#)

[NOAA Monthly State of the Climate Report](#)

Statewide Extremes (CDEC)

High Temperature – 97° F (Rice Valley and Buttercup, Colorado River Desert)

Low Temperature - -1° F (Casa Vieja Meadows, Tulare Basin)

High Precipitation – 9.19 inches (Gasquet Ranger Station, North Coast)

Low Precipitation –0 inches (4 stations)

Statewide Extremes (CIMIS)

High Average Maximum Temperature – 83.1° F (Indio 2, Riverside County)

Low Average Minimum Temperature – 21.8° F (Buntingville, Lassen County)

High Precipitation – 2.73 inches (Temecula, Riverside County)

Low Precipitation – 0 inches (14 stations)

Statewide Precipitation Statistics

Hydrologic Region	Region Weight	Basins Reporting			Stations Reporting			Percent of Historic Average	
		Basins	Nov	Oct-Nov	Stations	Nov	Oct-Nov	Nov	Oct-Nov
NORTH COAST	0.27	5	5	4	19	12	11	44.1%	89%
SAN FRANCISCO BAY	0.03	2	2	2	6	3	3	27.1%	69%
CENTRAL COAST	0.06	3	3	3	11	7	7	10.4%	33%
SOUTH COAST	0.06	3	3	3	15	9	7	56.5%	76%
SACRAMENTO RIVER	0.26	5	5	5	43	29	29	20.8%	52%
SAN JOAQUIN RIVER	0.12	6	6	6	25	22	21	19.3%	42%
TULARE LAKE	0.07	5	5	5	28	26	26	11.8%	29%
NORTH LAHONTAN	0.04	3	3	3	14	10	10	39.4%	60%
SOUTH LAHONTAN	0.06	3	3	3	15	8	8	43.9%	31%
COLORADO RIVER	0.03	1	1	1	6	4	4	477.4%	242%
STATEWIDE WEIGHTED AVERAGE	1.00	36	36	35	182	130	126	43.8%	65%

Statewide Mean Temperature Data by Hydrologic Region (degrees F)

Hydrologic Region	No. Stations	Minimum	Average	Maximum
North Coast	36	27.1	46.1	71.1
SF Bay	18	38.8	54.1	71.8
Central Coast	35	39.0	54.4	75.3
South Coast	72	39.6	58.5	82.5
Sacramento	94	27.8	48.1	73.8
San Joaquin	77	29.8	48.7	70.4
Tulare Lake	20	21.6	43.8	68.1
North Lahontan	31	14.8	37.9	60.4
South Lahontan	23	23.8	45.4	68.1
Colorado River Desert	23	44.9	63.3	83.8
Statewide Weighted Average	429	28.9	48.4	72.2