

Weather Highlights

May 2007 continued this year's trend of above-mean temperatures and below average precipitation. For the National Weather Service Co-Operative Network, the statewide average mean temperature was 62.4°F which is 2.1 degrees higher than the long-term average. The statewide average maximum temperature was 75.7°F, which is 2.7°F greater than the long-term average. The statewide average minimum temperature was 49.1°F which is 1.6°F greater than the long-term average. The National Weather Service Cooperative Network showed statewide average precipitation in May of 0.28 inches which is 0.48 inches below the long-term average. Every month of 2007 has recorded below normal precipitation and has resulted in a cumulative deficit of 7.2 inches for the calendar year.

May began with an upper-level low pressure system passing over California with showers spreading from northern California into the San Joaquin Valley. Temperatures dropped from the record highs at the end of April to near normal by May 2nd. Unstable air behind the front led to some thunderstorms. On May 2nd, Redding set a new record for precipitation with 1.02 inches recorded at the airport. The old airport record was 0.20 inches set in 2003 and the old city record was 0.79 inches set in 1941. A second frontal system passed through at the end of the first week bringing rain to the Central Valley and snow to the Sierras. The second week of May saw high pressure, offshore flow and warm weather move into the state. Gusty offshore winds in the south part of the state created dangerous fire weather conditions. In San Francisco, the downtown observation site recorded a minimum temperature on May 7th of 66° F. This is six degrees warmer than the previous record minimum set back in 1936. The end of the week brought a low-pressure system that changed patterns to cooler, onshore flow conditions. However, even with the cooling, temperatures were still 8 degrees above normal in the San Joaquin Valley. Some gusty winds near 45 mph moved through the Tehachapi Mountain passes and into the Kern County desert. The third week of May was spent under another ridge of high pressure with no significant rain hitting California. May closed out with more heat for the inland areas and cooler weather on the coast.

Preliminary records reported on the National Weather Service Record Event Report show that statewide there were 57 temperature records tied or broken and 2 precipitation records tied or broken for the month. There were only 8 days in May with a record set somewhere in California with 6 of these coming in the first ten days of the month. It should be noted that this data is preliminary and may not include all records set. New daily maximum temperature records account for 54 of the 59 reports. Statewide extremes from the California Data Exchange Center's (CDEC) network of temperature gages are shown below. A table of regional average minimum, mean, and maximum temperatures from the CDEC and CIMIS networks is also shown below.

Precipitation in May was below normal again. The largest amount of precipitation recorded for May 2007 was at Bowman where 2.58 inches of rain fell. This is 82% of the average May rainfall at this site. Thirty-two stations in the state reported zero precipitation for the month. The 8-Station Index for northern California precipitation showed 6 days of precipitation for a total of 1.16 inches. This is 55% of the long-term average for May. A table of October through May 8-Station Index totals can be found at

the end of the summary. In the southern part of the state, the downtown Los Angeles station recorded only no rain in May which keeps it on track for its driest year on record with a total of 3.21 inches. The previous driest year on record was from July 1960 to June 1961 when only 4.85 inches fell. More recently, from July 2001 to June 2002, 4.92 inches of rain fell. Statewide, the average precipitation for May was 58% 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 continuing dry weather over California has been reflected in the Drought Monitor Maps which can be found on the National Drought Mitigation Center's (NDMC) website <http://drought.unl.edu/dm/>. These maps are largely a reflection of precipitation and soil moisture deficit estimates. The northwest part of the state is depicted as abnormally dry (D0). Moderate drought conditions (D1) are shown for the Sacramento and lower San Joaquin Valleys. The Central Coast, Sierra Nevada and North Lahontan regions are depicted as severe drought (D2). The southern parts of the state are depicted by the NDMC as being in extreme drought (D3). Maps are updated weekly.

May is the second month of the April through July snowmelt season. Forecasts of seasonal runoff are provided in DWR's Bulletin 120 from February through May. Weekly updates are provided through May. Water supply information for California can be found at http://cdec.water.ca.gov/water_supply.html. By the end of May, runoff forecasts ranged from 50% of average in the north parts of the Sacramento Basin to 20% of average in the southern end of the Tulare Basin. The 50% and 90% exceedence water supply categories are dry for the Sacramento Basin and critically dry for the San Joaquin Basin. 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 neutral pattern. Equatorial sea surface temperature anomalies for the eastern tropical Pacific are running between -0.5° C and -1.0° C. Dynamical models forecast a continuing downward trend towards La Nina conditions in the next couple of months while statistical models are forecasting conditions to remain in a neutral pattern. 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 June through August period for California. Precipitation forecasts show below normal totals for the next three months for the northern end of the state and equal chance of above, near, or 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

May provided weather for the planting, maturing and harvesting of agricultural products across California. Grape, almond, and pistachio crops are looking good. Olive trees started fruiting as are some early varieties of tomatoes. Wheat is maturing and harvest is expected soon. Rice field planting is ongoing with some rice emerging above water level.

The third cutting of Alfalfa started in Merced County. Spring sugar beets and potatoes are being harvested. The cherry harvest continued along with some varieties of peaches and nectarines, plums, strawberries and blueberries. Range conditions continue to suffer due to the lack of precipitation this winter and windy conditions in May. Some livestock are being put on irrigated fields and some herds are being thinned due to dry conditions. 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

High Temperature – 106° F (Mojave River Sink, South Lahontan)

Low Temperature - 4° F (Slide Canyon, San Joaquin Basin)

High Precipitation – 2.58 inches (Bowman, Sacramento Basin)

Low Precipitation –0 inches (32 stations)

Statewide Precipitation Statistics

Hydrologic Region	Region Weight	Basins Reporting			Stations Reporting			Percent of Historic Average	
		Basins	May	Oct-May	Stations	May	Oct-May	May	Oct-May
NORTH COAST	0.27	5	4	4	19	8	8	56.1%	86%
SAN FRANCISCO BAY	0.03	2	2	2	6	2	2	65.3%	74%
CENTRAL COAST	0.06	3	2	1	11	3	2	0%	36%
SOUTH COAST	0.06	3	3	3	15	11	11	0%	29%
SACRAMENTO RIVER	0.26	5	5	5	43	29	26	67.2%	68%
SAN JOAQUIN RIVER	0.12	6	6	6	25	15	14	49.1%	64%
TULARE LAKE	0.07	5	5	5	28	25	24	15.8%	54%
NORTH LAHONTAN	0.04	3	3	3	14	10	10	25.9%	58%
SOUTH LAHONTAN	0.06	3	3	3	15	9	9	262.5%	41%
COLORADO RIVER	0.03	1	1	1	6	4	3	0%	12%
STATEWIDE WEIGHTED AVERAGE	1.00	36	34	33	182	116	109	58.4%	64%

Statewide Mean Temperature Data by Hydrologic Region (degrees F)

Hydrologic Region	No. Stations	Minimum	Average	Maximum
North Coast	36	33.8	57.0	85.3
SF Bay	21	43.4	59.8	79.9
Central Coast	33	43.1	58.1	76.7
South Coast	66	43.9	61.6	87.2
Sacramento	95	34.4	60.4	84.6
San Joaquin	76	35.4	59.6	80.8
Tulare Lake	17	24.3	52.3	73.8
North Lahontan	28	24.0	49.3	72.2
South Lahontan	24	32.0	58.3	79.5
Colorado River Desert	22	57.7	78.0	95.4
Statewide Weighted Average	418	35.2	58.7	82.6

Northern California 8-Station Index October through May Values

Month	Precipitation (inches)	% of Average
October	0.5	17
November	5.7	90
December	8.5	101
January	1.4	16
February	13.6	170
March	1.6	23
April	3.1	79
May	1.2	55