MAY 2012 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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The upper-level ridge that brought lower 90s to the central and southern San Joaquin Valley at the end of April moved inland on May 1st. The upper-level disturbance that pushed the ridge inland brought a push of marine air into the San Joaquin Valley, bringing cooler temperatures. As a result, the first day of this month was a more typical mid-spring day, with near normal temperatures. Fresno had a high of 82 degrees on May 1st, 10 degrees cooler than the high for the previous day. Bakersfield also had a high of 82 degrees on the 1st, down 9 degrees from April 30th. The disturbance that brought marine air to the San Joaquin Valley also brought gusty winds to the Kern County desert during the evening.

Temperatures continued near normal the next couple of days. Then an upper-level trough over the Great Basin dug southwest into southern California. This brought a few degrees more cooling to the region, but this was short-lived.

A surface thermal trough developed over California on May 6th, bringing warmer temperatures to the region. Central and southern San Joaquin Valley highs on the 6th were 5-8 degrees warmer than on the 5th, and climbed to a few degrees above normal. In the high country of the Southern Sierra Nevada, moisture from the melting snowpack warmed and lifted to form cumulus clouds near the crest. Isolated showers developed, with Lodgepole receiving 0.01 inch of rain.

Further warming occurred on the 7th as the thermal trough remained over the area. A thunderstorm developed over Ponderosa and the Camp Nelson areas in the Tulare County portion of the southern Sierra Nevada and dropped around 0.04 inch of rain and pea-sized hail.

An upper-level level ridge off the California coast began building into the northern part of the state and brought even more warming. Temperatures continued to warm through May 9th, with central and southern San Joaquin Valley highs reaching mostly the mid to upper 90s; Coalinga had a high of 100 degrees. A short-wave then moved through the Pacific Northwest, flattening the ridge and lowering temperatures several degrees. Fresno had a high of 90 on May 10th, well below its high of 98 the previous day. There was little change in temperatures on the 11th, but winds increased on the west side of the San Joaquin Valley around midday with a few gusts over 25 mph. Dust devils formed at Naval Air Station Lemoore shortly after noon, and blew over several pop-up canopies that had been set up for an outdoor safety expo. One canopy was destroyed, and others were damaged.

High pressure returned to California on May 12th, with temperatures warming back into the mid 90s. The warm weather continued the next day, except for the northern part of the region, where an influx of marine air kept high temperatures around 90 degrees. The marine air filled the San Joaquin Valley on May 14th, bringing colder temperatures to the region. The high at Fresno was only 83 degrees, down 13 degrees from the previous day. Bakersfield also saw a drop of 13 degrees, from a high of 97 on May 13th to a high of 84 on the 14th. The cool spell lasted into the 15th, and then high pressure moved over the state and warmed temperatures back into the lower 90s.

The warm spell was short-lived, lasting only two days but pushing central and south Valley highs into the mid 90s. A strong push of marine air into the San Joaquin Valley on May 17th brought gusts to 35 mph at the Fresno-Yosemite International Airport and gusts to 38 mph at Merced Regional Airport. Areas of blowing dust were reported; visibility was reduced to less than a half mile in some locales. The marine air pooled over the Valley and cooled temperatures into the lower to mid 80s on the 18th. Bakersfield only reached 81 degrees, down 14 degrees from the previous day, while Fresno was down 9 degrees with a high of 85.

High pressure again built into California on May 19th, and the central and southern San Joaquin Valley warmed into the upper 80s and lower 90s. The 20th saw central and south Valley highs in the mid 90s, and a partial solar eclipse occurred in the early evening hours. The eclipse was actually an annular eclipse, but the path of maximum coverage was east and north of the central California interior.

An upper-level disturbance moved through the Pacific Northwest on May 22nd. The initial effect of this disturbance was to flatten the high-pressure ridge over California; this set the stage for a stronger upper- level trough to move through the central California interior on the 23rd. The trough cooled temperatures to near normal, and also brought strong winds to the mountains and deserts. Mojave recorded a gust to 85 mph, and there were several gusts in the 65-75 mph range. In fact, sustained winds at Mojave were as high as 72 mph on the 23rd. Temperatures continued to cool on the 24th behind this disturbance; however, a stronger storm system began to arrive by the following day.

A cold Pacific storm reached California on May 25th. Temperatures were well below normal throughout the region. In fact, Fresno had a high of only 69 degrees, and Bakersfield was only two degrees warmer. Rainfall on the San Joaquin Valley floor was confined mainly to the west side; the Naval Air Station in Lemoore had the highest amount (0.12 inch). In the Southern Sierra Nevada, up to 0.40 inch of rain was reported. As much as four inches of snow fell near Tioga Pass in Yosemite National Park. Sites in the Tehachapi Mountains had up to 0.20 inch of rain, with the highest amounts recorded in the Tehachapi Pass area.

Temperatures warmed on the last days of May as high pressure moved back over California. High temperatures in the central and southern San Joaquin Valley reached near-normal values on the 29th, and climbed well into the 90s by the end of the month. Fresno had a high of 99 on May 31st, the warmest day so far this year. The average temperature for May of 72.3 degrees gave Fresno its 10th warmest May on record. Bakersfield was slightly cooler with an average temperature of 71.7 degrees.

THE 2011-2012 RAIN SEASON THROUGH MAY 31ST
(AMOUNTS IN INCHES)

SITE	MAY 2012	NRML MAY*	DEP	PCT NRML	SEASON 5/31	NORMAL 5/31*	DEP NRML	PCT
MERCED AIRPORT	0.01	0.58	-0.57	1.7	7.03	12.37	-5.34	56.8
MERCED CITY	0.02	0.54	-0.52	3.7	7.55	12.96	-5.41	58.3
MADERA AIRPORT	0	0.48	-0.48	0	7.87	11.83	-3.96	66.5
FRESNO	0	0.43	-0.43	0	8.15	11.29	-3.14	72.2
HANFORD AIRPORT	0.03	0.42	-0.39	7.1	5.82	9.95	-4.13	58.5
HANFORD CITY	0.03	0.26	-0.23	11.5	5.75	8.87	-3.12	64.8
BAKERSFIELD	0	0.18	-0.18	0	4.93	6.39	-1.46	77.2

* NORMALS FOR BAKERSFIELD...FRESNO...HANFORD CITY AND MERCED CITY ARE FOR 1981-2010.
NORMALS FOR HANFORD...MADERA AND MERCED AIRPORTS ARE FOR 2001-2010.