

APRIL 2014 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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April began with an upper-level low located west of the Oregon coast, continuing to spin impulses into interior central California. A line of showers moved into Merced County during pre-dawn hours, and upslope clouds over the south end of the San Joaquin Valley produced snow at Tehachapi. Where clouds partially cleared over the San Joaquin Valley, an area of fog developed and became locally dense, first near Porterville and subsequently in the Hanford-Visalia area.

The second line of showers moved into Merced and Mariposa Counties by mid-morning, bringing snow to Yosemite National Park. By the early afternoon of April 1st, showers had developed over the west side of the San Joaquin Valley, with a thunderstorm forming northwest of Los Banos. As the afternoon progressed, thunderstorms became more widespread over Merced and western Fresno Counties and continued until sunset. Showers over the central and southern San Joaquin Valley brought measurable rain, although it was much too little to impact the persistent drought across the region. Convection continued into the 2nd, with the Merced Regional Airport receiving a two-day total of 0.29 inch of rain, while Meadows Field (Bakersfield) recorded 0.14 inch and Fresno-Yosemite Airport had 0.12 inch of rain. For much of the central and southern San Joaquin Valley, this was the last measurable rain until April 25th.

In the Southern Sierra Nevada, snow fell into the foothills during the late evening hours of April 1st as the cold airmass behind front the moved into the region. By the time the storm ended, snow had fallen down to 2500 feet in the Southern Sierra Nevada. Up to a foot of new snow fell on the Southern Sierra Nevada, and 2 to 5 inches of snow fell in the higher foothills (2900-4000 foot elevation). An exception was in Madera County, where a strong snow shower dropped 7 inches at 3600 feet, above Oakhurst.

The snow level fell to 3500 feet in the Tehachapi Mountains, with a half inch of snow at Frazier Park. Snow also fell at Tehachapi and a light dusting was reported on the Grapevine.

The next winter storm passed mainly north of the WFO Hanford county warning and forecast area on the afternoon of April 4th. The RAWs at Los Banos reported 0.04 inch of rain and up to 0.20 inch of rain fell in northwestern Kern County near Lost Hills, but the cities remained dry as the showers were confined to the far west side of the central and southern San Joaquin Valley.

Although thunderstorms developed north of the region—in Solano County—thunderstorm activity never progressed as far south as Merced or Mariposa Counties.

Clouds lingered over the south end of the San Joaquin Valley through the morning and into the afternoon hours of April 5th, and pushed into the Valley-facing slopes of the Southern Sierra Nevada and Tehachapi Mountains. As the clouds settled into the Tehachapi Pass, fog formed in and near the Pass with visibilities down to ½ mile. Clouds lingered along the slopes through the evening of April 5th, with slow erosion from the north.

An upper-level ridge built into California behind the storm, and brought the central California interior two weeks of above-normal temperatures. Bakersfield and Fresno had their first 90-degree day of the year on April 8th, the first time since October 6th that highs were 90 degrees.

The combination of the above-normal temperatures and moisture from the storms at the beginning of the month resulted in the development of afternoon and evening thunderstorms over the Southern Sierra Nevada on April 11th and again on the 12th. April 12th also saw a weak upper-level trough move through California. This system deepened the marine layer along the coast, resulting in cooler marine air spilling through the passes and canyons of the Temblors and Diablo Range, as well as pushing through the Sacramento Delta.

The marine air brought 8-12 degrees cooling to the central and southern San Joaquin Valley, but as high temperatures on April 11th were around 90 (15-20 degrees above normal), the highs on the 12th and 13th remained well above normal despite the cool-down. The marine air also brought gusty winds to the west side of the San Joaquin Valley, and the trough brought gusty winds to the mountains and deserts of Kern County.

The upper-level ridge rebuilt into California behind the trough, and Valley high temperatures of the 14th were 7-10 degrees warmer than the previous day and the marine air pool rapidly mixed out.

Another upper-level trough reached California on April 18th, deepening the marine layer. Marine air spilled through Pacheco Pass, producing dusty winds below the pass and triggering patchy blowing dust in fallowed fields near Los Banos. To the south, an upper-level low west of Baja California was spinning a warm, moist flow into the southern part of the WFO Hanford county warning and forecast area. Thunderstorms developed over the Tulare County Mountains and spread northward up the Sierra Nevada, reaching Yosemite National Park by mid-afternoon, and south into the mountains and desert areas of Kern County by late afternoon.

In addition to the thunderstorms, the cloud cover associated with the storm kept low temperatures well above normal on the 18th. Bakersfield tied its record high minimum temperature for April 18th, and Fresno missed its record by only two degrees.

A dry cold front moved through central California on April 22nd, bringing gusty winds and cooler temperatures. Central and southern San Joaquin Valley highs on the 22nd and 23rd were only in the lower to mid 70s, finally back to near normal. The cold front was associated with an upper-level low west of Vancouver Island, which would swing a stronger system into the state two days later.

The storm that moved into northern California during the evening of April 24th brought thunderstorms to the northern part of the state. This was an indicator of the highly unstable airmass accompanying the storm. Thunderstorms developed over central California around midday and had strengthened to near severe levels by the middle of the afternoon. Three Severe Thunderstorm Warnings were issued by WFO Hanford on the 25th, two of which were for a particularly long-lasting storm. Eleven Significant Weather Advisories were issued for non-severe thunderstorms due to the threats of hail and strong outflow winds. Hail estimated at at least a half inch in diameter was reported from these storms, as were wind damage and at least two funnel clouds. The thunderstorms brought appreciable rains to Fresno, giving the city its fourth wettest April 25th on record (0.55 inch; wettest is 0.93 inch in 1952). Bakersfield had a storm total of 0.36 inch. This brought its monthly total to 0.50 inch, just under the average rainfall for April of 0.52 inch. The rainfall from this storm ensured that neither Bakersfield nor Fresno would have its driest rain season on record, although conditions for the season remained much below normal.

A very cold airmass moved into central California behind the cold front. By late on April 25th, snow was being reported down to the 3800-foot elevation, and storm-total snow estimates were as high as 22 inches in the high country of the Southern Sierra Nevada, and up to 3.5 inches in the Tehachapi Mountains. High temperatures in the central and southern San Joaquin Valley on the 26th were only in the 60s, compared to the mid 80s only a week earlier.

An upper-level ridge built along the coast during the last days of April. Temperatures warmed to near normal by April 28th, and continued warming through the end of the month. The last day of the month saw high temperatures in the central and southern San Joaquin Valley reach the low to mid 90s, or 10-15 degrees above normal.

April 2014 tied for the fifth warmest April on record for Fresno. For Bakersfield, April tied for the 14th warmest April on record; one of the Aprils it tied with was from last year.

WARMEST APRILS ON RECORD
/AVERAGE TEMPERATURE IN DEGREES FAHRENHEIT/

	BAKERSFIELD	FRESNO
1.	69.8...1909	67.6...2013
2.	69.0...1934	67.5...1934
3.	69.0...1910	67.2...1989
4.	68.8...1989	67.1...1985
5.	68.2...1959	*66.8...2014*
6.	67.8...1931	66.8...1992
7.	67.5...1977	66.7...1987
8.	67.3...1987	66.4...1939
9.	67.3...1966	66.1...1888
10.	67.2...2004	66.0...1931
11.	66.9...1992	66.0...1926
12.	66.9...1939	65.8...2004
13.	66.8...1949	65.7...1990
14.	*66.7...2014*	65.6...1959
15.	66.7...2013	65.6...1949
16.	66.7...1990	65.5...1966
17.	66.7...1954	65.5...1898
18.	65.9...1985	65.4...1977
19.	65.8...1962	65.2...1910
20.	65.5...1950	64.8...1962
	65.5...1947	