

MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS

REPORT FOR:

MONTH: **DECEMBER** YEAR: **2011**

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
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Silver Spring, MD 20910

SIGNATURE:
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(In Charge of Hydrologic Service Area)

DATE: January 3, 2012

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (WSOM E-41).

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| X | An X inside this box indicates that no flooding occurred for the month
+---+ within this hydrologic service area.

December, 2011 was an abysmal month from a hydrologic standpoint and ended up being one of the driest Decembers on record. Officially, not a drop of rain fell in Fresno, making it the driest December since 1989 when rainfall was zero. In Bakersfield, where only a trace of rain fell, it was the driest December since 2000. Precipitation was also scanty over the higher terrain, with meager snowfall over the southern Sierra Nevada and the Tehachapi mountains. This is a sharp contrast from December, 2010 when nearly 6 inches of rain drenched the San Joaquin Valley and snow piled 15-20 feet deep over the high Sierra.

The month began with a major wind storm in the San Joaquin Valley from Fresno County northward which extended into the foothills and higher elevations of the Sierra. The strong winds, which frequently gusted over 40 mph in the valley and as high as 74 mph along the Sierra crest, downed numerous trees and power lines and caused roof damage to several homes in the Fresno area during the afternoon of December 1st. An invasion of a dry and very cold airmass in the wake of this storm system led to a week long period of below freezing minimum temperatures in the San Joaquin Valley beginning December 3rd. This was the first freeze of the season in the San Joaquin Valley, and it was only a harbinger of what was to come later in the month.

A storm system that formed over the eastern Pacific during the second weekend of the month tracked too far west and south to bring measurable rain to the San Joaquin Valley. However, the storm did brush the extreme south end of the San Joaquin Valley and the Kern county mountains and desert with some light precipitation from the evening of the 11th into the 13th. The air was cold enough for a dusting of snow and ice down to pass level in the Tehachapi mountains on the morning of the 12th which ultimately closed a few secondary roads for a short time. A second storm followed closely behind this system but moved inland into northern California on the 14th and it then dragged a cold front southward through the central California interior on the 15th with little more than a few light showers across the northern half of the HSA. The second half of the month was pathetically dry as the storm track remained well north of the HSA and an upper level ridge of high pressure dominated the weather pattern.

December, 2011 was also much colder than normal. In fact, the San Joaquin Valley experienced several nights of frost and below freezing temperatures during the month. At the Hanford airport, minimum temperatures above 32 degrees occurred on only two nights of the month. In the coldest locations of the San Joaquin Valley, minimum temperatures were in the low to mid 20s. In the Kern county desert, temperatures bottomed out in the low to mid teens on the coldest nights. As 2011 drew to a close, nightly temperatures in most locations of the San Joaquin Valley finally stayed above freezing, however, night and morning fog and low clouds became more prevalent. Elsewhere across the central California interior, skies were mostly clear during the last week of December with relatively mild afternoons.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

cc: W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO

