

REPORT FOR:
MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS MONTH: **DECEMBER** YEAR: **2010**

TO: Hydrometeorological Information Center, W/OH12x1 **SIGNATURE:**
National Weather Service/Office of Hydrology
1325 East-West Highway #7116 Kevin Durfee
Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: January 5, 2011

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

December was a very active, stormy month with a phenomenal amount of rain and mountain snow. Precipitation averaged well above normal and shattered rainfall records in a number of localities. In Bakersfield, for example, it was not only the wettest December ever, but the wettest month ever in the history of record keeping, with a total of 5.82 inches. In Fresno, it was the second wettest December on record with a rainfall total of 5.92 inches. Many cities in the San Joaquin Valley received at least 90 percent of their normal annual rainfall during the last 3 weeks of December. During this period, storms were lining up over the Pacific, tapping into subtropical moisture, and tracking through central California with great frequency. Precipitation fell practically every day from the 14th through the 22nd and drenched the San Joaquin Valley and adjacent foothills with several inches of rain while dumping up to 15 feet of new snow on the high Sierra. As a result, significant hydrological impacts occurred in the San Joaquin Valley and adjacent foothills that included urban, highway and small stream flooding in addition to debris flows and rock slides over the higher terrain. After a very brief respite, wet weather returned to the HSA by Christmas Day and brought a renewed threat of flooding to the east side of the San Joaquin Valley and adjacent foothills. The eastern suburbs of Bakersfield were particularly hard hit as irrigation canals overflowed and left water up to 3 feet deep in places. Meanwhile, several feet of fresh snow fell in the higher elevations of the Sierra.

The final storm of the month originated in the Gulf of Alaska. When this storm moved through the central California interior on the 28th and 29th, it brought accumulating snow to elevations as low as 2000 feet. The storm dumped up to a foot of snow in the Tehachapi mountains and brought as much as 4.5 feet of fresh powder to the high Sierra. In the San Joaquin Valley, up to an inch and a half of rain soaked the east side and caused localized flooding. The hardest hit communities included the town of Seville in Tulare County and the city of Lamont to the south of Bakersfield where water was reportedly knee deep in places. In Seville, several homes were flooded on the 29th.

By the end of the month, water releases were being conducted at most of the major reservoirs. This resulted in moderately high water flows on the mainstem rivers below the dams. The Merced River at Stevenson fluctuated around monitor stage during the last few days of the month. By January 1st, the snowpack over the southern Sierra Nevada averaged about 267 percent of normal. Temperature-wise, the month averaged a good 4 to 6 degrees warmer than normal.

HYDROLOGIC PRODUCTS ISSUED (next page)

HYDROLOGIC PRODUCTS ISSUED

Urban/ Small Stream Flood Advisory.....	San Joaquin Valley north of Kern Co. the Sierra foothills and the Sierra Nevada below 7000 feet.	1720Z	17-DEC
Urban/ Small Stream Flood Advisory.....	San Joaquin Valley in Kern County and the Kern County mountains	0318Z	19-DEC
Flood Warning.....	San Joaquin Valley and adjacent Foothills; Sierra Nevada and the Tehachapi mountains below 6000 feet	1630Z	19-DEC
Small Stream Flood Advisory.....	Kern County desert	1711Z	19-DEC
Flood Warning.....	Kern County desert	1616Z	20-DEC
Flash Flood Warning.....	Kern County desert	0249Z	21-DEC
Flash Flood Watch.....	Kern County desert	0725Z	22-DEC
Urban/Small Stream Flood Advisory.....	San Joaquin Valley	1948Z	22-DEC
Flood Warning.....	San Joaquin Valley in the vicinity of Bakersfield	2325Z	22-DEC
Urban/Small Stream Flood Advisory.....	San Joaquin Valley	0512Z	26-DEC
Flood Watch.....	San Joaquin Valley and adjacent Foothills	0337Z	28-DEC
Flood Warning.....	San Joaquin Valley and adjacent Foothills	0922Z	29-DEC
Hydrologic Statement.....	Merced River at Stevinson	2027Z	29-DEC
Hydrologic Statement.....	Merced River at Stevinson	2217Z	29-DEC
Hydrologic Statement.....	Merced River at Stevinson	1845Z	30-DEC

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO