NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE HYDROLOGIC SERVICE AREA:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE SAN JOAQUIN VALLEY - HANFORD , CA

REPORT FOR:

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

Silver Spring, MD 20910

MONTH: NOVEMBER YEAR: 2012

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:
National Weather Service/Office of Hydrology
1325 East-West Highway #7116 Kevin Durfee

(In Charge of Hydrologic Service Area)

DATE: December 6, 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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 \mid X \mid An ${\bf X}$ inside this box indicates that no flooding occurred for the month +---+ within this hydrologic service area.

November, 2012, just like the past 3 months, averaged much warmer than normal. In Fresno, it was one of the top ten warmest Novembers on record...and the records date back to 1887. All in all, there were at least 23 days in the month when daily temperatures averaged above normal. During the first week alone, when a strong upper level ridge of high pressure dominated the pattern, high temperatures warmed into the low to mid 80s in the San Joaquin Valley, lower foothills and the Kern county desert. The spell of unseasonable warmth came to an abrupt end on the 8th as a storm charged into the state from the Gulf of Alaska. Although the storm produced meager precipitation in the lowest elevations, it brought isolated thunderstorms to the San Joaquin Valley during the afternoon of the 9th. One severe thunderstorm spawned a weak tornado in the south valley that afternoon. Fortunately, no damage was reported from this tornado as it touched down in a rural location a few miles northeast of the town of Tipton. Otherwise, the storm packed a wintry wallop over the Sierra with several inches of snow above 6000 feet. It was the season's first snowfall on the floor of Yosemite Valley where up to two inches fell. An unseasonably cold air mass settled in behind this storm system by the 10th and produced a hard freeze in the Kern county desert and the season's first frost throughout much of the San Joaquin Valley on the morning of the 11th and 12th. A developing storm system off the central California coast brought mild air and moisture back into the district by the 15th. The southwesterly flow aloft associated with this storm brought a fetch of subtropical moisture into the HSA from the 16th through the 18th, raised snow levels in the southern Sierra above 9000 feet, and drenched the higher elevations with 1 to 3 inches of rain. In the southern San Joaquin Valley, an influx of warm air from the south brought high temperatures into the 70s during this period along with isolated afternoon thunderstorms on the 17th. Unfortunately, much of the HSA south of Fresno county was robbed of significant precipitation from this storm with rain totals generally under two tenths of an inch.

For much of the rest of November, the storm track became established well north of the HSA as a strong upper level ridge of high pressure anchored itself over southern California and the desert southwest. One storm brushed the northern portion of the HSA with some light precipitation on the 21st. Otherwise, the weather pattern remained dry with mild afternoon temperatures through the 27th. During this time, night and morning fog became commonplace in the San Joaquin Valley, especially by Thanksgiving.

The final three days of the month brought a significant change in the overall pattern; one that brought a succession of storms in from the Pacific and ultimately beneficial precipitation, especially in the foothills and higher elevations of the Sierra. The first of these storms basically opened the door to wet weather on the 28th, the bulk of which fell north of Kern county. The storm that followed was much wetter, especially from Fresno county north, as it trekked eastward across the central California interior on the 30th. In fact, a few locations in the San Joaquin Valley north of Kern county set new records for daily rainfall on the 30th, including Fresno with 0.62 inches. Snow levels stayed above 9000 feet where up to 18 inches fell. The storms combined produced a favorable hydrologic response as the month drew to a close with appreciable water rises along many streams and rivers over the higher terrain north of Tulare county. In

spite of generous rain at the end of the month, water levels in area reservoirs remained extremely low, averaging only 24 percent of normal capacity. Precipitation for the month ranged from well below normal over the southern half of the CSA to slightly above normal in Merced county and Mariposa county.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flood Watch	foothills/ higher elevations of the Sierra from		
	Fresno county northward	2040Z	29-NOV
Urban/Small stream flood advisory.	.eastern San Joaquin Valley and foothills/higher		
·	elevations of the Sierra from Fresno county		
	northward	2325Z	30-NOV

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO