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

MONTH: OCTOBER YEAR: 2012

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: November 1, 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.

There were only two storm systems that brought measurable precipitation into the central California interior during the month of October. The first storm developed over the eastern Pacific and tracked inland across southern California on the 10th and 11th. Up to a half inch of rain fell from this storm in the Sierra foothills and in the Kern county mountains with upwards of nearly an inch in the higher elevations of the Sierra. In the San Joaquin Valley, the storm spawned isolated thunderstorms with very heavy rain on the 11th with reports of minor flooding along Highway 99 near Pixley and in western Kern county about 5 miles west of Lost Hills. Although the bulk of precipitation fell as rain in the mountains, the storm did leave a dusting of snow in its wake over the highest peaks of the Sierra by the morning hours of the 12th.

The second storm to impact the central California interior was much colder and originated in the Gulf of Alaska. Although this storm system tracked north of the state, a dip in the jet stream swept its associated cold front eastward across the central California interior on the $22^{\rm nd}$. While much of the west side and south end of the San Joaquin Valley were caught in the rain shadow of this system with at most only a hundredth of an inch of rain, the central and east side of the San Joaquin Valley from Hanford and Visalia northward received significantly higher rainfall with amounts ranging from a tenth to nearly a quarter of an inch... enough to quantify it as the first wetting rain of the season. Meanwhile, the storm produced generous precipitation in the orographically enhanced upslope regions of the HSA. Up to 1.25 inches of rain fell along the west slopes of the Sierra below 6000 feet. Above this elevation, snowfall totals from this storm ranged from 4-7 inches in the Tulare county mountains to as much as a foot from Yosemite National Park to Kings Canyon.

Aside from these short periods of storminess, much of the month was dry and tranquil as an upper level ridge of high pressure dominated the weather pattern. October, 2012 brought several days of unseasonably warm high temperatures. On at least three days, temperatures averaged 10 degrees or more above normal. October 1st through the 3rd were exceptionally warm with highs close to the century mark in the San Joaquin Valley, lower foothills and the Kern county desert. Even as late as the 18th, afternoon temperatures in these areas rose above 90 degrees. In fact, records for high temperature were either tied or broken in several San Joaquin valley locations on the 1st, 2nd and the 18th.

Precipitation for the month ended up slightly to much below normal throughout the HSA. All of the major reservoirs were well below their normal water levels for the season and averaged only about 20% capacity.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Urban/Small stream flood advisorySan Joaquin Valley	1709Z	11-OCT
Urban/Small stream flood advisoryKern county mountains	2230Z	11-OCT

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO