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: **2009**

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
1325 East-West Highway #7116
Silver Spring, MD 20910

SIGNATURE:
Kevin Durfee
(In Charge of Hydrologic Service Area)

DATE: November 5, 2009

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).

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

A deep, slow moving upper level trough kept temperatures below normal during the first week of the month. By the time this system retreated eastward into the Great Basin, a powerful moisture-laden storm had gathered strength over the eastern Pacific. As the storm moved onshore the day after Columbus Day, it brought copious precipitation to the HSA north of Kern County. Strong winds that accompanied this storm produced blowing dust and areas of near zero visibility along the west side and south end of the San Joaquin valley. Because this system tapped into an abundance of tropical moisture from what was once Typhoon Melor, it not only produced heavy precipitation, but snow levels remained above 9000 feet for the duration of the storm. Rainfall totals from this system ranged from 1 to 2 inches in the San Joaquin Valley north of Kern County to 4 to 7 inches in the foothills and higher elevations. In the southern Sierra Nevada, as much as 13 inches of rain fell at Dinkey Creek (about 9 inches of this fell in just 12 hours on the 13th). While the hydrograph at this location suggested that this would be a flash flood, there were no ground truth reports to confirm it. Antecedent conditions were abnormally dry. Therefore, much of the rain from this system easily percolated into the soil and slowed runoff in most areas.

The weather became tranquil by the 15th and remained so through the 18th as a weak ridge of high pressure settled over the HSA. Temperatures finally warmed several degrees above normal during this period, even in the San Joaquin Valley where stubborn low clouds and morning fog was present. The next upper level trough that moved into the central California interior was moisture-starved and produced up to a few hundredths of an inch of rain on the valley floor to as much as two tenths of an inch of rain over the higher elevations on the 19th. High pressure settled into the central California interior behind this trough by the 21st and brought a spell of dry, tranquil weather with a substantial warming trend through the 26th.

A dry cold front moved quickly southward across the state on the 27th and brought a dramatic change to cooler weather. Strong and gusty winds accompanying this system produced areas of blowing dust in the San Joaquin Valley on the 27th with locally poor visibility. As winds calmed and the dust settled, much of the HSA experienced its coldest weather so far this season. Temperatures dropped just below freezing in the Kern County desert on the morning of the 29th and dipped to frosty levels in most rural locations of the San Joaquin Valley. The remaining days of the month brought dry weather with relatively mild afternoon temperatures as an eastern Pacific ridge of high pressure built into California.

HYDROLOGIC PRODUCTS ISSUED

Flash Flood Watch…Sierra Nevada foothills and the higher elevations of the Sierra.	0834Z	12-OCT
Urban and Small Stream Flood Advisory…San Joaquin Valley north of Kern County	0009Z	14-OCT
Flash Flood Warning for the higher elevations of the Sierra Nevada in Fresno County	1004Z	14-OCT

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO