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: **2013**

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 3, 2013

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.

The month was much drier than normal even though two winter-like storms brought beneficial precipitation to much of the HSA. The first storm rolled in on the 9th and brought measurable rain no farther south than Merced county in the San Joaquin Valley where up to a tenth of an inch was observed. South of Merced county, 50+ mph wind gusts produced areas of blowing dust on the west side of the San Joaquin Valley during the morning hours of the 9th. Otherwise, this storm produced up to a quarter of an inch of rain in the foothills. Precipitation was more plentiful in the mountains where amounts ranged from nearly four tenths of an inch in Tehachapi to nearly three-quarters of an inch in the southern Sierra. The storm produced a light dusting of snow at elevations as low as 5000 feet in the Kern county mountains to as much as 8 inches over the highest elevations of the Sierra. The second storm tracked southward from western Canada on the 27th. From its arrival into the central California interior during the early morning hours of the 28th to its exit into the Great Basin during the evening of the 28th, the storm left the higher elevations of the Sierra blanketed with up to ten inches of snow. Precipitation from this storm fell as rain below 5000 feet with amounts ranging from a tenth of an inch or less in the San Joaquin Valley to about six tenths of an inch in the Sierra foothills. A few foothill localities received more than an inch of rain from this storm on the 28th. The storm also brought generous rain to the Kern county mountains where local amounts of up to 0.85 inches were reported.

Now, to put things in proper perspective, the above referenced storms were only flukes to an otherwise extremely dry weather pattern that prevailed over California. A very strong blocking upper level ridge of high pressure anchored near the West coast for most of the month effectively barricaded eastward moving storms that originated over the western Pacific ocean. While the high pressure ridge remained offshore, it left room for primarily dry cold fronts to slide southward out of western Canada. One of these cold fronts passed through the HSA on the evening of the 2nd and another frontal passage occurred on the evening of the 7th. A very dry air mass followed in the wake of the cold front on the 2nd and was accompanied and followed by gusty winds and blowing dust on the west side of the San Joaquin Valley through the 3rd. Single digit relative humidities associated with this air mass produced Red Flag conditions in the Kern county mountains and the higher elevations of Tulare county from the 4th through the 7th. Although widespread Red Flag conditions did not recur in this region, there were many nights of poor humidity recoveries over much of the higher terrain during the month while the upper level ridge of high pressure remained in control. Meanwhile, poor air quality existed in the San Joaquin Valley while the atmosphere stagnated underneath the High pressure ridge, particularly from the 14th through the 27th.

Temperature-wise, the month ended up slightly below normal throughout much of the HSA. Fresno was the only climate station that averaged slightly above normal for the month. Despite some hydrologic replenishment from the two storm systems referenced above, water levels remained quite low at most of the major reservoirs. As of November 1st, the water capacity of the reservoirs averaged only 24 percent of normal.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO