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

NS MONTH: OCTOBER YEAR: 2014

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 2, 2014

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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 $\mid$   $\boldsymbol{x}$   $\mid$  An  $\boldsymbol{x}$  inside this box indicates that no flooding occurred for the month

+---+ within this hydrologic service area.

October, 2014 was extraordinarily warm across the central California interior with an average bias of nearly 5 degrees above normal. In fact, it was the warmest October ever in Fresno with records dating back to the late 1800's. Despite a very wet storm on the 31<sup>st</sup>, precipitation for the month ended up below normal.

A strong high amplitude ridge of high pressure aloft dominated the pattern during the first two weeks of October and brought dry and unseasonably warm weather to the HSA. The month began with extremely low relative humidities over the mountains. The combination of very dry fuels and gusty winds in the mountains of Kern county into the Sierra National Forest portion of Tulare county prompted the issuance of a Red Flag Warning on the 1<sup>st</sup>. The fire danger remained high in this region until the offshore flow finally weakened by the evening of October 5<sup>nd</sup>. High temperatures during the first 14 days of the month were generally in the 90s in the San Joaquin Valley and lower foothills as well as the Kern county desert.

During the second half of October, the high pressure ridge was occasionally flattened over central California by storm systems that marched inland through the Pacific Northwest. Trailing cold fronts associated with these storms were generally moisture starved as they passed through the HSA. The first of these fronts moved southward across central California on the evening of the 14<sup>th</sup> with no precipitation. The next cold frontal passage occurred on the afternoon of the 20<sup>th</sup> and produced little more than some sprinkles in the San Joaquin Valley. However, low clouds and drizzle occurred in its wake along the north facing slopes of the Tehachapi mountains the following morning. The third cold frontal passage on the 25<sup>th</sup> did bring isolated showers to the San Joaquin Valley north of Fresno county and fairly light precipitation to the adjacent foothills and higher elevations of the Sierra. Rain amounts were generally less than a few hundredths of an inch in the northern part of the San Joaquin Valley. The higher elevations fared a little better with up to two tenths of an inch of rain falling in the Sierra. Temperatures cooled to near normal behind each cold front but rebounded to unseasonably warm levels when the upper level ridge of high pressure built back over the central California interior.

The first significant storm of the season moved into the HSA on Hallow's eve and delivered a soaking rain to the San Joaquin Valley, foothills and the mountains below 5500 feet. Above this elevation, 4 to as much as 17 inches of snow fell in the Sierra. Rain amounts ranged from a tenth to two tenths of an inch in the Kern county desert to as much as in inch in the San Joaquin Valley. The foothills and higher elevations were drenched with one to two inches of precipitation.

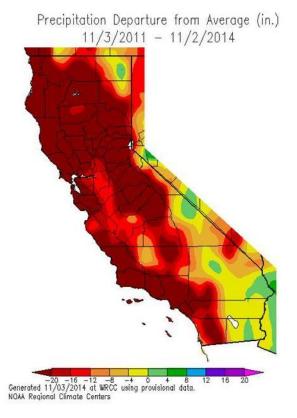
Despite the end of the month storm, water in the reservoirs remained pitifully low and averaged only about 18 percent of their normal capacity as of November 1<sup>st</sup>.

## NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

The maps on the following page show the departure from normal precipitation in California for this season and the accumulated precipitation deficit for the past 3 years.

## CA Precipitation deficit-short term and long term





cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO