

**SAN JOAQUIN VALLEY - HANFORD , CA**

REPORT FOR:

MONTHLY REPORT OF RIVER AND  
FLOOD CONDITIONS

MONTH: **OCTOBER** YEAR: **2016**

**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, 2016

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

October, 2016 ended up much wetter than normal over the northernmost part of the HSA, while precipitation over the southern two thirds of the HSA averaged slightly to much below normal. This was largely due to a storm track that remained well north of central California. There were two significantly stormy periods in October, namely from the 14<sup>th</sup> into the 17<sup>th</sup> and between the 27<sup>th</sup> and 31<sup>st</sup>. Snow levels remained fairly high during both episodes (generally above 8500 feet) with snow accumulations of up to 6 inches.

Prior to October 27<sup>th</sup>, precipitation in the San Joaquin Valley was rather nominal. A cold frontal passage on the 3<sup>rd</sup> produced little more than some sprinkles. An atmospheric river that set up over northern California during the middle of the month put Merced county on its southern periphery. But even there, rain totals in Merced county generally remained under a quarter of an inch. The rest of the valley received a trace to several hundredths of an inch of rain during the first stormy period. In contrast, the foothills and higher elevations of the Sierra were drenched with a good one to four inches of rain during the weekend of the 15<sup>th</sup> and 16<sup>th</sup>. Brisk downslope winds kept the Mojave desert dry during this time while precipitation gages in the Kern County mountains picked up as much as a half inch of rain. By and large, this mid October storm was the first significant storm to impact the central California interior in months. The two hundredths of an inch of rain that fell at Meadows Field airport on the 16<sup>th</sup> was the first measurable rain in Bakersfield since May 24<sup>th</sup>. And the hundredth of an inch of rain that fell at Fresno Yosemite International airport on the 17<sup>th</sup> was the first measurable rain in Fresno since June 12<sup>th</sup>.

Back to back storm systems between October 27<sup>th</sup> and 31<sup>st</sup> brought substantially more water into the central California interior, especially in the San Joaquin Valley. The first of the two storms had a tropical moisture connection as remnants of Hurricane Seymour were tapped by strong southwesterly winds aloft and driven into the Golden State. Rain totals during this period in the San Joaquin Valley ranged from about two tenths of an inch or less in Kern County to one to two inches in Merced County. The Kern County mountains and desert picked up a few hundredths to a few tenths of an inch of rain. Snow levels remained above 10,000 feet but eventually lowered to about 8,000 feet after the passage of the second storm during the early morning hours of the 31<sup>st</sup>. When all was said and done, the foothills and higher elevations of the Sierra ended up with the lion's share of precipitation from these back to back storms. Rain totals of up to 3 inches fell in the higher elevations of the Sierra north of Kings Canyon.

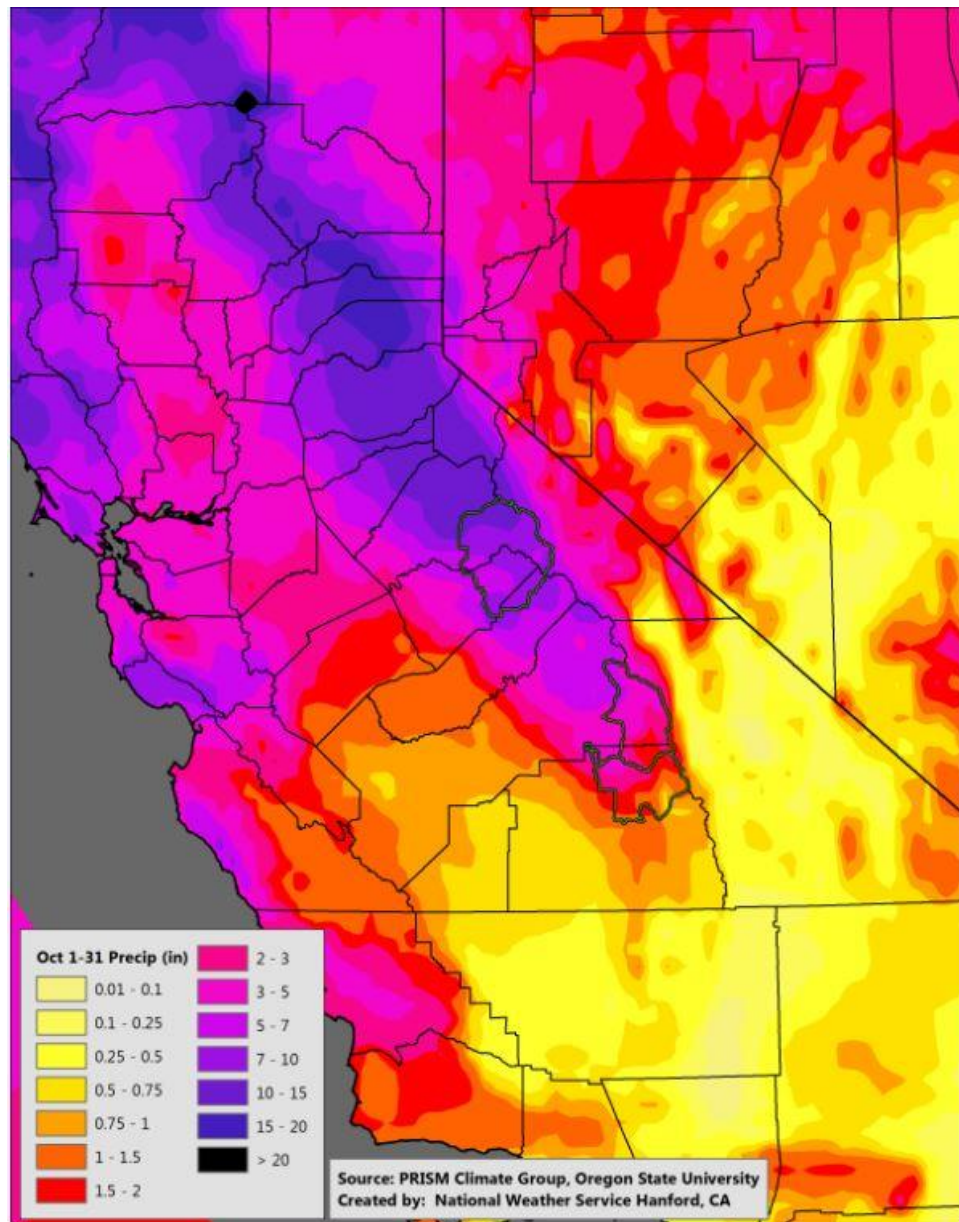
Temperatures averaged pretty close to normal for the month of October, despite many balmy afternoons with highs in the 80s in the San Joaquin Valley, lower foothills and the Kern county desert. Thermometer readings even topped the ninety degree mark in the above referenced areas on the 8<sup>th</sup> and 9<sup>th</sup>. But those toasty afternoons were offset by many long, clear, chilly nights. Temperatures bottomed out in the 40s on several nights this month outside of the urban areas in the San Joaquin Valley. During the unseasonably warm days, an upper level ridge of High pressure dominated the weather pattern across central California.

The storms that brought beneficial water into the HSA also helped recharge most of the major reservoirs. Usually October is a month of low water in the reservoirs after months of climatologically dry weather. However, little water was lost in most reservoirs this October. As of November 1<sup>st</sup>, the water capacity of the reservoirs within the central California interior averaged about 20 percent of normal.

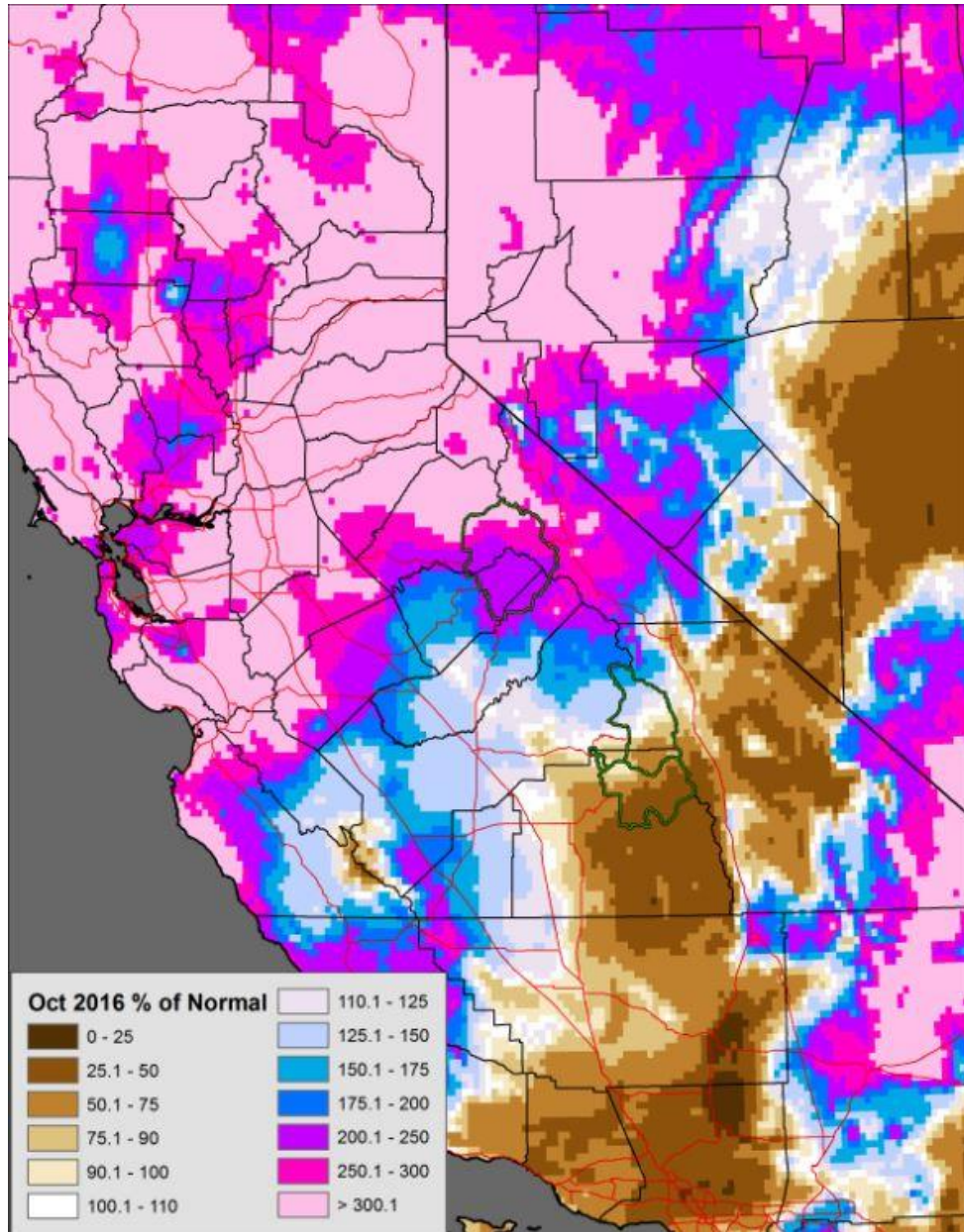
The maps below show precipitation totals for October, 2016 throughout central California and how these totals compare to normal rainfall for October.

**NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.**

### OCTOBER, 2016 PRECIPITATION



PERCENTAGE OF NORMAL PRECIPITATON FOR OCTOBER, 2016



cc:

W/OH12x1  
W/WR2  
CNRFC  
WFO HNX  
WFO STO