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: **JANUARY** 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: February 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.

January, 2016 was a banner month for precipitation throughout the central California interior, thanks to a succession of Pacific storm systems that tracked with frequent regularity through the Golden State. Although the primary storm track resided across northern California for much of the month, there were occasional southward shifts of the jet stream into central and southern California that brought water enriched storms into the HSA. Storms that produced the most significant hydrologic impact in the central California interior occurred on the 5th and 6th, again from the 18th through the 22nd and during the final weekend of the month. Each of these storms was accompanied by atmospheric rivers that originated near the Hawaiian Islands and each of them drenched the San Joaquin Valley with between a quarter of an inch and an inch of rain. Those amounts were nearly doubled, and in a few locations tripled, in the mountains and foothills, including Kern County. The highest elevations of the Sierra received the lion's share of precipitation from these El Nino type storms where generally one to two feet of new snow fell above 7,000 feet. The storm at the end of the month packed the hardest punch and set new daily rainfall records in Fresno and Bakersfield on the 31st. Additionally, this major storm buffeted the Kern County mountains and desert with very strong winds (58 mph and higher through and below the mountain passes) and greatly disrupted travel. Cold air in its wake lowered snow levels to 2500 feet by the evening of the 31st and forced the closure of Highway 58 through Tehachapi and Interstate 5 over the Grapevine because of a small accumulation of ice and snow. The storm at the end of the month produced some urban and small stream flooding in the San Joaquin Valley and adjacent foothills. Otherwise, most of the rain from this storm percolated into the soil.

Storms of comparatively minor hydrologic significance in central California were ones that tracked into Oregon and Washington state and dragged the tail end of Pacific cold fronts eastward across the HSA. This was a pattern that existed from the 7th through the 17th of January. As one would expect, precipitation amounts from these cold fronts were nominal at best in Kern County. Even in the San Joaquin Valley and adjacent foothills, rain amounts were less than two tenths of an inch. Precipitation amounts in the Sierra ranged from several hundredths of an inch south of Kings Canyon National Park to around a half inch near Yosemite. Snow showers associated with each of these cold fronts over the high Sierra produced local accumulations of up to 3 inches above 7,000 feet although Tuolumne Meadows (elevation 9,000 feet) picked up about 9 inches of snow with a cold frontal passage during the early morning hours of the 15th.

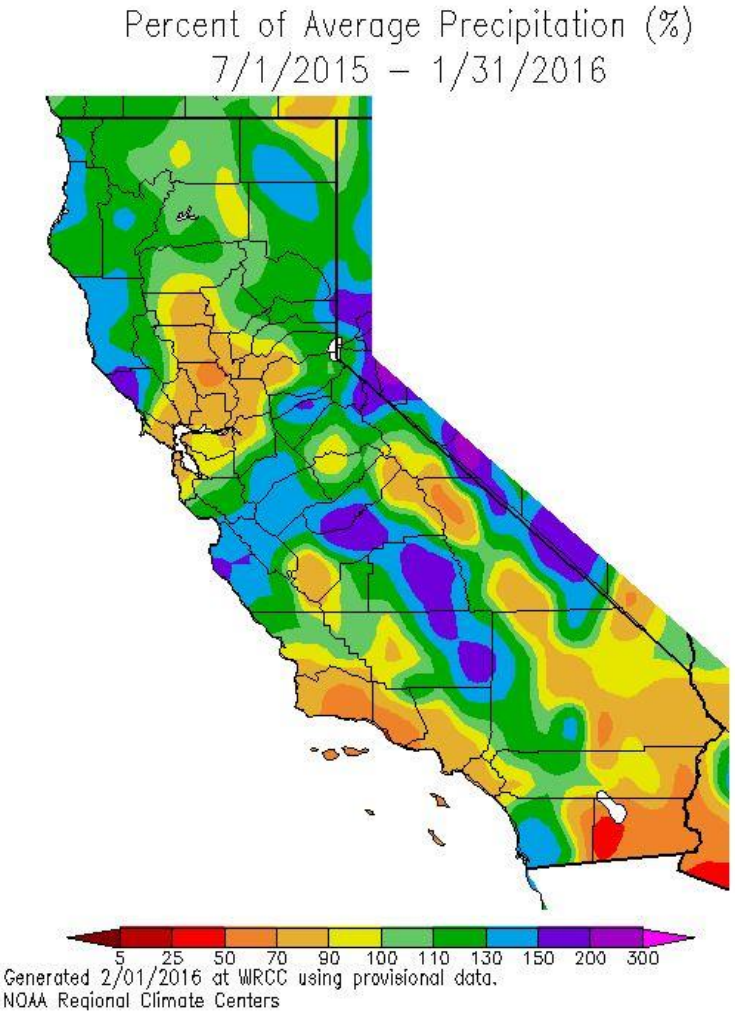
A predominant westerly flow aloft over central California did not allow many opportunities for night and morning fog development or below freezing minimum temperatures in the San Joaquin Valley this January. In fact, the coldest morning in the San Joaquin Valley for the entire month occurred on New Year's Day with frosty pre-dawn temperatures in the 20s. Dense fog became a travel woe for valley motorists driving home from New Year's Eve celebrations. Other incidents of dense fog in the San Joaquin Valley occurred during the morning hours of January 8th, 20th and 28th.

All in all, January, 2016 was the wettest January in 12 years for Bakersfield and the wettest January in 21 years for Fresno. January, 2016 was also the 9th wettest January on record for Fresno with a total of 4.42

inches of rain. It was the 15th wettest January on record in Bakersfield. That's pretty impressive when you consider that rainfall records go as far back as the late 19th century at both airport locations! Although December and January were very wet, there are still areas of the HSA that are falling shy of normal precipitation for the season, which began July 1st, 2015. For specific details on where this is occurring, please refer to the map of CA at the end of this report. Despite above normal rainfall, reservoir response was poor this month. By February 1st, the water capacity in the major reservoirs averaged only about 20 percent of normal. On the other hand, all of the storms this month helped replenish the snowpack over the southern Sierra to 107 percent of normal by February 1st. Temperature-wise, January, 2016 averaged several degrees above normal.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Watch…..Sierra foothills and the Kern Co mountains below 6,000 feet	0642Z	5-JAN
Flash Flood Watch…..Sierra foothills and the Kern Co mountains below 6,000 feet	0627Z	6-JAN
Flood Advisory…….Kern County mountains	2136Z	19-JAN
Flash Flood Watch…..Foothills and higher elevations of the Sierra	1916Z	29-JAN
Urban/Small Stream Flood Advisory…San Joaquin Valley	1813Z	31-JAN
Urban/Small Stream Flood Advisory…San Joaquin Valley	2106Z	31-JAN



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W/OH12x1
W/WR2
CNRFC
WFO HNX
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