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: **MARCH** YEAR: **2015**

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: April 2, 2015

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.

March, 2015 was exceptionally warm and much drier than normal. In fact, it was the warmest March ever in Fresno, beating March, 1934 by two tenths of a degree. In Bakersfield, March, 2015 was the 3rd warmest on record. March, 2015 was the 6th driest March on record in Fresno, tied with March, 1923 with a measly precipitation total of only six hundredths of an inch. Measurable rain fell, at most, on only two days in the San Joaquin Valley, namely the 2nd and the 11th. The month's unseasonably warm weather tied or established new records for high minimum and maximum temperatures on several occasions in the San Joaquin Valley. In fact, temperatures averaged above normal every single day of the month except the 1st, 2nd and 3rd. Thermometer readings topped the 90-degree mark in parts of the San Joaquin Valley on the 14th, 15th, 26th, 27th and the 30th. In Fresno, the high temperature of 91 degrees on the 15th was the earliest ever 90-degree day in March and for the calendar year since record keeping began there in the late 1800's.

A strong, blocking upper level ridge of High pressure centered over the Desert Southwest was to blame for the unusually warm and dry weather that characterized the month. On just a few occasions, storms that trekked eastward through the Pacific Northwest would flatten this High pressure ridge and allow cold fronts to move southward through the HSA. Unfortunately these were basically dry cold frontal passages. Their visits on the 11th, 22nd and the 27th produced a scattering of showers over the higher terrain with generally light precipitation. The cold front on the 11th brushed the northern San Joaquin Valley and adjacent foothills with up to eleven hundredths of an inch of rain. But from Fresno county southward, precipitation on the 11th was scanty at best with little more than a few hundredths of an inch. Similar results occurred with the cold frontal passage on the night of the 22nd . Like its predecessor , no measurable precipitation fell south of Fresno county. Farther north, the San Joaquin Valley remained dry while scattered showers over the higher terrain produced rain amounts that varied from just a couple hundredths of an inch in the foothills to as much as four tenths of an inch in Yosemite National Park.

The only storms that brought precipitation of relative noteworthiness into the HSA occurred during the first few days of the month, and there were two of them. Both of these storms tracked similarly down the California coast and although they remained offshore, the storms were close enough to spawn showers and isolated thunderstorms over the central California interior, particularly during the afternoon and evening hours of the 1st and 2nd. The Kern County mountains ended up receiving the lion's share of precipitation during this period with upwards of three quarters of an inch. The rain was heavy enough to cause rock and mud slides in the Kern River Canyon and close a portion of Highway 178 on the morning of the 2nd. Two to as much as six inches of snow fell in the Tehachapi mountains above 5000 feet during this period. All in all, snow was a pretty rare phenomenon this month over the mountains of central California. What little snow fell over the high Sierra melted by sublimation as a result of unseasonably warm temperatures. As March drew to a close, the snowpack over the southern Sierra was reduced to just 5 percent of normal. In the history of record keeping, there has never been such a low percentage of normal snowpack in the southern Sierra for April 1st. With an absence of snow to melt, water inflows into the reservoirs were relatively meager during the month. As of April 1st, water in most of the major reservoirs throughout the HSA were

historically low and ranged from just 8 percent at Buchanan Dam and Hidden Dam to 66 percent at San Luis Reservoir.

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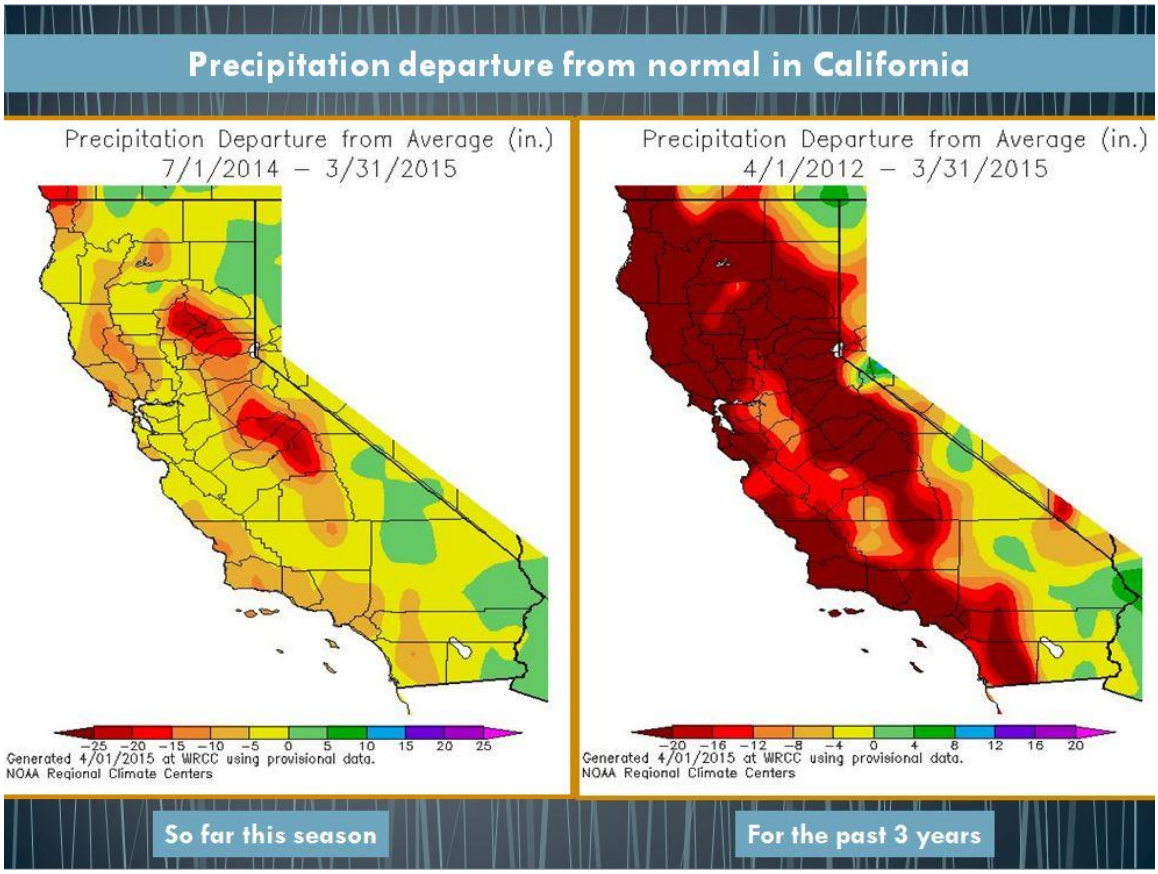
HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Small Stream Flood Advisory…..Kern County mountains 1532Z 02-MAR

The maps below reflect how serious the drought is across much of the Golden State. A precipitation deficit of 20 inches or more has existed over the southern Sierra Nevada since July 1st, 2014 and over a much larger part of California for the past 3 years.



cc:

W/OH12x1
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WFO HNX
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