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: **2014**

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

March, 2014 did not end up being the 'miracle' that state hydrologists were hoping for to ease the drought. On the contrary, March was a hydrological disappointment, as precipitation for the month ended up well below normal throughout the central California interior. Light showers in the mountains and desert on the 1st were just leftovers from a series of storm systems that soaked the HSA at the end of February. By March 2nd, the storm track had already shifted northward again. Nonetheless, storm systems that trekked inland from the Pacific brushed the northern portion of the HSA with additional light precipitation through March 4th. The storm track dipped southward, albeit briefly, on the 6th and brought measurable precipitation to much of the HSA. In the San Joaquin Valley and over the higher elevations from Fresno County to Kern County, rain amounts were paltry; generally less than a tenth of an inch. Merced County, Mariposa County and the higher elevations of Madera County received the lion's share of precipitation on the 6th with as much as three tenths of an inch in the San Joaquin Valley to a little more than an inch in the highest elevations of Mariposa County. A building upper level ridge of high pressure pushed the storm track northward into the Pacific Northwest by the 7th where it remained for the next two and a half weeks. From March 8th through the 25th, dry weather prevailed over the central California interior. Temperatures averaged well above normal during this period with afternoon highs in the 70s to lower 80s in the San Joaquin Valley, lower foothills and the Kern County desert. So it will come as no surprise that March, 2014 ended up much warmer than normal. In fact, March 2014 was the 3rd warmest on record in Fresno and the 8th warmest on record in Bakersfield.

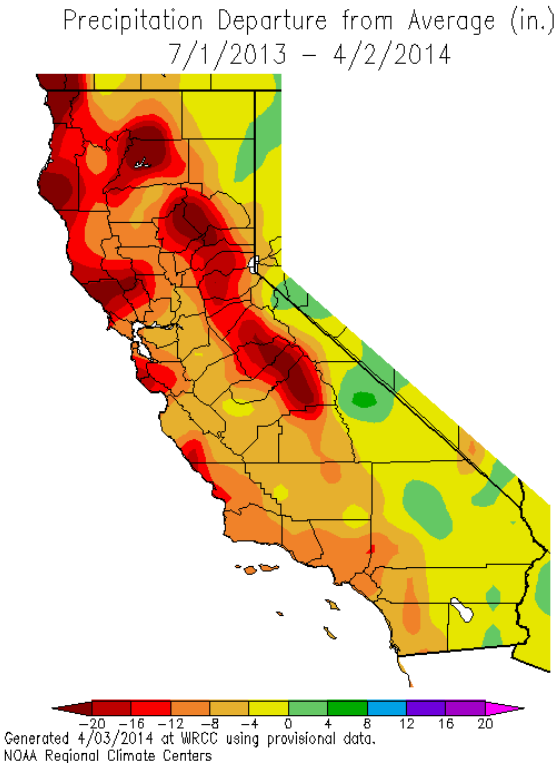
The pattern finally buckled by the 26th, thanks to a deepening upper level low pressure system over the Gulf of Alaska and a breakthrough of a strong mid latitude jet over the central Pacific. This powerful jet brought a series of moisture laden cold fronts into central California during the remaining days of the month. The first cold front moved through the HSA during the morning of the 26th. A second cold front barreled eastward across central California on the night of the 29th and was followed by another cold frontal passage during the evening of the 31st. Nearly 90 percent of the month's precipitation fell during the last few days of the month. During this period, rain amounts in the San Joaquin Valley ranged from nearly a third of an inch at the south end to about three quarters of an inch in Merced County. The foothills and higher elevations of the Sierra fared much better thanks to orographic lift. Precipitation totals of 1 to 2 inches were common over the higher terrain including Kern County. Precipitation fell as snow above 7000 feet and accumulated to a depth of one foot over the Sierra. All well and good, of course, but when the official snow survey was completed on April 1st, the snowpack over the southern Sierra Nevada was only 31 percent of normal. Lakes throughout the central California interior were at historically low levels and all of the major reservoirs had plenty of room to store water. As of April 1st, water capacities at the major reservoirs ranged from only 8 percent of normal at Hidden Dam to 42 percent of normal at San Luis reservoir. While these were the extremes, the average water capacity of most reservoirs by the end of the month was a mere 19 percent of normal.

Displayed on the following pages are rainfall departures for Bakersfield and Fresno for designated periods and a map of the precipitation departure from normal for the season since July 1st, 2013 for California.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

RAINFALL DEPARTURES

		BAKERSFIELD	FRESNO
LAST MONTH	ACTUAL	0.36 INCH	0.62 INCH
	NORMAL	1.21 INCH	2.03 INCHES
	DEPARTURE	-0.85 INCH	-1.41 INCH
	PCT OF NORMAL	29.8	30.5
LAST 3 MONTHS	ACTUAL	0.80 INCH	3.30 INCHES
	NORMAL	3.61 INCHES	6.25 INCHES
	DEPARTURE	-2.81 INCHES	-2.95 INCHES
	PCT OF NORMAL	22.2	52.8
LAST 6 MONTHS	ACTUAL	1.87 INCH	4.02 INCHES
	NORMAL	5.57 INCHES	9.72 INCHES
	DEPARTURE	-3.70 INCHES	-5.70 INCHES
	PCT OF NORMAL	33.6	41.4
LAST 12 MONTHS	ACTUAL	1.97 INCH	4.19 INCHES
	NORMAL	6.47 INCHES	11.50 INCHES
	DEPARTURE	-4.50 INCHES	-7.31 INCHES
	PCT OF NORMAL	30.4	57.3
SINCE JAN 1ST	ACTUAL	0.36 INCH	3.30 INCHES
	NORMAL	3.61 INCHES	6.25 INCHES
	DEPARTURE	-2.81 INCHES	-2.95 INCHES
	PCT OF NORMAL	22.2	52.8



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W/OH12x1
W/WR2
CNRFC
WFO HNX
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