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: 2012

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:
National Weather Service/Office of Hydrology

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Silver Spring, MD $20\overline{9}10$ (In Charge of Hydrologic Service Area)

DATE: February 3, 2012

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

The first half of the month was bone dry as a strong upper level ridge of high pressure dominated the pattern and kept the storm track well north of the HSA. In fact, not a drop of precipitation fell anywhere in the HSA through the 19th. The snowpack over the southern Sierra was almost non-existent during this period with only trace amounts of snow on the ground over the highest elevations. Afternoon temperatures averaged well above normal through the middle of the month and challenged records in many San Joaquin Valley locations during the second week of January. The near record warmth was brought to an abrupt end by a dry cold frontal passage on the evening of the 15th. In its wake, a very dry Canadian airmass settled into the central California interior on Martin Luther King, Jr. day and remained over the HSA through the morning of the 19th. During this time, sub freezing temperatures were common to the San Joaquin Valley each night. Thermometer readings dipped into the upper teens to lower 20s in the coldest locations of the San Joaquin Valley and in the mid to upper 20s elsewhere.

A welcome change to a wet pattern occurred by the 3rd weekend of January as the westerlies busted down the upper level ridge and the storm track finally shifted southward into central California. A parade of storms, three of them to be exact, trekked eastward across the central California from the 20th through the 23rd. The first "door opening" system produced light precipitation north of Kern county on the 20th. The following two storms, however, brought a soaking rain to the San Joaquin Valley and adjacent foothills with up to 3 feet of fresh snow over the highest elevations of the Sierra. The storms also brought an end to a 60 day stretch of dry weather which began November 21, 2011. Unfortunately, the wet change in the pattern was short lived, and from the 24th through the 29th, an upper level ridge of high pressure reclaimed its dry influence on the central California interior. A weak cold frontal passage during the evening of the 30th brought spotty light precipitation to the HSA north of Kern county, but it was only a proverbial "drop in the bucket" to an otherwise large precipitation deficit for the month.

As of February 1st, which marked the midway point of the rain season in central California, precipitation averaged well below normal throughout the HSA. (See chart below) In fact, since the official beginning of Autumn, the number of storm systems that brought significant precipitation to the HSA could literally be counted on one hand. The snowpack over the southern Sierra, which was only at 19 percent of normal prior to the 20th, increased to about 38 percent of normal by the 24th. Temperature-wise, January, 2012 averaged much warmer than normal.

THE 2011-2012 RAIN SEASON THROUGH JANUARY 31ST

AIRPORT (inches)	SEASON TO DATE (inches)	NORMAL TO DATE (inches)	DEPARTURE	PERCENT OF NORMAL
MERCED	2.62	6.43	-3.11	40.7%
FRESNO	2.95	5.85	-2.90	50.4%
HANFORD	1.87	5.38	-3.51	34.8%
BAKERSFIELD	1.75	3.24	-1.49	54.0%

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

cc: W/OH12x1

W/WR2 CNRFC WFO HNX WFO STO