S 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

FLOOD CONDITIONS MONTH: JANUARY YEAR: 2011

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:

National Weather Service/Office of Hydrology

1325 East-West Highway #7116 Kevin Durfee

Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: February 3, 2011

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.

January began very wet as a storm system that originated in the Gulf of Alaska tracked southeastward across the HSA during the first two days of the month. By the time the storm exited into the Great Basin on the morning of the 3<sup>rd</sup>, it dumped up to 15 inches of new snow on the southern Sierra Nevada, blanketed the Kern County mountains and desert with 4 to 8 inches of snow and snarled traffic over the Grapevine with a slushy mixture of snow and ice. In the Kern County desert, it was the first measurable snow of the season. The storm also brought generous rain to the lower elevations with amounts ranging from a half inch to two inches In the San Joaquin Valley and as much as 3 inches in the Sierra foothills. Because of saturated soil conditions from previous storms, the rain caused renewed flooding in parts of the San Joaquin Valley and adjacent foothills. Fortunately, the flooding that occurred was very minor and some ponding of water occurred in poor drainage areas. Moderately high water levels continued along the mainstem rivers below the dams during the first few days of the month. The Merced River at Stevinson fluctuated around monitor stage from the afternoon of January 2<sup>nd</sup> until the morning of the 6<sup>th</sup> before finally receding.

After January 3<sup>rd</sup>, the storm track shifted well to the north of California and an upper level ridge of high pressure centered over the Eastern Pacific took control and dominated the pattern up until the last few days of the month. During this time, dry weather ruled and temperatures averaged above normal, especially over the higher terrain, while low clouds and fog became commonplace in the San Joaquin Valley. In fact, the stratus remained trapped in the San Joaquin Valley for five consecutive days and nights from the 5<sup>th</sup> through the 10<sup>th</sup> and again from the 14<sup>th</sup> through the 19<sup>th</sup>. During the morning hours of the 14<sup>th</sup>, however, a weak upper level disturbance that slid down the eastern periphery of the high pressure ridge offshore squeezed some light rain and drizzle out of the stratus in the San Joaquin Valley and produced local rain amounts of up to five hundredths of an inch.

A welcome and long awaited break from dry weather occurred during the last weekend of January as a storm system that originated in the Gulf Of Alaska barreled southeastward across the central California interior. By the time this storm exited into the Great Basin on the 31<sup>st</sup>, it dumped up to a foot of new snow on the Southern Sierra Nevada north of Kings Canyon National Park. Lesser amounts of snow fell farther south with a general 4 to 7 inch accumulation in the Tulare County mountains and up to 4 inches of heavy wet snow in the Kern County mountains above 5500 feet. The storm also produced generous precipitation in the lower elevations. Rainfall totals of up to a half inch fell in the San Joaquin Valley while up to an inch of rain soaked the Sierra foothills and the Kern County mountains below 4000 feet.

In summary, the month ended up much drier than normal . However, due to the extraordinary surplus of precipitation in the two previous months, precipitation for the season to date, which began July 1<sup>st</sup>, averaged about 210 percent of normal throughout the HSA. As of February 1<sup>st</sup>, most of the major reservoirs in central California were holding about 70 percent of their normal water capacity and the snowpack over the higher elevations of the southern Sierra Nevada averaged about 150 percent of normal.

## **HYDROLOGIC PRODUCTS ISSUED**

Flood Watch	San Joaquin Valley and adjacent foothills/		
	Kern County mountains below 4000 feet	0446Z	01-JAN
Hydrologic Statement	Merced River at Stevinson	1728Z	02-JAN
Hydrologic StatementMerced River at Stevinson		1650Z	03-JAN
Hydrologic StatementMerced River at Stevinson		2235Z	03-JAN
Hydrologic StatementMerced River at Stevinson		1711Z	05-JAN
Hydrologic StatementMerced River at Stevinson		1733Z	06-JAN
Hydrologic StatementMerced River at Stevinson		2229Z	06-JAN

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO