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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: **FEBRUARY** 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: March 4, 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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| X | An X inside this box indicates that no flooding occurred for the month
+---+ within this hydrologic service area.

No precipitation fell during the first 13 days of the month as an upper level ridge of high pressure dominated the pattern. The ridge remained parked offshore during the first week of the month and produced a northerly flow of cool, dry air into the HSA. The ridge finally did build inland over California by the 10th and brought sunny skies, low humidities and springlike afternoon temperatures to much of the central California interior through the 13th, especially over the higher terrain.

A wintry change in the pattern occurred during mid month as a storm system trekked southward from the Gulf Of Alaska. The storm deepened and stalled off the central California coast on the 14th and 15th, then finally moved inland on the 18th. By the time this storm system exited into the Great Basin on the 19th, it dumped up to 16 inches of new snow over the high Sierra and soaked the Sierra foothills with up to 3 inches of rain. In the San Joaquin Valley, rainfall from the storm ranged from barely a tenth of an inch in Bakersfield to as much as 2 inches in Fresno county and points northward. Another dry and cooler than normal airmass settled in behind this storm on the 20th and took up residence across the HSA through the 23rd as a weak ridge of High pressure drifted eastward across the state.

An even deeper and colder storm system made its presence felt by the evening of the 24th as it moved southward along the California coast. During the height of the storm, very heavy snow accumulated to a depth of 1 to 3 feet over the high Sierra and it was cold enough for a small accumulation of snow down to the 1000 foot elevation. A few weather spotters even reported some snow mixed in with rain in the San Joaquin Valley before precipitation came to an end during the late afternoon and early evening hours of the 25th.

The final weekend of February was unseasonably cold with minimum temperatures below freezing across much of the HSA during the early morning hours of the 27th. In fact, temperatures bottomed out as low as 25 degrees in the San Joaquin Valley during the predawn hours of the 27th. Although the morning of the 28th was not as cold, a widespread frost still occurred in the San Joaquin Valley.

In summary, the month ended up colder and drier than normal. Storm systems during the last two weeks of the month helped replenish the deep snowpack over the southern Sierra Nevada, which averaged about 125 percent of normal by March 1st. During this period, reservoir releases resulted in slightly higher flows in the mainstem rivers. The Merced River at Stevenson rose just above monitor stage on the 18th and finally receded just below this stage during the predawn hours of the 23rd. As of March 1st, most of the major reservoirs in central California averaged about 60 percent of their normal water capacity.

HYDROLOGIC PRODUCTS ISSUED

Hydrologic Statement.....	Merced River at Stevinson	1807Z	18-FEB
Hydrologic Statement.....	Merced River at Stevinson	2231Z	18-FEB
Small Stream Flood Advisory....	western Fresno County and western Kings County	0250Z	19-FEB
Small Stream Flood Advisory....	southwest Fresno County and west Central Kings County	0947Z	19-FEB
Hydrologic Statement.....	Merced River at Stevinson	1820Z	19-FEB
Hydrologic Statement.....	Merced River at Stevinson	1825Z	20-FEB
Hydrologic Statement.....	Merced River at Stevinson	1558Z	21-FEB
Hydrologic Statement.....	Merced River at Stevinson	1608Z	22-FEB
Urban and Small Stream Flood Advisory.....	Kern County portion of the San Joaquin Valley	1053Z	26-FEB

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO