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

CONDITIONS MONTH: MAY YEAR: 2011

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:

National Weather Service/Office of Hydrology

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

DATE: June 2, 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).

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

The month averaged cooler than normal as storm systems trekked southeastward from the Gulf of Alaska into the Great Basin and brought frequent cold frontal passages through the central California interior. The first of these storm systems brought showers to the mountains from the 7th through the 9th. In the wake of this storm, isolated thunderstorms with small hail developed in the San Joaquin Valley during the late afternoon hours on the 9th. The next storm system carried an impressive amount of moisture with it when it arrived during the second weekend of the month. A major block in the upper air pattern across the continental U.S. forced this storm to stall over the Great Basin for a few days. Consequently, this system brought wet weather to much of the HSA except for the Kern County desert. Rainfall during this 3-day event, which began on the 15th, averaged a tenth to a quarter of an inch in the San Joaquin Valley, and from three quarters of an inch to nearly two inches in the Sierra foothills and higher elevations. Up to five inches of snow accumulated above 7000 feet in the southern Sierra Nevada. The third storm brought showers into the HSA during the first half of Memorial Day weekend and produced up to a quarter of an inch of rain on the San Joaquin Valley floor with up to three quarters of an inch in the mountains. Local rain amounts of an inch and a half fell in the Kern county mountains. It was cold enough once again for accumulating snow above 6000 feet where local amounts of 4 to 7 inches were observed. In fact, there was so much snow over the high country of Yosemite National Park, that park officials had to close Glacier Point road. In addition to high elevation snow, all three storms also brought strong and gusty winds to the west side of the San Joaquin Valley, the Kern county mountains and desert and the Sierra crest. During the stormy periods, the weather remained unseasonably cool with temperatures averaging a good 15-25 degrees below normal throughout the central California interior.

The month did have its share of exceptionally warm weather, too. Until a block developed in the upper air pattern on the 7th, a fairly strong ridge of high pressure aloft resided over California. During this time, the weather was dry and temperatures averaged about 5 to 15 degrees above normal. The warmest period was from the 4th through the 6th. During this time, afternoon temperatures soared well into the 90s in the San Joaquin Valley and even peaked just above 90 degrees in the lower foothills and in the Kern county desert. One spot in the San Joaquin Valley even touched the century mark on the 5th, and that was in the town of Hilmar. Although snowmelt increased over the higher elevations of the Sierra during this period, no incidents of river flooding occurred. The Merced River at Pohono Bridge peaked about 1.5 feet below its respective flood stage during the morning hours of the 6th. Fortunately, the prevalence of cooler than normal weather during much of the month slowed the rate of snowmelt and minimized the threat of Spring flooding. Nonetheless, sizeable water releases continued at most of the major reservoirs through the end of the month with moderately high flows along the mainstem rivers. All river forecast points on the upper San Joaquin river and the Merced river remained below their respective monitor stages all month. As of June 1st, a majority of the major reservoirs averaged about 67 percent of their normal water capacity.

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO