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: JUNE YEAR: 2013

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: July 5, 2013

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  ${\bf X}$  inside this box indicates that no flooding occurred for the month +---+ within this hydrologic service area.

June, 2013 was typically dry throughout much of the HSA. However, just like every month so far in 2013, the month averaged much warmer than normal. The hottest days, marked by triple-digit high temperatures in the San Joaquin Valley, occurred on the 2<sup>nd</sup>, 7<sup>th</sup> and 8<sup>th</sup>, and during the last four days of the month, which was the start of a lengthy spell of extreme heat that lasted well into the first week of July as a very strong upper level ridge of high pressure anchored itself over the Golden State. Otherwise, until the 27<sup>th</sup>, stretches of 100-degree heat in the San Joaquin Valley and adjacent foothills barely lasted any longer than 2 days thanks to fairly frequent dry cold frontal passages. Intrusions of marine air in the San Joaquin Valley occurred behind every one of these cold fronts and kept high temperatures at or below normal. The deepest marine pushes kept high temperatures below 90 degrees in the San Joaquin Valley and lower foothills on the 10<sup>th</sup>, from the 18<sup>th</sup> through the 20<sup>th</sup>, and again on the 23<sup>rd</sup> and 24<sup>th</sup>. In fact, a rather deep infiltration of ocean-cooled air in the northern San Joaquin Valley on the 23<sup>rd</sup> kept afternoon temperatures below 80 degrees throughout much of Merced County. Additionally, southwesterly winds aloft that preceded the cold front on the 10<sup>th</sup> transported a very dry air mass into the Kern county mountains where the relative humidity fell below 10 percent for a period of up to 14 hours creating red flag conditions.

Although isolated, thunderstorms developed over the higher elevations of the Sierra each afternoon from the 3<sup>rd</sup> through the 10<sup>th</sup>. The most active thunderstorm days did not occur until the 27<sup>th</sup> and 28<sup>th</sup> and were the result of a northerly surge of mid-level tropical moisture associated with the remnants of what was once Hurricane Cosme south of the Baja peninsula.

Now some notable facts about this June. If there ever was a day in June that has never produced measurable rain in Fresno since record keeping began there in 1881, it is June 21<sup>st</sup>. And, as tradition has it, June 21<sup>st</sup>, 2013 was bone dry in Fresno. The 2012-2013 rain season, which runs from July 1<sup>st</sup> through June 30<sup>th</sup>, ended up as the 7<sup>th</sup> driest on record in Fresno and the 8<sup>th</sup> driest in Bakersfield. As one would expect, water storage in the reservoirs continued to drop and by month's end averaged about 34 percent of normal capacity.

NO HYDROLOGIC PRODUCTS ISSUED THIS MONTH

CC:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO