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: MAY YEAR: 2014

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: June 3, 2014

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).

+---+

 $\mid$   $\boldsymbol{X}\mid$  An  $\boldsymbol{X}$  inside this box indicates that no flooding occurred for the month

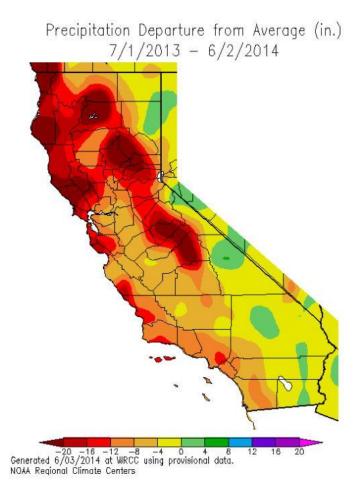
+---+ within this hydrologic service area.

May, 2014 was severely deficient of precipitation with a continuation of extreme drought conditions in much of the HSA. Only two storm systems the entire month produced beneficial showers, mostly over the higher terrain. The first storm originated in the Gulf of Alaska and brought wintry precipitation to the mountains above 6000 feet from the night of the 4<sup>th</sup> into the midday hours of the 6<sup>th</sup>. This storm left a 7 to 14 inch blanket of snow in the Sierra above 7000 feet while elevations as low as 5000 feet received a light dusting. Rain showers fell in the lower elevations and were most numerous along the east side of the San Joaquin Valley and adjacent foothills, but it was hardly enough to settle the dust in the valley where rain amounts varied from a trace to several hundredths of an inch. The passage of a secondary upper level disturbance on the 8<sup>th</sup> and 9<sup>th</sup> produced even scantier amounts of precipitation; nothing measurable in the San Joaquin Valley and at most a tenth of an inch over the higher terrain north of Kern County. The second storm also proved to be a hydrologic disappointment in the San Joaquin Valley. Although this system tracked right over the central California interior on the 20<sup>th</sup> and 21<sup>st</sup>, most of its precipitation fell in the foothills and higher elevations of the Sierra where rain amounts ranged from a few hundredths to a few tenths of an inch. Some of the wettest locations in the Sierra received nearly a half inch in heavier showers. Isolated thunderstorms equipped with frequent lightning and gusty winds rolled out of the mountains and into the east side and south end of the San Joaquin Valley on the 22<sup>nd</sup> as the storm system moved into southern Nevada. Isolated thunderstorms redeveloped over the high Sierra and also popped up over the Kern County desert the following afternoon as the storm system drifted into southeastern California. Few if any of these thunderstorms produced measurable rain on the 23<sup>rd</sup>. During the stormy periods referenced above. temperatures averaged cooler than normal. Otherwise, May, 2014 was exceptionally warm (the 6<sup>th</sup> warmest on record in Fresno) as an upper level ridge of high pressure dominated the overall pattern. On at least 12 days, temperatures soared into the 90s in the San Joaquin Valley. May 15<sup>th</sup> was the hottest day and the first one this year of widespread triple digit heat in the San Joaquin Valley. On two separate occasions, a lengthy period of very low humidities, coupled with well above normal temperatures and extremely dry fuels prompted Red Flag Warnings in the Kern County mountains. Red Flag conditions occurred during the first two days of the month and between the 13<sup>th</sup> and 16<sup>th</sup> of May.

Area lakes and reservoirs remained at historically low water levels. In Yosemite National Park, the Merced river at Pohono Bridge, which generally peaks between the 3<sup>rd</sup> week of May and the first week of June in a normal snowmelt season, experienced unusually low flows and steadily receded through the month from a peak stage of only 5.3 feet on the 3<sup>rd</sup> to 3.5 feet by month's end. Water levels also continued to slowly drop in all of the major reservoirs and ranged from only 9 percent of normal capacity at Buchanan Dam to 62 percent of normal capacity at Friant Dam.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

The map below shows how much below normal precipitation has been this rain season across California. The rain season runs from July  $1^{st}$  through June  $30^{th}$ .



cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO