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: SEPTEMBER YEAR: 2010 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: October 12, 2010 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).

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

The month of September was slightly warmer than normal, despite a couple of cold frontal passages, and it was rather uneventful from a hydrologic perspective. Unlike most Septembers, there were no deep influxes of monsoonal moisture into the central California interior, even though a humid and unseasonably warm airmass settled into the HSA by the end of the month. As one might hypothesize, the weather pattern was dominated by a ridge of high pressure aloft . There were only two occasions when the ridge was pushed out by deep upper level troughs venturing in from the Pacific. The first upper level trough moved across the state on the 7<sup>th</sup> and 8<sup>th</sup> accompanied by only a few light showers in the Sierra Nevada and adjacent foothills. Prior to its arrival, temperatures averaged well above normal during the first 6 days of the month with triple digit heat common to the San Joaquin Valley. In its wake, afternoon temperatures in the San Joaquin Valley were no higher than the 70s on the 7<sup>th</sup> and 8<sup>th</sup>. The second upper level trough moved through the HSA on the 22<sup>nd</sup> with a similarly cool airmass behind it. A day to day warming trend began on the 23<sup>rd</sup> and continued through the 27<sup>th</sup>, by which time maximum temperatures again peaked around the century mark in the San Joaquin Valley with triple digit heat finishing out the remaining days of the month. The higher than normal humidity at month's end fueled the development of isolated thunderstorms in the Kern County mountains. A southeasterly flow aloft brought a couple of these thunderstorms into the south end of the San Joaquin Valley during the afternoon of the 30<sup>th</sup> with brief, locally heavy rain and small hail.

NO HYDROLOGIC PRODUCTS ISSUED THIS MONTH

CC:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO