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: JULY YEAR: 2012

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: August 2, 2012

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.

As one would expect at the start of a new rain season in central California, the month of July was typically dry despite occasional bouts with the monsoon. July ended up averaging very close to normal, temperature-wise. While spells of hot weather were short, one particularly long stretch lasted nearly a week, specifically from the 7<sup>th</sup> through the 13<sup>th</sup> with back to back days of triple digit heat in the San Joaquin Valley. There were some unusually cool days, too, but they were few and far between. One notable period of below normal temperatures occurred from the 16<sup>th</sup> through the 18<sup>th</sup>. During this time, a fairly brisk onshore flow brought a deep intrusion of marine air into the San Joaquin Valley and lower foothills. Afternoon temperatures each day during this period warmed no higher than the 80s in this region with overnight lows in the 50s.

As mentioned above, visits with the monsoon in the central California interior were short-lived and rather infrequent. The first northward influx of monsoonal moisture was shallow and brushed the Kern county desert on Independence Day. A couple of thunderstorms in the vicinity of Edwards AFB during the afternoon and evening hours of the 4th only produced trace amounts of rain, but did put on quite a light show during the evening hours . The next northward surge of moisture was the remnants of what was once tropical storm Fabio, and its presence was far more extensive across the HSA on the 18<sup>th</sup> and 19<sup>th</sup>. Yet, its bark was worse than its bite as it produced scanty amounts of precipitation, generally less than a tenth of an inch, over the higher terrain. Sprinkles fell in the lower elevations such as the San Joaquin Valley. In Bakersfield, two hundredths of an inch of rain on the 19th was the only day of measurable rain for the month and it set a new daily rainfall record. Monsoonal moisture returned by the 21st and helped ignite thunderstorms in the mountains on the 22<sup>nd</sup> and 23<sup>rd</sup>. A few thunderstorms even wandered out of the Sierra foothills and into Merced county during the night of the 22<sup>nd</sup>. The final bout with the monsoon was much like the first and brushed the eastern portion of the Kern county desert and the Sierra crest on the evening of the 31<sup>st</sup> with a few thunderstorms.

In the broader picture, the synoptic pattern was one where a dry southwesterly flow aloft prevailed across the central California interior for much of the month with fairly frequent intrusions of marine air in the San Joaquin Valley. On occasion, an upper level ridge of high pressure anchored over the central U.S. would build westward and bring hot weather to the HSA. In addition to the spell of triple digit heat referenced in the first paragraph, afternoon temperatures in the San Joaquin Valley and lower foothills peaked at or above the century mark from the 21st through the 23rd and again during the last two days of the month. As July drew to a close, most of the major reservoirs in the HSA where holding about 38 percent of their normal water capacity.

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO