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: **2012**

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
1325 East-West Highway #7116
Silver Spring, MD 20910

SIGNATURE:
Kevin Durfee
(In Charge of Hydrologic Service Area)

DATE: October 1, 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).

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

Nothing was more prolific this September than hot weather in the San Joaquin Valley. In fact, September, 2012 ended up being the 6th hottest September on record in Bakersfield and the hottest September ever in Fresno where the monthly temperature averaged 3.9 degrees above normal and 5 degrees above normal respectively.

The culprit for the abnormally warm weather was a strong and persistent upper level ridge of high pressure that extended from northern Baja to the Four Corners region. A prevailing dry southwesterly flow aloft resided over central California for much of the month. On two separate occasions, mid and high level tropical moisture became embedded in the southwesterly flow, initially during the few days following Labor Day and again from September 8th through the 10th. In both instances, moisture from tropical systems, first Ileana, then John, produced isolated thunderstorms along the Sierra crest and in the Kern county mountains and desert. Isolated thunderstorms popped up along the Sierra Crest on the afternoons of the 11th and 12th. Afterward, the upper level ridge of high pressure amplified northward and brought some of the hottest weather of the month from the 13th through the 16th. During this period, much of the San Joaquin Valley, lower foothills and the Kern county desert sweltered in triple digit heat. Storm systems that trekked across the Pacific Northwest suppressed the high pressure ridge southward from the 17th through the 21st and produced a slightly cooler but dry onshore flow across the central California interior. Although the onshore flow brought shallow intrusions of marine air into the San Joaquin Valley during this time, temperatures still averaged slightly above normal. Triple digit heat returned to much of the San Joaquin Valley on the 23rd as the upper level ridge briefly built northward. The ridge was shunted southward again by another storm system that traversed through the Pacific Northwest into the Great Basin. Northwesterly winds aloft in the wake of this storm system transported noticeably cooler air into the HSA by the 25th. High temperatures were mostly in the 80s in the Kern county desert on the 25th and even stayed below 90 degrees in parts of the San Joaquin Valley that afternoon. Relief from abnormally warm weather was short-lived, however, as the upper level ridge again flexed its muscle from the 26th through the 28th. Other than a few isolated thunderstorms along the Sierra Crest on the 28th, dry weather prevailed during the final week of the month. The high pressure ridge was flattened one more time only to build northward again during the last two days of the month. Hydrologically, September, 2012 averaged below normal for precipitation. As of October 1st, water levels in many of the area reservoirs were lower than normal and averaged about 25% of their normal capacity.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Watch…Kern county mountains and desert	2151Z	09-SEP

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO