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: 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: October 2, 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).

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

Temperatures have averaged above normal throughout the central California interior for 31 of the past 33 months. September, 2014 was no exception, which ended up as one of the top 10 warmest Septembers on record. In Fresno, it was the 3rd warmest since record keeping began in the late 1800's. In Bakersfield, September, 2014 tied with 2009 as the 7th warmest on record. On several afternoons, thermometer readings soared to within a couple of degrees of the century mark in both locations. It was also a summer season that produced 43 days of triple digit heat in Bakersfield and 50 days of triple digit heat in Fresno. That's 6 days more than an average year in Bakersfield and 14 days more than an average year in Fresno. The reason for it? A rather persistent upper level ridge of High pressure that spent a majority of the month anchored over the Four Corners region.

Although dry weather prevailed, a few storm systems did bring showers and isolated thunderstorms into the HSA, particularly over the higher terrain, and coincidentally on every weekend during the month! A northerly influx of mid level tropical moisture associated with Hurricane Norbert off the west coast of Baja California moved into the mountains and desert by the evening of the 7th and lingered through the 8th. Some communities on the east side of the San Joaquin Valley and adjacent foothills received measurable rain from this system with local amounts of up to a quarter of an inch in heavier showers. The city of Oakhurst ended up a little wetter with a rainfall of 0.34 inches. The next rain opportunity, albeit brief, came as the 2nd weekend of September drew to a close. Mid level tropical moisture became entrained in a southwesterly flow aloft on the 14th. Although little more than sprinkles fell out of these clouds in the San Joaquin Valley and lower foothills, the moisture fueled isolated thunderstorms along the Sierra crest. The next weekend brought more numerous showers and thunderstorms to the Sierra Nevada as an upper level Low pressure system tracked northeastward from the southern California coast to the Great Basin. Precipitation amounts were relatively scanty over the Sierra and ranged from just a few hundredths of an inch to three tenths of an inch by the 21st.

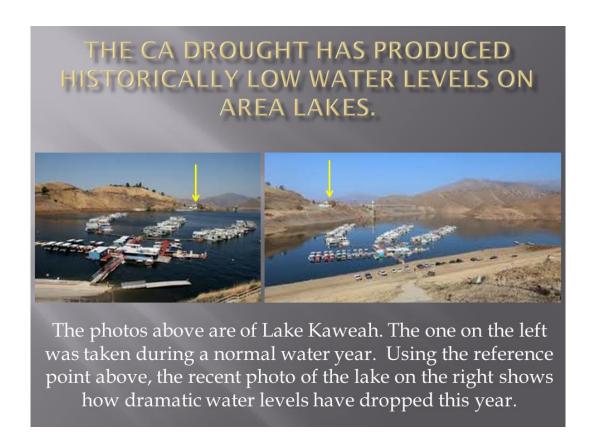
The final weekend of September heralded an Autumnal change in the weather. A cold front that ran well ahead of a storm system over the Gulf of Alaska, ended up stalling over Merced county and Mariposa county on the 25th. Clouds kept afternoon temperatures from rising much higher than the lower 70s in the northern San Joaquin Valley that day. Otherwise, a robust onshore flow brought ocean cooled air into the remainder of the San Joaquin Valley and kept afternoon temperatures on the 25th below 90 degrees. Meanwhile, the higher elevations experienced an increase in clouds and showers as the storm system tracked southeastward on the 26th and 27th. High temperatures in the San Joaquin Valley remained below 80 degrees during this period. It was the coolest weather for the central California interior since May 21st. By the time this storm system moved into the Great Basin on the 29th, it left a dusting to locally 2 inches of snow over the highest elevations of the Sierra (above 9000 feet) with enough rain to settle the dust on the east side of the San Joaquin Valley. Fresno picked up 0.18 inches of rain on the evening of the 28th and tied the 24-hour rainfall record for the date. Meanwhile, showers and thunderstorms brought a good soaking to the foothills and higher elevations of the Sierra. Rain amounts were generally between a half inch and an inch. The heaviest precipitation fell in and around Yosemite National Park with places like Crane Flat and Coulterville measuring 1.33 inches and 1.40 inches respectively.

Unfortunately, the storm near the end of the month was hardly enough to put even a small dent in the extremely large rainfall deficit over the southern Sierra. Water levels on area lakes and reservoirs remained phenomenally

low, averaging only about 12 percent of their normal capacity as of October 1st. Photo comparisons of Lake Kaweah in the graph below seem to sum up the seriousness of the CA drought.

NO HYDROLOGIC PRODUCTS ISSUED THIS MONTH

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