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: AUGUST YEAR: 2014

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:
National Weather Service/Office of Hydrology

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DATE: September 4, 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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 \mid X \mid An X inside this box indicates that no flooding occurred for the month

+---+ within this hydrologic service area.

August, 2014 was drier than normal throughout the central California interior. What is more astounding is that it was also the 9th consecutive month of below normal precipitation in the HSA. Prior to November, which ended up slightly wetter than normal only in Kern County, monthly precipitation has been below normal in central California since the beginning of 2013. However, the precipitation deficit began in the 2011-2012 water year. Two back to back rain seasons of below normal precipitation has only exacerbated the long term drought which a majority of climatologists now believe is the worst drought in recorded California history.

Fewer influxes of monsoonal moisture occurred this month compared to July, and at least two of them involved the entrainment of tropical systems in the Eastern Pacific. Remnants of what was once Hurricane Hernan were picked up by an offshore trough and carried into the central California interior by southwesterly winds aloft during the first weekend of August. Precipitation in the San Joaquin Valley ranged from sprinkles to locally heavy showers on the east side and in the adjacent foothills on the 3rd and 4th. Visalia picked up six hundredths of an inch on the 4th with reports of puddles on some city streets. Showers were more numerous over the higher terrain including the Kern County desert where a few were accompanied by thunder and lightning. The next monsoonal influx occurred nearly a week later as an offshore Low pressure system drew mid-level moisture northward into the HSA. As a result, scattered showers and thunderstorms developed over the mountains and desert from the evening hours of the 10th through the early morning hours of the 12th. Approximately 7 days later, another offshore low pressure system tracked southward parallel to the coast. This system also tapped into some mid and high level tropical moisture and triggered the development of isolated afternoon thunderstorms near the Sierra Crest on the 19th. A few thunderstorms also clipped the southeast portion of Kern County on the 20th with a recurrence of isolated thunderstorms along the Sierra Crest. This area of low pressure and its associated moisture exited into Arizona by the 22nd. In its wake, a dry northwesterly flow aloft resided over the HSA for the next 4 days. A robust onshore flow in the low levels brought ocean cooled air into the San Joaquin Valley during this time and kept high temperatures at or slightly below normal through the 26th. Mid and high level moisture from the remnants of Hurricane Marie, which by the 29th was a good 2000 miles west of the central California coast, became entrained in the west to northwest flow over the HSA, but these clouds produced no precipitation.

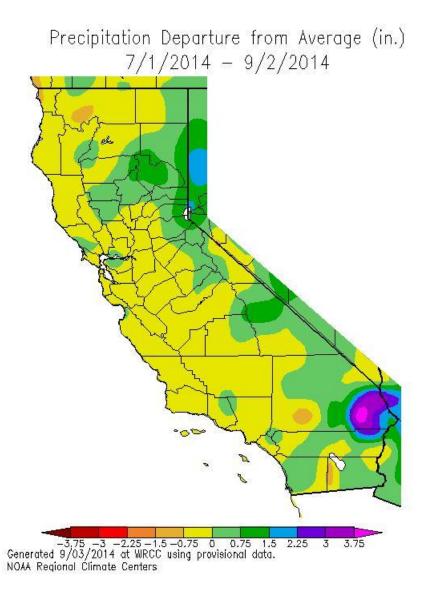
Outside of the above referenced intrusions of mid-level moisture, a ridge of High pressure aloft dominated the pattern and brought dry weather, clear skies and well above normal temperatures to the central California interior. By the end of August, Bakersfield tallied 36 days of triple digit heat so far this year while Fresno recorded 41 days of high temperatures at or above the century mark. In summary, August, 2014 was much warmer than normal. In Fresno, it was the 2nd warmest August ever since record keeping began in the late 1800's. In Bakersfield, August, 2014 ended up as the 8th warmest on record.

Water levels on area lakes and reservoirs remained unusually low, averaging only about 14 percent of their normal capacity as of September 1st.

Flash Flood Watch...Kern County mountains & desert

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The map below is a representation of how precipitation fared across the Golden State this month. As you can see, much of the HSA was unquestionably below normal.



cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO