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: 2016

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

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Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: September 2, 2016

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  $\boldsymbol{X}$  inside this box indicates that no flooding occurred for the month

+---+ within this hydrologic service area.

August, 2016 was typically dry throughout the HSA and warmer than normal. This is nothing that would be considered out of the ordinary in a prolonged drought. What was more unusual this August, however, was the absence of northerly influxes of monsoonal moisture. A typical August normally averages a couple of monsoon events within the HSA. August, 2016 had none. Neither did June or July. That's a rarity. In fact, there were only a handful of afternoons this August when isolated thunderstorms popped up over the higher elevations of the Sierra. Tuolumne Meadows, which suffered through its driest July on record, finally received measurable rain from a nearby thunderstorm on the afternoon of the 22<sup>nd</sup>, but it was only six hundredths of an inch. It was during that period, August 20<sup>th</sup> through the 23<sup>rd</sup>, that an upper level Low pressure system anchored near Point Conception brought just enough mid-level moisture into the HSA to produce isolated afternoon convection near the Sierra crest.

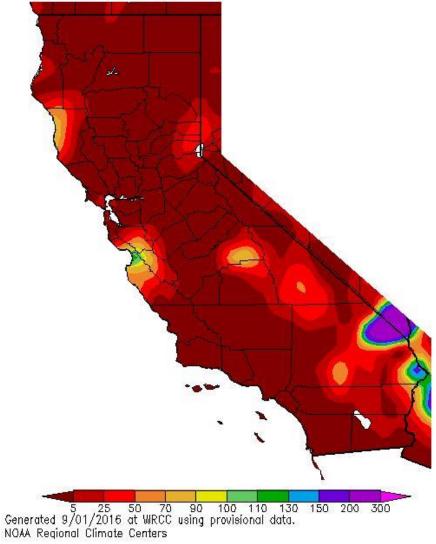
For most of the month, an upper level ridge of High pressure remained in control and kept temperatures well above normal. The San Joaquin Valley, lower foothills and the Kern County Desert experienced several afternoons of triple digit heat, primarily during the first four days of August and again between the 12<sup>th</sup> and 21<sup>st</sup>. Marine pushes in the San Joaquin Valley, while infrequent, did provide some relief from the heat, most notably from August 5<sup>th</sup> through the 10<sup>th</sup> and again between the 26<sup>th</sup> and 29<sup>th</sup>.

The extensive acreage of dead, beetle infested trees in the foothills and mountains, compounded by 5 years of drought, provided plenty of dry fuel for the growth of wildfires this month. By the middle of August, there were at least four major wildfires burning throughout central California. The Soberanes, Chimney, Cedar and Rey fires were among the largest. Smoke from these fires significantly worsened the air quality over much of central California, particularly in the San Joaquin Valley. Particulate matter from the smoke plumes was so abundant that some communities on the east side of the San Joaquin Valley such as Visalia, Tulare and Porterville received a light dusting of ash on the 18<sup>th</sup> and 19<sup>th</sup>.

Water storage continued to decrease at all of the major reservoirs throughout the HSA this month. Water capacities ranged from just 7 and 8 percent of normal at Kaweah and Eastman Dams, respectively, to 50 percent of normal at Friant Dam. By September 1<sup>st</sup>, the water capacity in the reservoirs averaged about 21 percent of normal, which was approximately an 8 percent drop from the beginning of August.

## NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

Percent of Average Precipitation (%) 8/1/2016 - 8/31/2016



cc:

W/OH12x1 W/WR2 **CNRFC** WFO HNX WFO STO