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: **2021**

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: September 15, 2021

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 no flooding occurred for the month within this hydrologic service area.
+---+

August, 2021 was much warmer than normal throughout the central California interior. Historical data dating as far back as the late 19th century indicate that August, 2021 was one of the top 20 warmest on record. Fresno ranked as the 3rd warmest followed by 8th and 9th ranked Bakersfield and Hanford, respectively. Merced and Madera experienced its 16th and 20th warmest August on record, accordingly. The month brought several days of triple digit heat in the San Joaquin Valley, lower foothills and the Kern county desert. As a testament to the heat, high temperatures topped the century mark on all but one day during the first 17 days of August in Fresno and Hanford. A strong upper level ridge of high pressure that was anchored over the Four Corners region for much of the month was responsible for all the days of triple digit heat in the lower elevations of the HSA.

Influxes of monsoonal moisture were few and rather shallow, but provided enough impetus for the development of isolated mainly afternoon thunderstorms over the mountains. Every afternoon from the 11th through the 15th brought isolated thunderstorms to the high Sierra. Most thunderstorms brought little if any rain and those that did dropped up to a half inch of precipitation, mainly near Yosemite. The precipitation that fell in the mountains didn't make a dent in the otherwise exceptional drought that's plagued much of the Golden State since the early part of the year. Maps that depict the percentage of normal rainfall throughout California during the month of August and the departure from normal precipitation so far this Water Year are provided below this summary. In addition, the Drought Monitor map for California as of August 31st is also provided below this summar.

In many areas of central California, 2021 is so far the driest year in four decades, with annual precipitation in many places lower so far than the driest year of 1977. Historically low flows existed on many mainstrem rivers during the month. Water levels dropped so low on area lakes that boats had to be removed from their marinas. In the San Joaquin Valley, wells continued to dry up and water needed to irrigate farmland remained In high demand and in very limited supply. Water levels continued to drop in the reservoirs and remained well below normal throughout the month. By the first week of September, the water capacity in the reservoirs ranged from only 6 percent of normal at Buchanan Dam to 46 percent of normal at Friant Dam. On the average, the percentage water capacity of the reservoirs was about 16 percent of normal.

The month's hot, dry weather and parched fuels provided a tinder box for easy fire ignitions. One particularly large human caused wildfire started during the afternoon of the 18th in the Kern County mountains west of Lake Isabella and approximately 30 miles northeast of Bakersfield. This was the called the French wildfire and it grew to nearly 26,000 acres by the end of August. Wildfires were far more numerous over the northern part of the state during the month. Smoke from these fires drifted southward over the district at times and significantly reduced air quality in the valleys of the HSA. A thick layer of smoke blanketed much of the HSA on the 18th and 19th The lack of solar insolation during this period kept high temperatures below 90 degrees in much of the San Joaquin Valley.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

FLASH FLOOD WARNINGS*

SQF Complex (Tulare County Mountains) 2357Z 14-AUG

*Note: Flash Flood Statements were issued as follow-ups to the initial Flash Flood Warnings.