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: 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: October 6, 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.

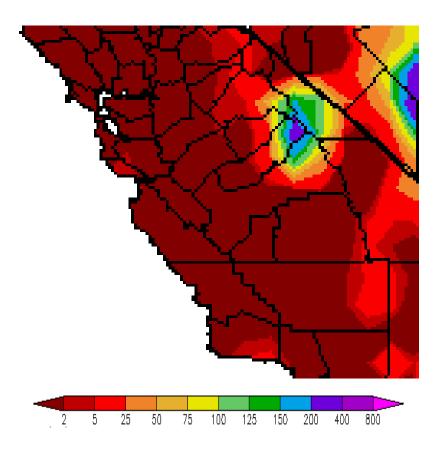
September, 2016 brought frequent and large fluctuations of high temperatures throughout the central California interior that ranged from unseasonably cool to abnormally warm. In spite of these large variations, temperatures for the month ended up averaging pretty close to normal. Much of the HSA remained dry with only local exceptions. Three noteworthy cold fronts moved southward through the Golden State this month. The first one swept through at the start of the Labor Day weekend. The second and third cold frontal passages occurred on the 11<sup>th</sup> and the 21<sup>st</sup>, respectively. Each of them were accompanied and followed by locally gusty winds and areas of blowing dust on the west side of the San Joaquin Valley and isolated to scattered showers and thunderstorms over the southern Sierra. Deep marine intrusions in the wake of the second and third cold fronts kept high temperatures below 80 degrees in the San Joaquin Valley and lower foothills. In fact, Fresno established a new record for the coolest September 13<sup>th</sup> on record with a high of only 73 degrees. Minimum temperatures dipped into the mid to upper 40s in the chilliest locations of the San Joaquin Valley behind each of these cold fronts, too. A light dusting of snow fell over the highest peaks of the Sierra in Yosemite National Park on the 21<sup>st</sup>, but it wasn't enough to close Tioga Pass. In contrast, there were many days of hot weather this month with highs well into the 90s in the San Joaquin Valley, lower foothills and the Kern County desert. September 19<sup>th</sup> was the hottest day, although high temperatures also peaked at or above the century mark on the 26<sup>th</sup> and 28<sup>th</sup> in the above referenced areas. There were several days of poor air quality in the San Joaquin Valley, particularly on the 20<sup>th</sup> and 21<sup>st</sup> when westerly winds aloft carried smoke from the Soberanes wildfire in Monterey county into much of the central California interior.

Northward influxes of tropical moisture from Baja were rare and only once came as far north as the Tulare County mountains and the Kern County mountains and desert. That happened on the 28<sup>th</sup> as a low pressure system moved inland across southern California. Showers and isolated thunderstorms that developed over the mountains of Tulare County and Kern County got caught in the counter clockwise circulation of this low pressure system and ended up over the southeastern portion of the San Joaquin Valley during the late afternoon hours of the 28<sup>th</sup>. The thunderstorms produced outflow winds as high as 53 mph just east of Bakersfield along with blowing dust. The city of Lamont received four tenths of an inch of rain within 40 minutes that evening with reports of minor flooding. A few thunderstorms developed near the Sierra crest the following afternoon as the low pressure system exited into the Great Basin.

Water storage in the reservoirs remained lower than normal and ranged from just 7 percent of capacity at Success Dam to 44 percent of capacity at Friant Dam. By the beginning of October, water capacity in the major reservoirs averaged about 21 percent of normal.

## HYDROLOGIC PRODUCTS ISSUED

## PERCENTAGE OF NORMAL PRECIPITATION FOR SEPTEMBER, 2016



cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO