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: **2017**

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 4, 2017

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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¦ X ¦ An **X** inside this box indicates that no flooding occurred for the month
+---+ within this hydrologic service area.

If August, 2017 could be remembered for just one thing, it would be for its persistently hot weather in the San Joaquin Valley, lower foothills and the Kern county desert. Bakersfield recorded twenty-one days of triple digit heat; Fresno recorded fifteen of them within the 31 days of August. On the hottest days, thermometer readings rose as high as 112 degrees and 109 degrees in these locations respectively. There were also a handful of nights when temperatures in Fresno, Bakersfield and Mojave never fell below 80 degrees. So it should come as no surprise that August, 2017 ended up as the second warmest August on record in Fresno and Bakersfield. (Historical records for these airports date back to the late 19th century.) The month averaged much warmer than normal across the remainder of the central California interior as well. A strong upper level ridge of high pressure was to blame for the long stretches of hot weather as it spent most of the month firmly lodged over the Great Basin. A brief but welcome break from oppressively hot weather occurred during the middle of the month in the wake of a dry cold frontal passage. An onshore flow brought marine air into the San Joaquin Valley from the 14th through the 16th and cooled overnight temperatures into the 50s to lower 60s. High temperatures were only in the 80s in the San Joaquin Valley on the 15th and it was the first time since the middle of June that high temperatures stayed below 90 degrees.

On at least two occasions, monsoonal moisture was transported into the HSA by southeasterly winds aloft. A moisture influx during the first 5 days of August brought daily occurrences of afternoon thunderstorms over the mountains, a few of which drifted into the San Joaquin Valley during the early evening hours that produced little or no measurable rain. An upper level low pressure system poised off the southern California coast brought another influx of monsoonal moisture into the HSA from the 17th through the 23rd. Isolated mainly afternoon thunderstorms with heavy rain popped up over the higher terrain each of these days. Of noteworthiness was a strong thunderstorm that developed over Yosemite National Park on the afternoon of the 18th. This storm deluged Yosemite Valley with 1.25 inches of rain in a matter of minutes and produced minor flooding within the park. During the last two days of the month, tropical moisture was channeled into the HSA between two upper level ridges of high pressure, one centered off the Oregon coast and the other over the Great Basin. Showers and isolated thunderstorms developed along this moisture channel over the central California interior during the early morning hours of the 30th and brought light rain to parts of the San Joaquin Valley. As the air mass heated up, additional thunderstorms erupted over the mountains and desert during the last two afternoons of the month. Additionally, the combination of very dry fuels and hot temperatures provided an environment favorable for new wildfire ignitions over the foothills and higher elevations of the Sierra this month. A few of those wildfires were sparked by lightning.

Throughout the month, water levels in the reservoirs gradually lowered and all mainstem rivers continued to recede. The water capacity of the reservoirs ranged from only 9 percent or normal at Terminus Dam to 90 percent of normal at San Luis Reservoir. As of September 1st, water capacities at the reservoirs averaged about 57 percent of normal.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Warnings

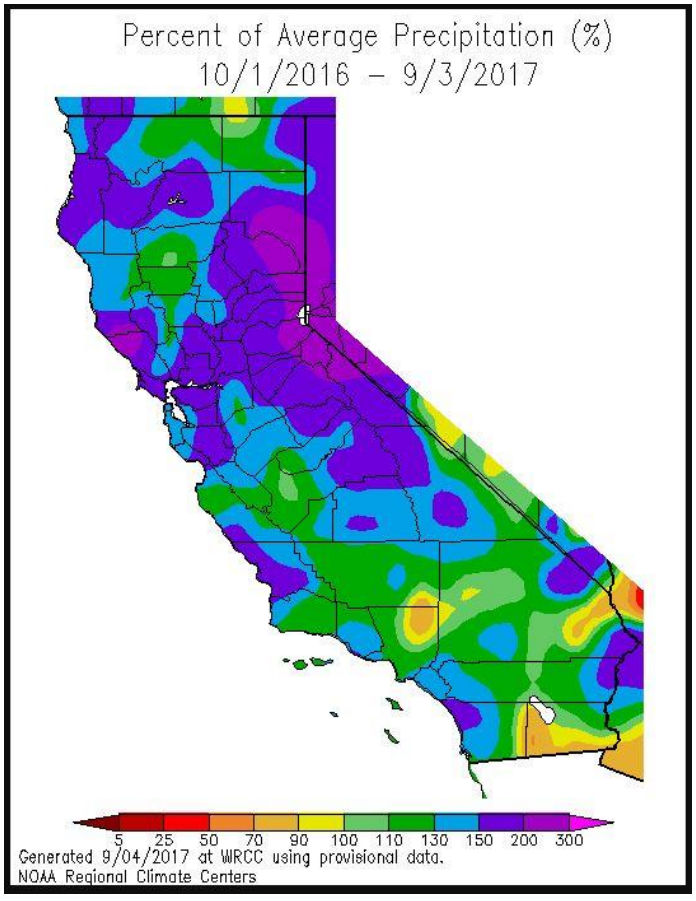
Higher elevations of the Sierra (Mariposa county, Madera county)	2149Z	2-AUG
Kern county desert	2002Z	3-AUG
Higher elevations of the Sierra in Yosemite NP	2300Z	5-AUG
Higher elevations of the Sierra (Fresno county)	0011Z	19-AUG

Flash Flood Statements

Higher elevations of the Sierra (Mariposa county, Madera county)	2219Z	2-AUG
Higher elevations of the Sierra (Mariposa county, Madera county)	2240Z	2-AUG
Higher elevations of the Sierra (Mariposa county, Madera county)	2306Z	2-AUG
Kern county desert	2017Z	3-AUG
Kern county desert	2111Z	3-AUG
Kern county desert	2300Z	3-AUG
Higher elevations of the Sierra in Yosemite NP	0022Z	6-AUG
Higher elevations of the Sierra (Fresno county)	0140Z	19-AUG
Higher elevations of the Sierra (Fresno county)	0306Z	19-AUG

Flood Advisories

Higher elevations of Yosemite NP	2243Z	2-AUG
Kern county desert	2149Z	3-AUG
Southeastern San Joaquin Valley	0053Z	20-AUG



Percentage of normal precipitation across CA since October 1st, 2016

CC:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO