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: JUNE YEAR: 2018

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

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DATE: July 1, 2018

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 \mathbf{X} \mid An \mathbf{X} inside this box indicates that no flooding occurred for the month

+---+ within this hydrologic service area.

June is typically a dry month throughout the central California interior. So it should come as no surprise that the month was precipitation-free over at least 95 percent of the HSA. There were a handful of afternoons when thunderstorms popped up near the Sierra crest. However, thunderstorms were few and far between. Nonetheless, precipitation for the month ended up below normal. That bodes well with the story for the entire rainfall season in central California which traditionally runs from July 1st through June 30th. As one can see from the maps below this summary, the 2017-18 season ended up drier than normal. The southern Sierra fared better than any other part of the central California interior with total precipitation for the season averaging 70 to 85 percent of normal. Precipitation over the remainder of the HSA for the 2017-18 season was generally less than 70 percent of normal and as low as 50 percent of normal over much of Kings County and the Kern County desert. In general, the precipitation deficit for the season ranged from 3 inches to as much as 9 inches over the central California interior. Deficits were much larger over the northwestern part of the state, particularly over the Shasta-Trinity National Forest.

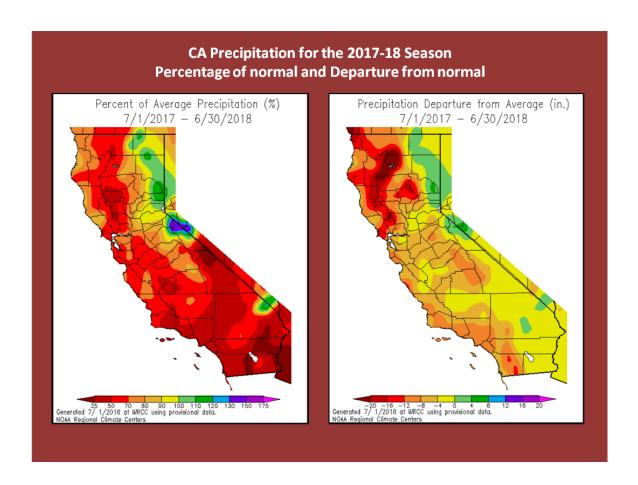
In the broader synoptic pattern, upper level troughs frequently trekked through the Pacific Northwest during the month. Although a majority of these troughs were moisture deficient when they passed through central California, these systems produced a moderate to strong onshore flow across the HSA with consequential marine intrusions in the San Joaquin Valley and lower foothills. One particularly deep marine intrusion occurred on the 17th and was accompanied by a rare June invasion of low stratus in the San Joaquin Valley. Much of this cloudiness banked up along the western slopes of the Sierra into the evening hours that day. Afternoon temperatures on the 17th were no higher than the 70s in the San Joaquin Valley as a result. The onshore flow was so strong on the 17th that it carried ocean cooled air into the Kern County desert. Mojave, Boron and Edwards Air Force Base all recorded a high temperature of only 72 degrees that day despite sunny skies! Other invasions of marine air into the San Joaquin Valley during the month were relatively shallow with high temperatures mainly in the 80s.

The month had its share of hot days, too. During at least three different periods, thermometer readings soared to the century mark or higher over much of the San Joaquin Valley, lower foothills and the Kern County desert. Beginning June 3rd and generally every ten days or so thereafter, a strong upper level ridge of high pressure built over central California and brought triple digit heat to the lower elevations of the HSA. During these hot spells, overnight low temperatures were relatively comfortable. Even in the warmest urban areas of the San Joaquin Valley, minimum temperatures were in the low70s. All in all, June, 2018 averaged slightly warmer than normal.

Daily water releases continued at all of the major reservoirs through the month. This kept the rivers downstream flowing rather swiftly. Some people who chose to cool off in these rivers met an unfortunate fate and ended up drowning or having to be rescued in the swift undercurrents. There were a total of 4 known drowning deaths in June. Two people drowned in the San Joaquin River and two others drowned in the Kaweah River. Although not confirmed as of this writing, a man presumably drowned in the Kern River on

June 30th and his body is yet to be recovered. As of July 1st, the water capacity in the reservoirs ranged from about 35 percent at Hidden Dam and Isabella Dam to 87 percent at Exchequer and Friant Dam. Of the 9 major reservoirs in the HSA, the water capacity averaged about 62 percent of normal by the end of June.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.



CC:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO