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: **2019**

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: October 4, 2019

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.

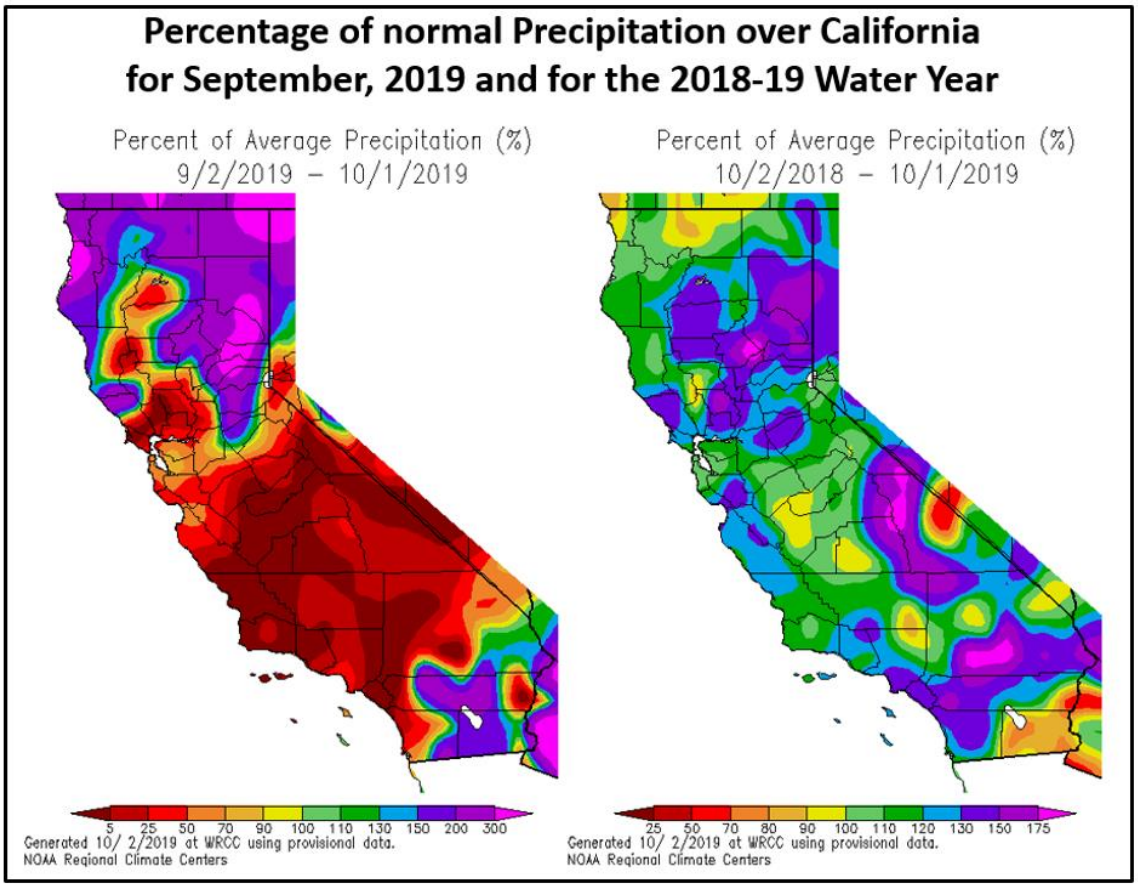
September, 2019 was a rollercoaster ride when it came to temperatures. Unseasonably warm air masses were frequently chased away by Autumn-like cold fronts during the month. There were at least five of them. Although most of these cold fronts swept southward through the HSA with little or no precipitation, each of them produced gusty westerly winds in their wake in addition to areas of blowing dust in the San Joaquin Valley. Specifically, the passages of these fronts occurred on September 7th, 16th, and during the night of the 26th. Two relatively weak, dry cold fronts also breezed through the HSA during the early morning hours of the 19th and 23rd. Up to two tenths of an inch of rain fell out of scattered showers in the Sierra on the 16th and during the last weekend of the month. The blast of Canadian air that followed the cold front during the last few days of September lowered snow levels to about 6500 feet and produced a dusting to as much as an inch of snow in some locations of the Sierra above 8,000 feet on the 28th. The threat of snow and ice also prompted the closure, albeit briefly, of Highway 120 through Tioga Pass in Yosemite National Park as nightly temperatures plummeted into the teens over the Sierra high country.

A northerly influx of monsoonal moisture from the 4th into the 6th provided an atmospheric environment favorable for the development of scattered showers and isolated afternoon and early evening thunderstorms. Although much of this convection occurred over the mountains, a few showers were carried into the south end of the San Joaquin Valley on the afternoon of the 5th. Two hundredths of an inch of rain fell at Bakersfield's Meadows Field airport on the 5th and it was the only measurable rain that fell in Bakersfield all month. Otherwise, sprinkles fell in other parts of the San Joaquin Valley and adjacent foothills on the 5th.

In the broader picture, the storm track remained well north of the HSA all month and this accounted for the above normal precipitation that fell in the mountainous areas of northern California. Influxes of monsoonal moisture were mostly confined to the southeastern part of the state which is also where above normal precipitation occurred for the month. September 30th marks the end of the traditional water year over the Golden State. Total precipitation for the 12-month period ending October 1st, 2019 ended up at 70 percent of normal or higher over much of California. Maps that depict the percentage of normal precipitation for September, 2019 and for the water year have been included below this summary.

Dam operators were slowly shutting their release gates at most of the reservoirs in order to store water for a possibly drier than normal winter season ahead. (This was based on the 90-day precipitation forecast from the Climate Prediction Center.) Otherwise, water levels lowered somewhat in the reservoirs during the month. New Exchequer Dam and Friant Dam had the highest percentage of normal water capacity as of October 3rd at 68 percent and 66 percent, respectively. All in all, the water capacity of the reservoirs throughout the central California interior averaged about 43 percent of normal as September, 2019 drew to a close.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.



CC:

W/OH12X1
W/WR2
CNRFC
WFO HNX
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