

REPORT FOR:
MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS

MONTH: **OCTOBER** YEAR: **2019**

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
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Silver Spring, MD 20910

SIGNATURE: Kevin Durfee
(In Charge of Hydrologic Service Area)

DATE: November 5, 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** |
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An **X** inside this box indicates no flooding occurred for the month within this hydrologic service area.

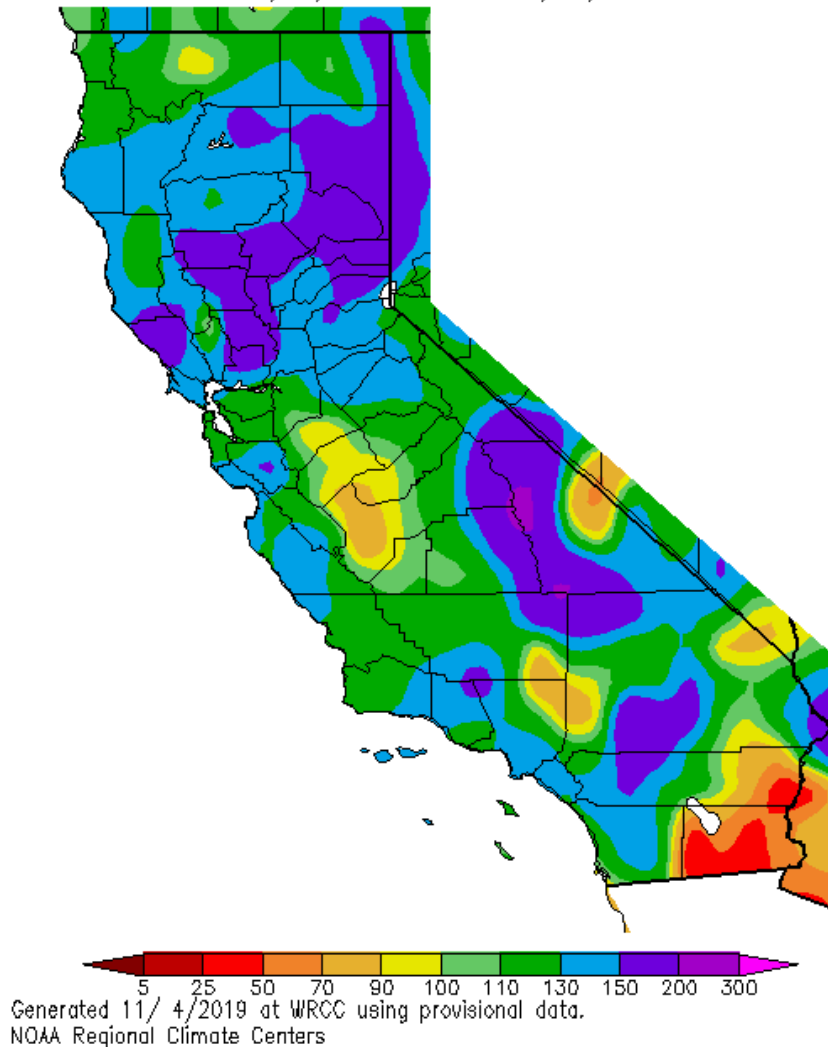
October, 2019 was one of the driest Octobers on record throughout the central California interior. It goes without saying that it was an abysmal start to the new water year which began October 1st. With the exception of isolated showers in Yosemite National Park on the afternoon of the 27th, October, 2019 was bone dry over the HSA. Historically, it was one of 18 Octobers that did not bring even a drop of rain in Fresno and Bakersfield. Records for both locations date back to the late 1800's. To sum it up hydrologically, precipitation was well below normal for the month over the entire HSA. Precipitation for the calendar year, however, fared much better over much of California, thanks to above normal precipitation from January 1st through the end of May. A graphical summary of the percentage of normal precipitation for the Golden State has been provided below this summary.

Cold fronts that swept southward through the Golden State during the month were moisture deficient. There were three significant cold frontal passages; one on the 9th, another one on the 17th and the last one which swept in as a backdoor front on the 27th. In addition to the dramatically cooler air that followed them, the cold fronts produced strong and gusty winds on the valley's west side, the Sierra crest, and the Kern county mountains and desert. The blast of Canadian air that followed the third front brought the coldest air mass since the middle of March into the HSA. Minimum temperatures were as low as the mid teens in the Kern County desert on the night of October 30th. Thermometer readings bottomed out just below 32 degrees in the coldest locations of the San Joaquin Valley during the last few nights of the month. Brisk offshore winds in the wake of the third cold front brought extremely dry air into the mountains and desert in addition to the Kern county portion of the San Joaquin Valley on October 30th. The relative humidity dropped into the single digits in many locations as a result. The combination of gusty winds, very low humidity and extremely dry fuels also produced Red Flag conditions in the Kern county mountains during this time. Additionally, blustery winds created blowing dust, poor visibility and unhealthy air quality throughout the central California interior, particularly in the San Joaquin Valley, on the 27th and again on the 30th. Although the month brought several afternoons of unseasonably warm temperatures, it was balanced by relatively chilly nights. Ultimately, October, 2019 ended up slightly cooler than normal over the central California interior.

Reservoir owners maintained ample water storage in the dams in preparation for a possibly drier than normal Winter season that was forecast by the Climate Prediction Center in their 90 day outlook. At the end of the month, the water capacity of the reservoirs averaged 35 percent of normal. New Exchequer Dam was holding 61 percent of their maximum water storage while Friant Dam carried a water capacity of about 52 percent of normal.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

Percent of Average Precipitation (%)
1/1/2019 – 11/3/2019



CC:

W/OH12X1
WWR2
CNRFC
WFO HNX
WFO STO