

SAN JOAQUIN VALLEY - HANFORD, CA

REPORT FOR:

MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS

MONTH: **JANUARY** YEAR: **2018**

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: February 2, 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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| X | An **X** inside this box indicates that no flooding occurred for the month
+---+ within this hydrologic service area.

January, 2018 was the fourth consecutive month of below normal precipitation throughout the HSA. A map of the percentage of normal precipitation for the month across California is provided below.

There were only four storm systems that brought wet weather into the central California interior. Of the four storm systems, only one brought copious precipitation into the district, the bulk of which fell on the warm side of a Gulf of Alaska storm from the evening of the 7th through the 8th. This particular storm tracked much farther south than any of the other storms and moved inland into southern California on the 9th. As colder air swept in behind it, snow levels fell abruptly and rain ended briefly as snow at elevations as low as 4500 feet. This system unfortunately was not a big snow producer in the mountains with accumulations of 6 inches or less above 5000 feet. Nonetheless, a generous and beneficial amount of rain fell from this storm, even in the Kern county desert where up to three quarters of an inch was observed. Elsewhere, rain totals of 1 to 3 inches were common. Although rain of this magnitude posed a threat of flash flooding and debris flows, particularly in the vicinity of burn scars, impacts of the rain were relatively benign with minor street flooding and ponding of water in poor drainage areas. As mentioned above, there were three other storms that brought wet weather into the HSA, namely on January 4th, January 19th and January 25th. None of them warranted hydrologic bragging rights. In general, each of these storms produced a quarter of an inch or less in the San Joaquin Valley and the Kern County mountains and up to three quarters of an inch in the foothills and higher elevations of the Sierra where snow accumulations ranged from 2 to 9 inches above 7,000 feet. To sum it all up, the already large precipitation deficit within the HSA grew larger by month's end and raised the drought classification status from D0 (abnormally dry) to D1 (moderate drought). A graphical representation of this deficit has been provided below. Since the beginning of the water year (October 1st, 2017) through the end of January, 2018, parts of the central California interior have a precipitation deficit of as much as 12 inches!

Temperature-wise, January, 2018 ended up much warmer than normal, thanks to a strong upper level ridge of high pressure parked off the coast of northern Baja for most of the month. Statistically, January, 2018 ranked as the 3rd and 4th warmest January on record for Fresno and Bakersfield, respectively. Thermometer readings peaked in the 70s in the foothills and in the Kern county desert on several afternoons. Unlike December, there were only a handful of frosty mornings in the San Joaquin Valley, most of which occurred after January 20th. Otherwise, there were plenty of hazy days in the San Joaquin Valley. Most of those days began with patchy dense fog.

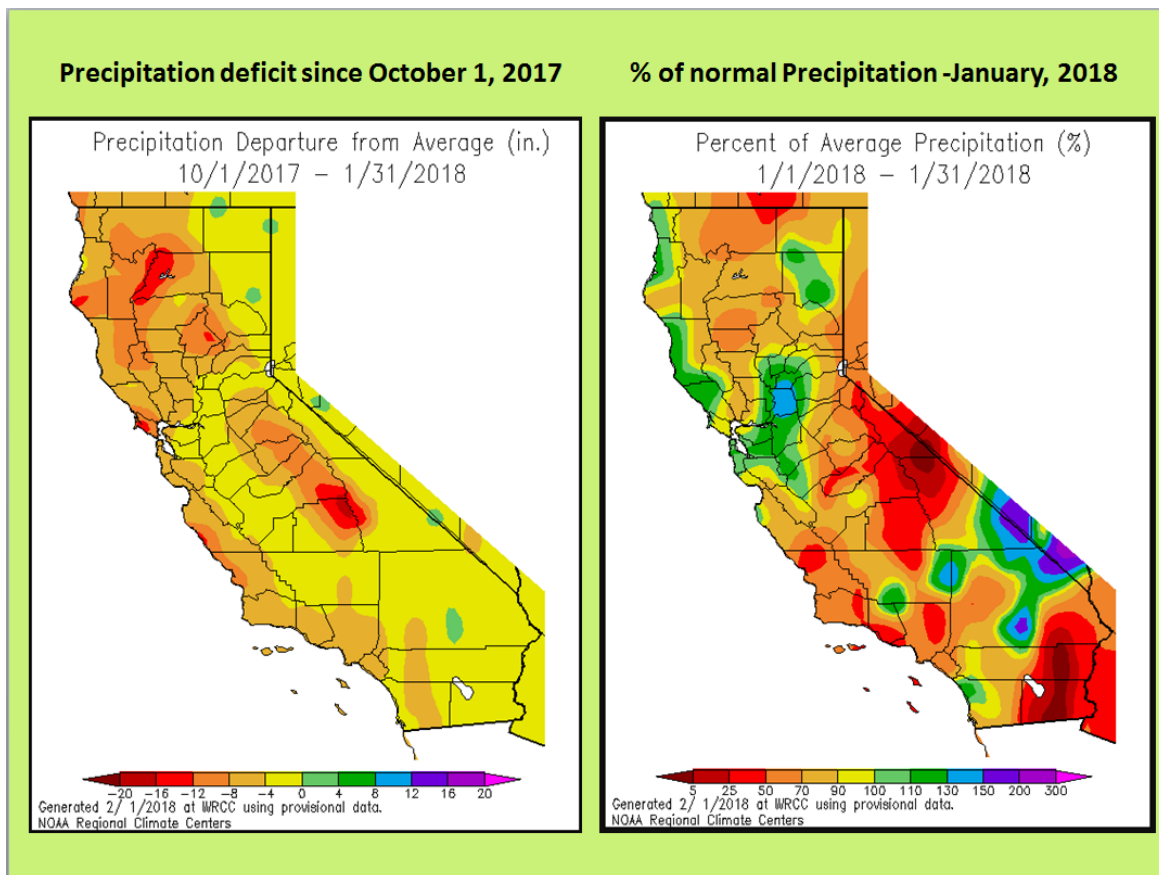
The amount of snow that fell over the southern Sierra was sparse at best. By the end of the month, snow depths, which are normally measured by the yard by the end of January, could only be quantified in inches. In fact, there was so little snow that many ski resorts remained closed through the middle of January. According to the Fresno Bee, China Peak ski resort, which is normally bustling with thousands of visitors, reported its worst season in more than 40 years of business. As of February 1st, the snowpack over the southern Sierra was only 25 percent of normal; a far cry from the 228 percent of normal just one year earlier.

Dam owners, who anticipated a continuation of drier than normal weather this season, did not release any water out of the reservoirs throughout central California. Consequently, many of the rivers below the dams produced low flows through month's end. Most of the major reservoirs continued to hold a respectable amount of water in them and savored what little precipitation fell during the month. As of February 1st, the water capacity of the reservoirs throughout the HSA averaged about 46 percent of normal.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Watch...foothills and higher elevations of the Sierra	1718Z	7-JAN
Flash Flood Watch...extended for the foothills/higher elevations of Sierra	1142Z	9-JAN
Flood Advisory.....southern San Joaquin Valley	1502Z	9-JAN
Urban/Small Stream Flood Advisory....northwestern Kern County	0044Z	10-JAN

The maps below show the precipitation deficit in California since the beginning of the water year (October 1st, 2017) and the statewide percentage of normal precipitation for January.



CC:

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