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: **JANUARY** YEAR: **2015**

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 9, 2015

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).

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

January, 2015 was a significant hydrological setback for much of the central California interior, especially north of Kern County. In the San Joaquin Valley, much of January was bone dry. Measurable rain only occurred on one day north of Kern County, and that was on January 27th. The 0.21 inches of rain that fell in Fresno made it the 7th driest January on record, and records date back to the late 1800's. Other reporting stations in the San Joaquin Valley were considerably drier. For example, Merced only tallied two hundredths of an inch for the entire month. Hanford wasn't far behind with a scanty rain total of only four hundredths of an inch. This exceptionally dry January only exacerbated the ongoing extreme drought in central California. Maps of the percentage of normal precipitation for the state from a monthly and seasonal perspective have been provided at the end of this summary. (see below)

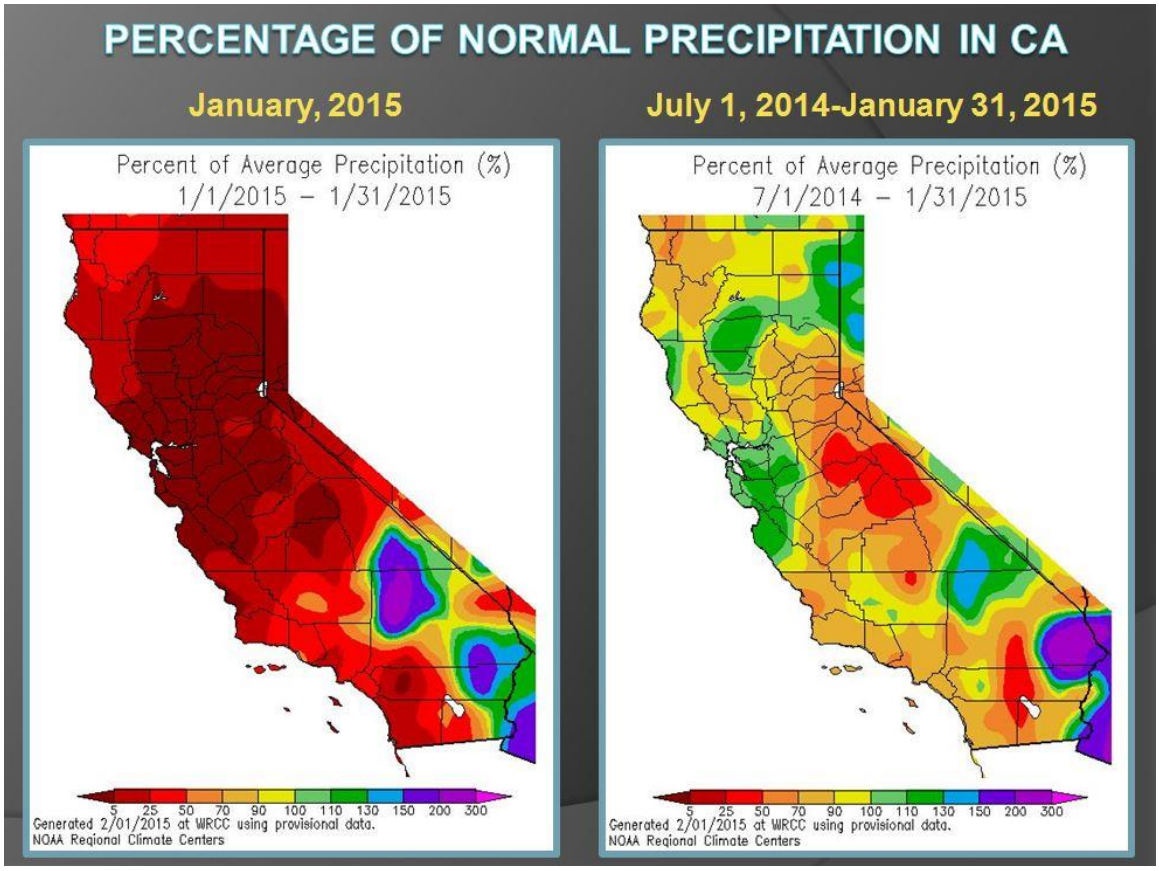
Otherwise, the main storm track remained well north of the HSA the entire month. A weaker southern branch of the jet stream occasionally brought upper level storm systems into southern California. One of them brushed Kern County with beneficial precipitation on the 11th, which included the desert. Ironically, in the midst of this California drought, Bakersfield set a 24-hour rainfall record on the 11th with 0.63 inches. This storm produced up to an inch and a half of rain in the Tehachapi mountains. Even the desert areas received a wetting rain from this system with nearly a quarter of an inch falling in a few localities. The storm system on the 27th, although centered off the coast of northern Baja, brought a northward surge of subtropical moisture into the HSA. Rain amounts in the San Joaquin Valley were rather meager and ranged from just a few hundredths of an inch to nearly a quarter of an inch. Precipitation was a little more generous over the higher terrain with up to six tenths of an inch in the wetter locations of the Sierra. Again, the Kern County mountains received the lion's share of precipitation from this storm off the Baja coast with up to about eight tenths of an inch of rain in the Frazier Park area on the 27th.

An upper level ridge of high pressure dominated the pattern for much of January, 2015 and kept skies mostly clear over the HSA with a prevailing offshore flow. This ridge remained fairly strong during the middle of January and aided in trapping low stratus and fog in the San Joaquin Valley. Low stratus and fog plagued the San Joaquin Valley much of the time from the 13th through the 25th. In fact, there were only 3 days during this 13-day stretch when low stratus lifted completely out of the San Joaquin Valley…January 15th, 22nd and the 25th. The clearing in the San Joaquin Valley was self-destructive, however, and lead to widespread dense fog formation on the nights that followed. On the days that remained overcast, small diurnal temperature ranges occurred in the San Joaquin Valley with thermometer readings staying primarily in the 40s. Outside of the

San Joaquin Valley, much of the HSA experienced relatively warm Spring-like afternoons. High temperatures in the foothills were well into the 70s on several occasions. The unseasonably warm weather was a notable payback from the frigid start to the month. Until the high pressure ridge over the eastern Pacific moved inland, it amplified on January 1st in response to a deepening storm system over the Great Basin. Brisk north to northeast winds aloft delivered dry and very cold air into the central California interior on New Year's eve. The Arctic air mass that settled over the HSA at the beginning of the year produced several nights of below freezing temperatures in the San Joaquin Valley during the 1st week of January. During the midst of the hard freeze, pre-dawn temperatures in the coldest locations of the San Joaquin Valley were in the lower 20s. It wasn't until January 6th that this Arctic air mass finally modified enough to safely end the threat of below freezing minimum temperatures in the San Joaquin Valley. In spite of this cold snap during the first week, January, 2015 ended up averaging slightly warmer than normal.

The month's below normal precipitation left water levels at unseasonably low levels in the Dams throughout the HSA. The water capacity in the reservoirs as of February 1st ranged from just 7 percent of normal at Hidden Dam and Success Dam to 55 percent of normal at San Luis Reservoir. This figured to an average of about 13 percent of normal water capacity in the reservoirs and reflected a 2 percent loss from the start of the month. The snowpack over the southern Sierra was equally abysmal and as of February 1st, averaged only 22 percent of normal.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.



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