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: **MAY** 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: June 2, 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).

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

A few winter-like storm systems brought some water replenishment to the HSA during the month, but it was only a proverbial 'drop in the bucket' compared to what was needed to get central California out of its exceptional drought status. The first two storm systems originated in the Gulf Of Alaska. The storm system on the 7th and 8th took a path across northern California. The second storm took a more southerly track and moved inland over central California on the 14th. Both systems brought accumulating snow to elevations above 6000 feet while lower elevations received showers and isolated thunderstorms. In each case, the Kern County desert and the west side of the San Joaquin Valley were buffeted by brisk westerly winds that gusted to 40 mph or higher. Each storm brought up to a quarter of an inch of rain in the San Joaquin Valley although a few locations received more than a half inch of rain. Parts of Fresno and Bakersfield reported minor street and urban flooding from slow moving thunderstorms during the afternoon of the 14th. Weather spotters reported one to two inches of rain in Clovis that day while a few locations in the southeastern San Joaquin Valley received a little more than three quarters of an inch of rain. As one would expect, both storm systems produced heavier precipitation over the higher terrain. In the highest elevations of the southern Sierra, the storm on the 7th and 8th produced 10-20 inches of snow above 6000 feet. The storm on the 14th brought up to 5 inches of snow over the high Sierra. Precipitation amounts were relatively light over the Kern County mountains and desert and averaged less than two tenths of an inch from each storm.

An upper level trough of low pressure lingered along the West Coast from the 15th through the 20th and kept the weather unsettled across the HSA. Scattered afternoon and evening showers during this period were mainly confined to the mountains, although on occasion, an isolated shower or thunderstorm popped up over the San Joaquin Valley and brought up to a few hundredths of an inch of rain. During this period, total rainfall amounts were generally light, even over the higher terrain, and ranged from several hundredths of an inch in the foothills to between a quarter of an inch and a half inch over the higher elevations of the Sierra.

The final storm system of the month formed over the eastern Pacific between the 20th and 21st . While it remained offshore, a southwesterly flow aloft brought a good deal of mid and high level tropical moisture into central California which in turn generated showers and isolated thunderstorms over much of the HSA from the evening of the 21st through the 22nd. This particular storm system ended up tracking inland over southern California on the 23rd and brought additional showers to Kern County. The three tenths of an inch of rain that fell at Meadows Field airport in Bakersfield on the 22nd set a new record for 24-hour rainfall for the date which last occurred in 1958.

Temperature-wise, the month ended like it began with well above normal temperatures as a ridge of high pressure dominated the pattern. High temperatures were generally in the 90s in the San Joaquin Valley and lower foothills during the first two days and the last few days of the month. In fact, a few locations in the San Joaquin Valley topped the century mark for the first time this year on the 30th. In spite of these exceptionally warm periods, May, 2015 averaged cooler than normal. The month ended up slightly wetter than normal, especially along the Sierra Crest and in the mountains of Tulare County and Kern County. This is more

clearly defined in the graphics below which also include the percentage of normal precipitation so far this season throughout California. Perhaps a small benefit of the month's above normal precipitation was that water levels on most mainstem rivers, lakes and reservoirs changed little within the 31-day period. However, water levels remained historically low throughout the month. As of June 1st, the water capacity of the major reservoirs ranged from just 8 percent of normal at Buchanan Dam, Hidden Dam and Isabella Dam to 53 percent of normal at San Luis Reservoir for an average water capacity of 22 percent of normal. The snowpack over the southern Sierra Nevada was completely depleted by the end of May.

**HYDROLOGIC PRODUCTS ISSUED THIS MONTH**

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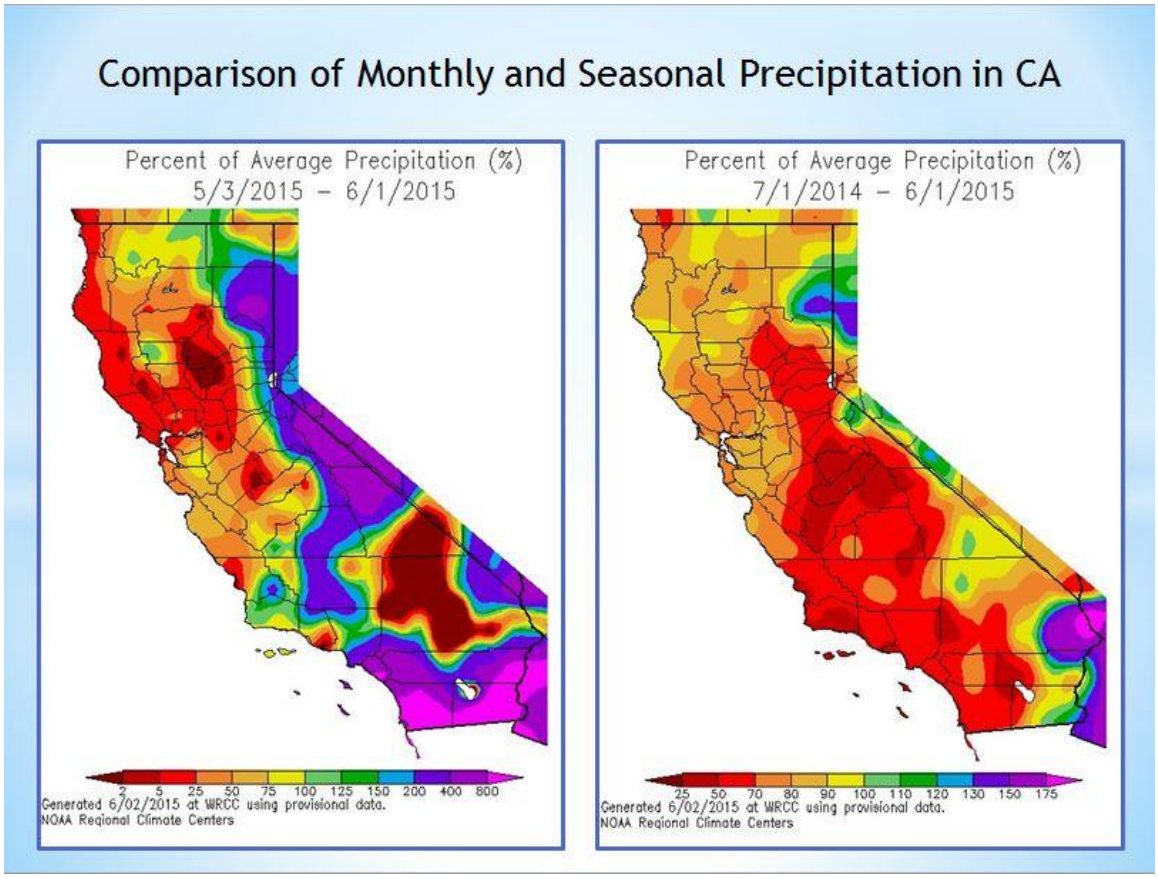
| Urban and Small Stream Flood Advisory…San Joaquin Valley | 0232Z | 15-MAY |
| Urban and Small Stream Flood Advisory…San Joaquin Valley (extended) | 0515Z | 15-MAY |




cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO