

**SAN JOAQUIN VALLEY - HANFORD , CA**

REPORT FOR:

MONTHLY REPORT OF RIVER AND  
FLOOD CONDITIONS

MONTH: **JUNE** 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: July 4, 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.

June, 2015 was a hydrologically active month with at least three substantial monsoon events. Northerly surges of tropical moisture are climatologically rare in June for the central California interior and normally don't make their presence known until mid or late July. Interestingly the west side of the San Joaquin Valley and adjacent foothills were the primary target of the monsoonal surges. In this part of the HSA, June rainfall ended up well above normal. This is a deceiving anomaly since normal June rainfall in this part of the HSA is generally a trace or less. Overall, the month was drier than normal throughout much of the central California interior. For the entire season, which typically begins July 1<sup>st</sup> and runs through June 30<sup>th</sup>, precipitation ended up well below normal. Maps of precipitation with respect to normal for this month and for the season have been provided at the end of this summary.

A strong upper level ridge of High pressure dominated the pattern across California and brought dry weather and well above normal temperatures to much of the HSA. This ridge was responsible for sending temperatures into the triple digits in the San Joaquin Valley, lower foothills and the Kern County desert. Fresno recorded 11 days of high temperatures at or above 100 degrees while Hanford and Bakersfield recorded 13 of them. Not surprisingly, June 2015 ended up much warmer than normal. In fact, it was the 3<sup>rd</sup> warmest June ever in Fresno and the 4<sup>th</sup> warmest on record in Bakersfield. On a few occasions, the center of the upper level ridge of high pressure shifted to the Four Corners region while an area of low pressure developed off the southern California coast. When this happened, a southerly flow aloft prevailed over the HSA, channeled tropical moisture northward into central California and produced an atmospheric environment favorable for thunderstorm development, especially over the higher terrain.

The first monsoonal surge occurred between the 4<sup>th</sup> and 6<sup>th</sup> and tapped into tropical moisture from what was once Hurricane Andreas well offshore the Baja peninsula. Numerous thunderstorms erupted over the higher terrain as a result. A small and nearly stationary thunderstorm cluster formed near Coalinga during the late afternoon hours of the 5<sup>th</sup> and dumped nearly two inches of heavy rain on the city within one hour. There were numerous reports of street flooding in Coalinga that evening with up to 4 feet of water in poor drainage areas. A few thunderstorms erupted in the vicinity of Coalinga the following afternoon but fortunately dissipated over the higher terrain west of the city.

The next northerly surge of monsoonal moisture occurred only a few days later. This time tropical moisture associated with the remnants of what was once Hurricane Blanca became entrained in the southerly flow aloft over California. From the 9<sup>th</sup> through the 13<sup>th</sup>, thunderstorms rumbled over the mountains and desert. A few thunderstorms wandered into the southern San Joaquin Valley on the 10<sup>th</sup>. One strong thunderstorm in particular sat nearly idle over southwestern Kern County during the early evening hours of the 10<sup>th</sup> and deluged the city of Taft with 1.15 inches of rain. Nearly an inch of this rain fell within a 15-minute period and caused extensive flooding in the city between 5 pm and 6 pm. One vehicle was stranded in deep water, apartments on the southwest side of Taft were flooded and the Kern County Fire department conducted a search and rescue. State route 166 was flooded about two miles east of Maricopa. Sandy Creek, a

normally dry creek in the city of Taft, became a raging torrent of water, and left a muddy mess in parts of the city with large amounts of debris. Two days later, during the late afternoon hours of the 12<sup>th</sup>, torrential downpours from a thunderstorm brought traffic to a standstill in the city of Tehachapi and caused a mudslide along a portion of Highway 58. Nearly two inches of rain fell within an hour from this storm. It wasn't until almost 9:30 pm that evening until the debris was cleared from Highway 58 and traffic started moving again. Mother Nature's flooding wrath in Kern County didn't end there, however. During the late afternoon and early evening hours of the 13<sup>th</sup>, thunderstorms drenched the Kelso Creek watershed and produced a 3-foot high debris flow of mud and water that washed out a 20-foot section of Kelso Valley Road.

The final northward influx of monsoonal moisture occurred between the 25<sup>th</sup> and 30<sup>th</sup> and was relatively shallow and uneventful compared to its predecessors. Its presence triggered isolated thunderstorms over the mountains and produced nothing more than sprinkles in the San Joaquin Valley.

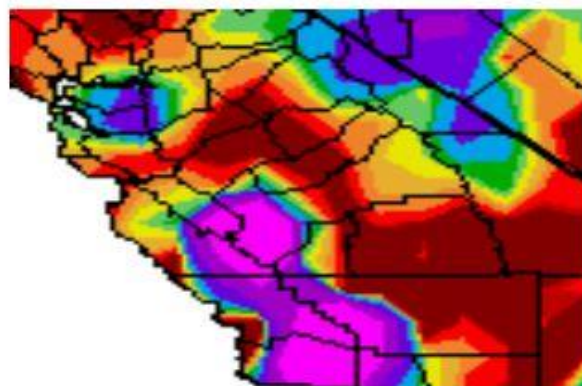
In spite of the unusually high frequency of monsoonal influxes this month, there is one statistic that still stands solid. If one were to place a bet that measurable rain would fall in Fresno on June 21<sup>st</sup>, she/he would likely lose. You see, in the 135 years of record keeping in Fresno, June 21<sup>st</sup> is the only day of the entire year that no rain, trace or measurable, ever occurred.

The convective outbreaks from the monsoonal periods this month brought highly varied rainfall over the mountains and desert and were not much benefit to central California's long term drought. Fuel moistures were more comparable to September and equivocally kept the fire danger high. Water levels on area lakes and rivers remained historically low and when June drew to a close, the water capacity of the reservoirs averaged only 18 percent of normal.

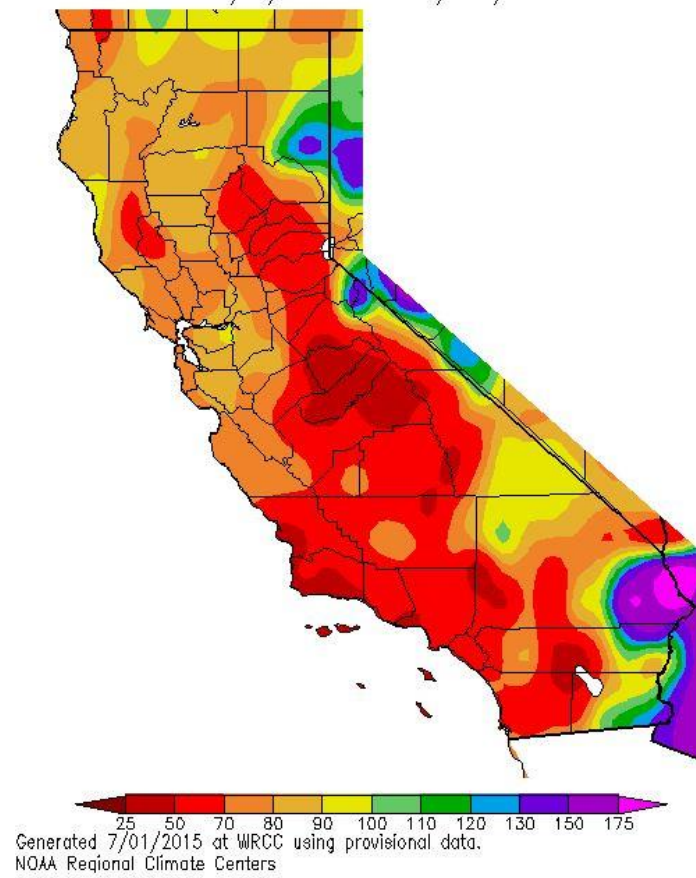
#### HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Warning...for the city of Coalinga	0202Z	6-JUN
Flash Flood Warning...for the city of Taft	0024Z	11-JUN
Flash Flood Warning...for the city of Tehachapi	2320Z	12-JUN
Flash Flood Warning...for the Kelso Creek watershed	2358Z	13-JUN

#### Percent of Average Precipitation June, 2015



Percent of Average Precipitation (%)  
7/1/2014 – 6/30/2015



cc:

W/OH12x1  
W/WR2  
CNRFC  
WFO HNX  
WFO STO