

**SAN JOAQUIN VALLEY - HANFORD , CA**

REPORT FOR:

MONTHLY REPORT OF RIVER AND  
FLOOD CONDITIONS

MONTH: **MAY** YEAR: **2016**

**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 6, 2016

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.

May, 2016 brought a monsoon event and a visit from a cold Gulf of Alaska storm, both of which are very atypical for the month of May in central California. The monsoon event, although short-lived, produced nuisance flooding in some areas and flash flooding in a few localities on the 5<sup>th</sup> and 6<sup>th</sup> while the Gulf of Alaska storm brought unseasonably chilly temperatures and a light snowfall to the higher elevations of the Sierra on the 20<sup>th</sup> and 21<sup>st</sup>.

The storm system that tapped into a rich supply of tropical moisture sat nearly idle over the eastern Pacific from the 4<sup>th</sup> through the 6<sup>th</sup> before finally tracking inland over southern California on the 7<sup>th</sup>. While this system was anchored offshore, it spawned scattered showers and thunderstorms during the afternoon and evening hours of the 5<sup>th</sup> and 6<sup>th</sup>. Most of these thunderstorms were very slow moving and equipped with heavy downpours and numerous reports of local urban, street and road flooding. Thunderstorms targeted the west side of the San Joaquin Valley during the afternoon and early evening hours of the 5<sup>th</sup>. CHP reported flooding on State Routes 33, 46, 152 and 166 that evening. Urban flooding occurred in the cities of Mendota, Los Banos and Lemoore. On the following afternoon and evening, slow moving thunderstorms redeveloped along the west side and south end of the San Joaquin Valley in addition to the Tehachapi mountains. Mud and debris flows were observed on State Route 198 in the vicinity of Coalinga and along I-5 through the Grapevine which closed the northbound lanes of the interstate for a short time during the late afternoon hours of the 6<sup>th</sup>. Portions of State Route 33 and 46 were also flooded that afternoon. An isolated, nearly stationary thunderstorm with very heavy rain deluged the downtown area of Fresno during the early evening hours of the 6<sup>th</sup> and flooded several city streets. Water was almost knee deep at a few street intersections in the city of Fresno that evening. Local rainfall amounts of six tenths of an inch to more than one inch were common in the heaviest thunderstorms.

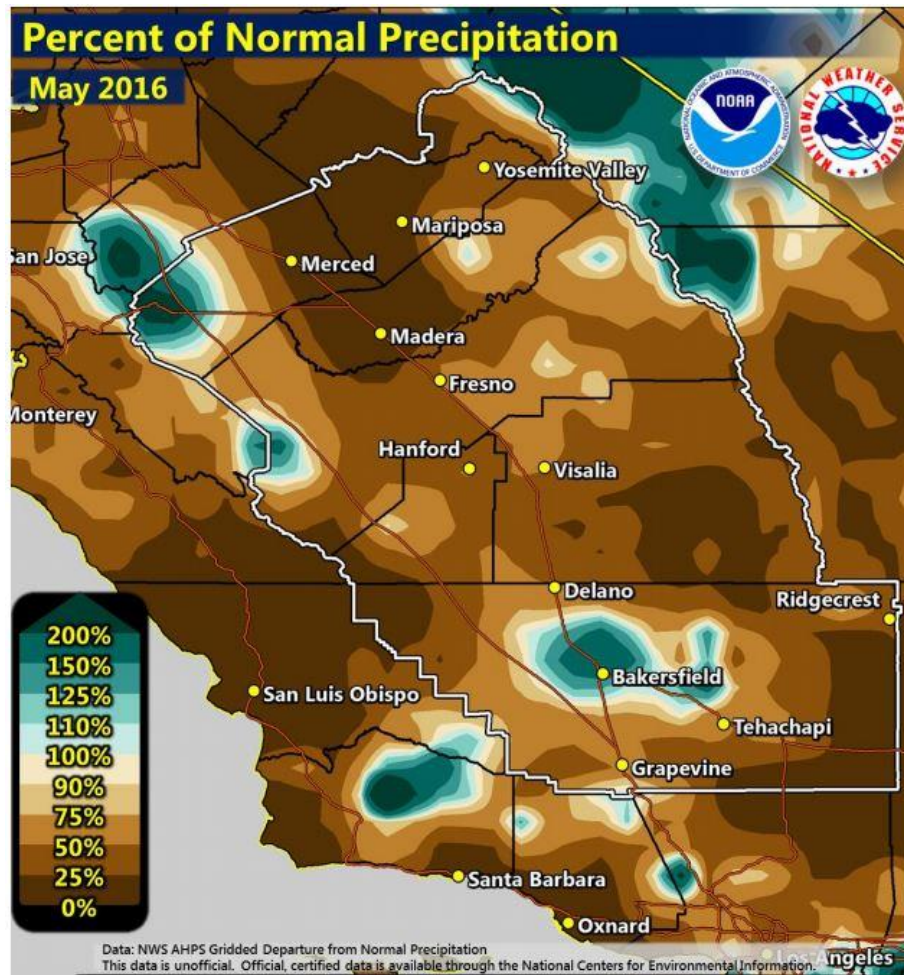
The next storm system, although moisture deficient, brought a dry cold front through the HSA on the 14<sup>th</sup> accompanied by blustery winds in the San Joaquin Valley and the Kern County mountains and desert during the second weekend of May. Wind gusts of up to 35 mph were recorded on the west side of the San Joaquin Valley and frequently gusted over 50 mph through and below the mountain passes of Kern County during the second weekend of May. The upper level storm system that followed tracked through the Pacific Northwest on the 15<sup>th</sup> and produced isolated showers and thunderstorms over the Sierra as it settled into the Great Basin on the 16<sup>th</sup>. This storm brought plenty of backwash clouds and even a few light showers into the mountains on the 17<sup>th</sup> before it finally exited into Arizona on the 18<sup>th</sup>. Following right on its heels was the Gulf of Alaska storm which moved inland over northern California on the 20<sup>th</sup>. While the bulk of this storm's precipitation stayed north of the HSA, a few instability showers and thunderstorms occurred over the Sierra on the 20<sup>th</sup> with a light dusting of snow in a few locations as low as 7,000 feet. As mentioned earlier, this system brought an unseasonably cool air mass into the HSA during the third weekend of May. Afternoon temperatures on the 20<sup>th</sup> ranged from the upper 30s and 40s above 7,000 feet to the upper 60s and lower 70s in the central San Joaquin Valley. Temperatures remained much cooler than normal over the central California interior through the 24<sup>th</sup>. An upper level disturbance that spun out of this storm system tracked

down the California coast from the 23<sup>rd</sup> through the 24<sup>th</sup> and brought a return of showers and thunderstorms to mainly the higher elevations of the HSA, although a few thunderstorms did wander into the east side and west side of the San Joaquin Valley during this period. Like its predecessor, this storm brought a good deal of backwash moisture into the foothills and higher elevations of the Sierra as it exited into Arizona on the 25<sup>th</sup>. A few showers tracked out of the Sierra foothills and into the east side of the San Joaquin Valley during the early evening hours of the 25<sup>th</sup>. Showers and thunderstorms that trained through the cities of Oakhurst and Coarsegold on the afternoon of the 25<sup>th</sup> dumped up to 1.5 inches of rain. A weak upper level storm system tracked eastward across southern California during the last weekend of May and ended up over Arizona by Memorial Day. Although isolated afternoon and early evening thunderstorms popped up over the higher elevations of the Sierra on the 28<sup>th</sup> and 29<sup>th</sup>, only a few produced briefly heavy rain. Otherwise, temperatures trended warmer each day during the last 7 days of the month. May 31<sup>st</sup> ended up being the warmest day yet this year in many locations with a few of the hottest locations topping the century mark in the San Joaquin Valley and the Kern County desert.

In summary, May 2016 ended up generally drier than normal with the exception of some areas on the west side of the San Joaquin Valley and portions of Kern County. A map showing the percentage of normal precipitation for the HSA is provided below. The month averaged warmer than normal which hastened melting of the southern Sierra snowpack and in turn increased water levels at all of the major reservoirs. By June 1<sup>st</sup>, the snowpack over the southern Sierra dwindled to 21 percent of normal while water capacities of area reservoirs rose to 53 percent of normal.

## HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flood Warning....Northeast Madera County	2303Z 01-MAY
Urban/Small Stream Flood Advisory...North Central Fresno County	2316Z 01-MAY
Flood Advisory...South Central Kern County	0011Z 05-MAY
Flood Advisory...West Central Kern County	0034Z 05-MAY
Flood Advisory...Southern Kings Co., South Central Fresno Co., Northern Kern Co	0035Z 05-MAY
Flood Advisory...Southwestern Fresno County	0036Z 05-MAY
Flood Advisory...Central Kings County, Southwestern Fresno County	0102Z 06-MAY
Flood Advisory...West Central Fresno County, South Central Madera County	0110Z 06-MAY
Flood Advisory...Northwest Fresno County, Southwest Madera County	0228Z 06-MAY
Flood Advisory...North Central Kings Co, West Central Fresno Co, Southwest Madera Co	0235Z 06-MAY
Flood Advisory...West Central Fresno County	0354Z 06-MAY
Flood Advisory...Western Fresno Co, Southwest Merced Co, Southwest Madera Co	0442Z 06-MAY
Flash Flood Watch...San Joaquin Valley, Kern County Mountains	2002Z 06-MAY
Flood Advisory...Southwest Fresno County	2045Z 06-MAY
Urban/Small Stream Flood Advisory...SW Kings Co, SW Fresno Co, Western Kern Co	2245Z 06-MAY
Flash Flood Warning...Southwest Kings Co, Southwest Fresno Co.	2256Z 06-MAY
Flash Flood Warning...Southwest Fresno County	2326Z 06-MAY
Urban/Small Stream Flood Advisory...South Central Kern County	2345Z 06-MAY
Flash Flood Warning...South Central Kern County (Grapevine, Lebec)	2356Z 06-MAY
Flash Flood Warning...Southwest Kings County, Northwest Kern County	0001Z 07-MAY
Flash Flood Warning...Central Fresno County (city of Fresno...downtown area)	0043Z 07-MAY
Urban/Small Stream Flood Advisory...SW Kings Co, SW Fresno Co, Western Kern Co	0050Z 07-MAY
Urban/Small Stream Flood Advisory...West Central Fresno County	0053Z 07-MAY
Urban/Small Stream Flood Advisory...North Central Kern County	0108Z 07-MAY
Flash Flood Warning...Central Kern County (Bakersfield, Rosedale, Oildale)	0143Z 07-MAY
Urban/Small Stream Flood Advisory...Central Kern Co, South Central Tulare Co	0321Z 07-MAY
Urban/Small Stream Flood Advisory...Central Kern Co, South Central Tulare Co	0429Z 07-MAY
Urban/Small Stream Flood Advisory...Central Kern Co, South Central Tulare Co	0630Z 07-MAY
Flash Flood Watch...San Joaquin Valley, Kern County Mountains	1108Z 07-MAY
Urban/Small Stream Flood Advisory...Northeast Kern County (Desert)	2107Z 07-MAY
Urban/Small Stream Flood Advisory...East Central Kern County (Tehachapi Mountains)	2321Z 07-MAY
Urban/Small Stream Flood Advisory...Kern County mountains and desert	0112Z 18-MAY



CC:

W/OH12x1  
W/WR2  
CNRFC  
WFO HNX  
WFO STO