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: **JUNE** 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: July 5, 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).

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

If there was one memorable aspect of the weather this June it was for its triple digit heat in the San Joaquin Valley, lower foothills and the Kern County desert. Of the 30 days in June, thermometer readings topped the century mark on 14 of them in Bakersfield and Hanford. Fresno tallied 15 days of triple digit heat this month. In the Kern County desert, several locations peaked above the century mark on at least 20 days, and of those 20 days, at least 3 of them were at or above 110 degrees. All in all, it was the 5th warmest June on record in Fresno and the 6th warmest in Bakersfield. A strong upper level ridge of high pressure was to blame for the hot, dry weather and it dominated the pattern across central California during the first 7 days of the month, the last 5 days of the month, and for a briefer period between June 20th and 23rd.

In contrast to the hot, dry weather, one storm brought unseasonably cool temperatures and precipitation to the HSA during the second weekend of June. This was a storm that moved inland across southern California on the 11th. Initially the storm brought a northwestward influx of tropical moisture into the central California interior, equipped with isolated thunderstorms in the San Joaquin Valley, Sierra foothills and higher terrain during the evening of the 11th. As this storm exited into Arizona during the late night hours of the 11th into the 12th, it tapped into much colder air from the north and produced snow showers over the highest elevations of the Sierra. While the snow might have normally surprised hikers and campers over the high Sierra, most were not caught off guard by the wintry change in the weather, thanks to the early “heads up” by the National Weather Service several days in advance. Nonetheless, a rare 1 to 3 inch blanket of snow fell above 10,000 feet by the morning of the 12th. A dusting of snow was even reported as low as 8,500 feet in Sequoia National Park. The last of the storm’s moisture and instability triggered isolated thunderstorms with dime sized hail over the Sierra during the afternoon hours of the 12th. This was the only day of the month when measurable rain fell in parts of the San Joaquin Valley, the bulk of which fell south of Madera County. Rainfall amounts were spotty and ranged from just a few hundredths to two tenths of an inch in briefly heavy thunderstorms. Up to a half inch of precipitation fell in the foothills and higher elevations of the Sierra from this storm system.

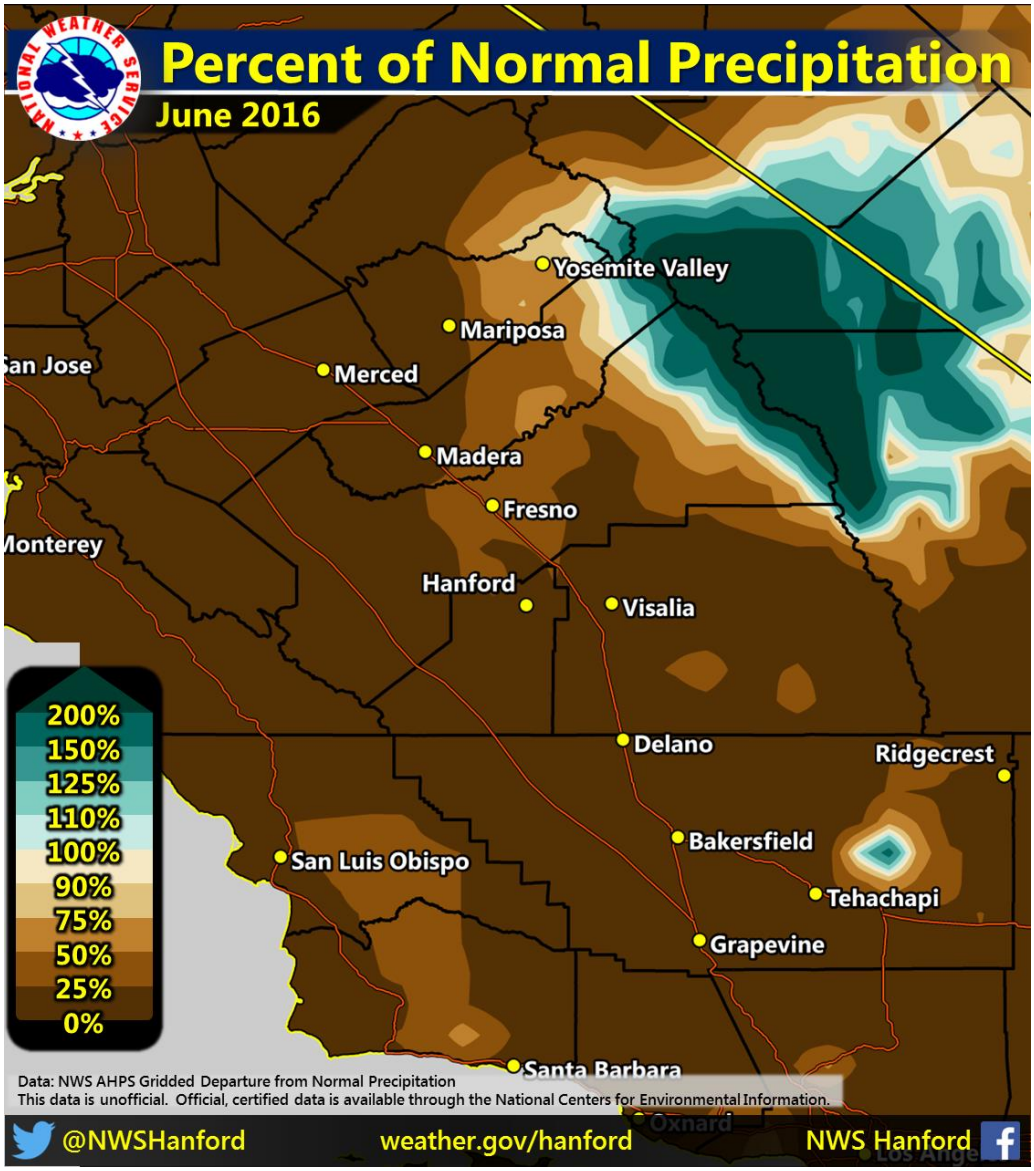
On the other hand, hot temperatures, low humidities and extremely dry fuels elevated the fire danger throughout the HSA, particularly over the higher terrain. Consequently, a deadly wildfire erupted in the Kern County mountains approximately 40 miles northeast of Bakersfield during the late afternoon hours of the 23rd. It was named the Erskine wildfire, and it became the largest wildfire in California so far in 2016. This wind whipped fire spread rapidly northeastward to the south shore of Lake Isabella by the 25th and scorched the communities of South Lake and Mountain Mesa during its first 48 hours. By the end of June, the fire had consumed over 48,000 acres, destroyed 285 homes and killed at least two people. The smoke plume from this fire moved over the southern San Joaquin Valley during the morning of the 25th but by that afternoon southwesterly winds aloft carried much of that smoke into the Tulare County mountains. A brief northerly surge of monsoonal moisture triggered a few thunderstorms in the vicinity of the Erskine fire during the evening hours of the 27th. Those thunderstorms were a mixed blessing, however. While they doused the fire

with nearly a half inch of rain, they also brought gusty and erratic winds to the region. Monsoonal moisture hung around until the end of June and helped produced isolated afternoon thunderstorms over the highest elevations of the southern Sierra. Precipitation was scanty at best over the Sierra during the last 3 days of the month.

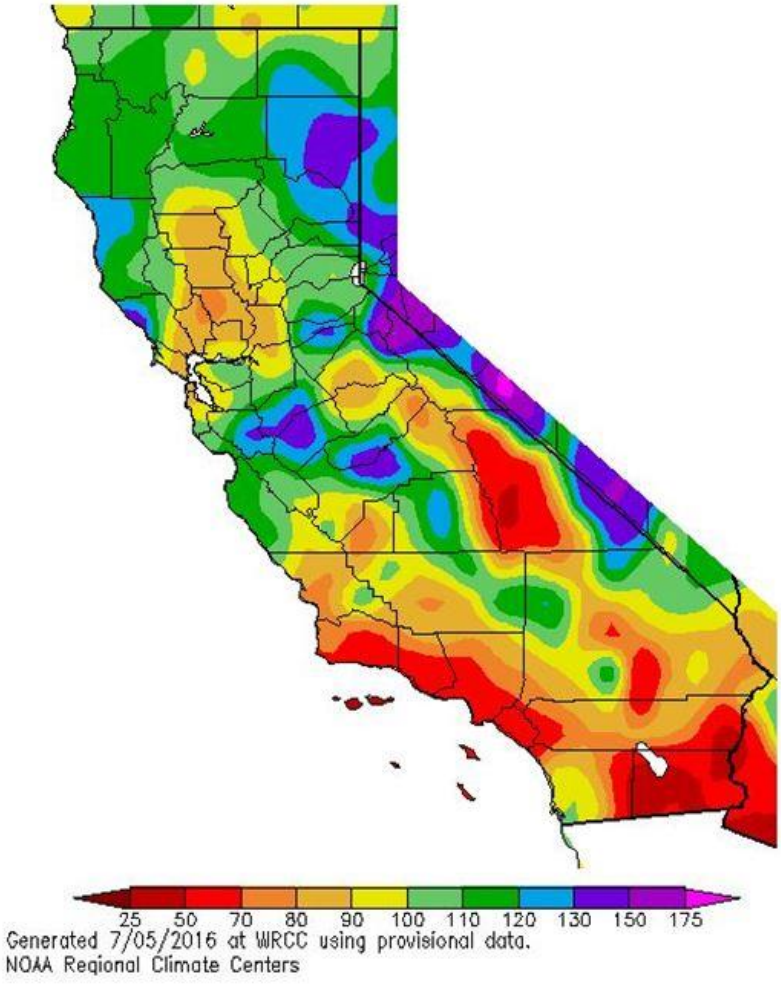
From a hydrological perspective, June was typically rather dry with below normal precipitation. Most of the major reservoirs in the Sierra were releasing water this month and for the first time since 2011, many of the mainstem rivers besides the San Joaquin River and the Merced River actually had water flowing in them in the San Joaquin Valley! Water capacities at the reservoirs ranged from just 17 percent of normal at San Luis Dam to 86 percent of normal at Friant Dam. Overall, the water capacity of the reservoirs throughout the HSA averaged 48 percent of normal by July 1st .

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

The maps below show the percentage of normal precipitation throughout central California for June, 2016 and a statewide look of precipitation with respect to normal for the season which runs from July 1st to July 1st.



Percentage of Normal Precipitation
July 1, 2015 through June 30, 2016



cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO