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: JULY YEAR: 2013

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:
National Weather Service/Office of Hydrology
1325 East-West Highway #7116 Kevin Durfee
Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: August 2, 2013

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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 \mid An ${\bf X}$ inside this box indicates that no flooding occurred for the month +---+ within this hydrologic service area.

July averaged a good 3 degrees warmer than normal throughout the central California interior. A strong upper level ridge of high pressure dominated the pattern during the first ten days of the month. During this time, high temperatures were persistently in the triple digits in the San Joaquin Valley, lower foothills and the Kern county desert. Afterward, and for much of the remainder of July, the upper level ridge settled over the Four Corners region while an upper level trough anchored itself off the Pacific Northwest coast. Central California remained in between these two systems for the remainder of the month and under a prevailing southwesterly flow aloft. A tug of war took place over central California as the Four Corners ridge tried to build westward and the offshore trough tried to move inland. When the upper level trough exerted its influence on the HSA, it brought refreshing marine intrusions, albeit shallow, into the San Joaquin Valley. This occurred from the 16th through the 18th and again during the last few days of July. Ultimately, however, the Four Corners ridge won the battle and brought triple digit heat into the San Joaquin Valley and adjacent foothills in addition to the Kern county desert, namely from the 19th until about the 22nd and again from the 24th through the 28th.

Whenever the Four Corners ridge tried to build westward, it was too often accompanied by a northward influx of monsoonal moisture. This occurred briefly on the 10th and was followed by monsoonal surges from the 21st through the 23rd and again from the 25th through the 27th. In each case, thunderstorms frequented the mountains and desert, and a few of them produced very heavy rain and localized flooding. Of the 3, the most prolific monsoonal surge occurred on the 22nd as torrential downpours produced flash flooding in the Kern county desert. A section of Garlock Road was washed out and left many motorists stranded in up to 2 feet of water, some of which had to be rescued by emergency officials. A couple of thunderstorms even wandered out of the foothills and into the east side and south end of the San Joaquin Valley from the afternoon of the 22nd into the early morning hours of the 23rd. The remainder of the San Joaquin Valley had little more than sprinkles during each monsoonal event. Lightning also sparked several wild fires in the mountains during this period, the largest of which was the Aspen wildfire In the higher elevations of Madera county. Smoke aloft from this fire spread into the San Joaquin Valley on the 30th and was fortunately dispersed by southwesterly winds aloft by the afternoon of the 31st.

To recap, July was exceptionally warm. In fact, it was the 3rd hottest July in Fresno and the 6th hottest in Bakersfield since record keeping began in the late 1800s. By the end of the month, water levels in the major reservoirs were quite low, averaging only 23 percent of normal capacity.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Warning	.Tulare county mountains	2312Z	04-JUL
Flash Flood Watch	.Tulare county mountains, Kern county		
	Mountains and desert	1126Z	21-JUL
Flash Flood Warning	Tulare county mountains	2122Z	22-JUL
Flash Flood Watch	Sierra Nevada from YNP to Kings Canyon	2219Z	22-JUL
Flash Flood Warning	Tehachapi mountains (Pine Mountain Club)	2225Z	22-JUL
Flash Flood Warning	Kern county desert (California City)	2354Z	22-JUL
Flash Flood Warning	. Tulare county mountains	0012Z	23-JUL
Small Stream Flood Advisory	Kern county desert	0134Z	23-JUL
Flash Flood Warning	Kern county mountains	0004Z	24-JUL
Small Stream Flood Advisory	Foothills and higher elevations of the Sierra	2210Z	25-JUL
Flash Flood Watch	.Kern county mountains and desert	0858Z	26-JUL
Flash Flood Watch	expanded to include the Sierra Nevada	1713Z	26-JUL
Urban/Small Stream Flood Advisory	.Kern county desert (Ridgecrest)	0236z	28-JUL
Flash Flood Warning	.Tulare county mountains	2010Z	28-JUL
Flash Flood Warning	.Kern county mountains (Walker Pass)	2251Z	28-JUL

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO