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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: **2011**

**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: August 5, 2011

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. |

Large water releases from the dams continued during the first two weeks of July with resultantly high flows along all of the rivers in the HSA. Since the reservoirs were being fed by rapidly melting snow over the high Sierra, rivers downstream of the dams ran cold, fast and deep and became a threat to public safety. Minor flooding occurred in communities and parks adjacent to the rivers, particularly the San Joaquin river and the Kings river. Sections of the aforementioned rivers were closed to boaters, swimmers and rafters up until the middle of the month, after which time the rivers receded to a level that county officials deemed safe for recreational activities. Although all rivers ran high, none of the forecast points within our HSA came close to flood stage. The Merced river at Stevinson peaked about a half foot below monitor stage on the 3rd and remained just below monitor stage through the 10th before receding.

Weatherwise, the hydrologic highlights of the month included two distinct influxes of monsoonal moisture. The first surge of monsoonal moisture began July 3rd and continued through July 6th. During every one of these days, afternoon thunderstorms erupted over the Kern county mountains and desert in addition to the higher elevations of Tulare county. Most notably, a thunderstorm complex that developed during the late afternoon hours of July 4th, deluged the city of Rosamond with 1.5 inches to 2.25 inches of rain and caused extensive street flooding. Residents described it as a cloudburst that was preceded by strong winds and near zero visibility in blowing dust. Thunderstorms visited the Rosamond area the following afternoon and, while they did not cause a repeat of flooding, strong winds that accompanied the storms felled trees and power lines in the city. Meanwhile, heavy rain produced flooding in the Kern county desert along highway 14 at Red Rock-Randsburg road on the afternoon of the 5th. The next influx of monsoonal moisture did not occur until the end of the month. Its arrival sparked isolated thunderstorms over the mountains and desert on the afternoon of the 30th. A few thunderstorms wandered northward out of the Tehachapi mountains and into the San Joaquin Valley on the morning of the 31st and produced locally heavy rain. Nearly a tenth of an inch of rain fell in Hanford while up to three tenths of an inch of rain fell in Lindsay. Outside of these two monsoonal events, dry weather prevailed throughout the central California interior.

The synoptic pattern favored a dry southwesterly flow aloft in between a nearly stationary and very strong upper level ridge of high pressure over Texas and a quasi stationary upper level trough off the Pacific Northwest coast. A prevailing onshore flow brought frequent intrusions of marine air into the San Joaquin Valley and kept temperatures elsewhere at seasonable levels. A particularly deep intrusion of marine air into the San Joaquin Valley cooled temperatures several degrees below normal during the second week of July. Thermometer readings were no higher than the 80s in the San Joaquin Valley during the afternoons of the 14th, 15th and 16th as a result. In contrast, the month had two significant periods of above normal temperatures. A particularly long spell of hot weather occurred during the first nine days of the month which included an 8-day string of triple digit heat In the San Joaquin Valley from the 2nd through the 9th. Hot weather made a brief comeback toward the end of the month as the upper level ridge of high pressure over Texas expanded westward. Afternoon temperatures touched the century

mark in several locations of the San Joaquin Valley from the 27th through the 30th. As July drew to a close, most of the major reservoirs in the HSA were holding about 85 percent of their normal water capacity.

**HYDROLOGIC PRODUCTS ISSUED**

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| Hydrologic Statement……. | Merced River at Stevinson | 1538Z | 01-JUL |
| Hydrologic Statement……. | Merced River at Stevinson | 1541Z | 02-JUL |
| Flash Flood Watch……. | Tulare County mountains; Kern County mountains and desert | 2154Z | 04-JUL |
| Flash Flood Warning…….. | Kern County desert (Rosamond area) | 2348Z | 04-JUL |
| Flash Flood Warning…….. | Kern County desert (Highway 14 near Red Rock-Randsburg road) | 0142Z | 06-JUL |
| Flash Flood Watch……. | Tulare County mountains; Kern County mountains and desert | 0421Z | 06-JUL |
| Flash Flood Warning…….. | Tulare County mountains | 2004Z | 06-JUL |
| Flash Flood Warning…….. | Kern County desert (Highway 14 in the Red Rock Canyon area) | 2256Z | 06-JUL |
| Flash Flood Watch……. | Tulare County mountains; Kern County mountains and desert | 1039Z | 07-JUL |
| Flash Flood Watch……. | Southern Sierra Nevada and the Kern County mountains and desert | 1013Z | 30-JUL |

cc: W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO