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: **MAY** YEAR: **2017**

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 3, 2017

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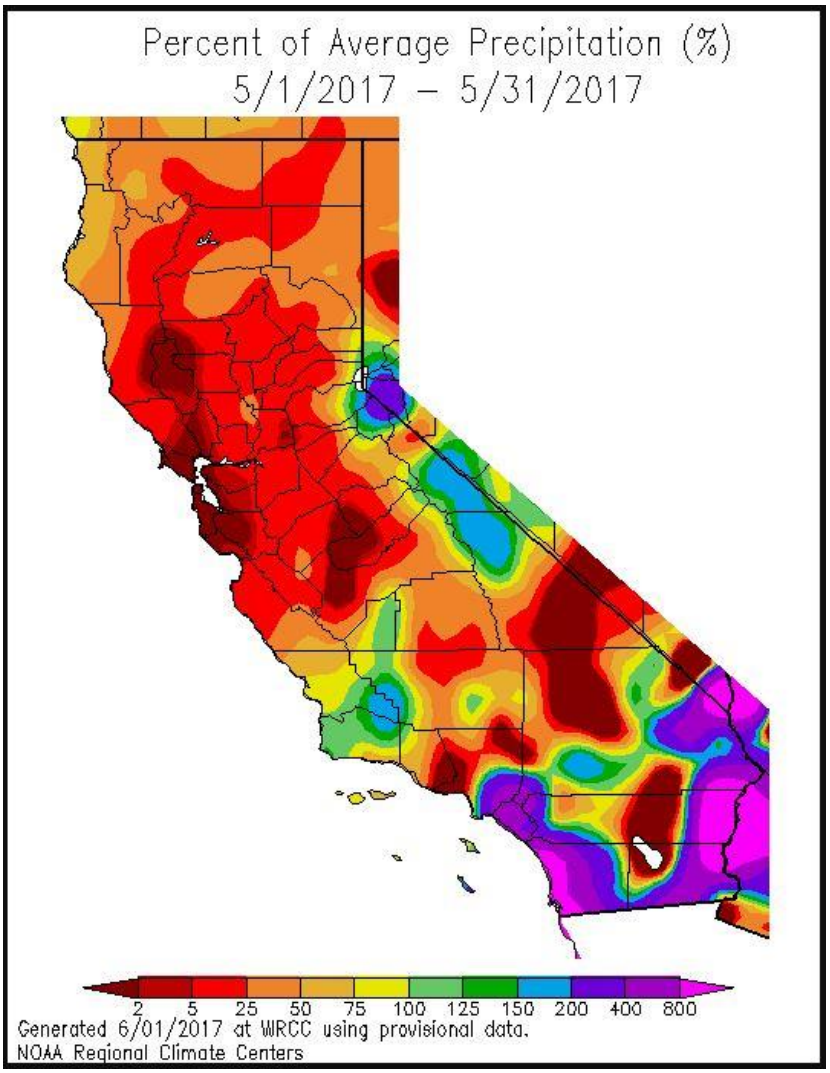
¦ ¦ An **X** inside this box indicates that no flooding occurred for the month
+---+ within this hydrologic service area.

The 2017 snowmelt process was in full swing over the high Sierra during the month. A substantial snowpack over the Sierra, the deepest since the Spring of 2011, combined with warmer than normal temperatures, caused rapid melting of snow over the higher elevations of the Sierra which in turn brought an increase in water levels and flows along many rivers over the higher terrain through the month. The upper Merced River, which runs through Yosemite National Park, rose just above Flood stage on four separate occasions, namely from the 3rd into the 7th, for a second time between the 10th and 13th, with a repeat occurrence from the 23rd into the 25th.and for a final time during the early morning hours of the 31st. (For specific details, please refer to the supplemental Flood Stage Report for the Merced River at Pohono Bridge.) Flooding was relatively minor in Yosemite National Park during these incidents with appropriate campground evacuations prior to each threat of flooding. Nonetheless, reservoirs continued to fill with water and by the first of June, water capacities in the dams averaged around 80 percent of normal. There was still plenty of snow left to melt over the Sierra by June 1st, which was running about 150 percent of normal over the southern Sierra. Otherwise, rivers throughout the HSA were flowing swiftly the entire month. The Merced River at Stevinson remained above its respective monitor stage through the 19th then gradually receded during the remaining days of the month. The San Joaquin River at Newman was close to its monitor stage at the beginning of the month with a general downward trend through the end of May.

May, 2017 ended up drier than normal across much of the central California interior. One, and at most two days saw measurable rain in the San Joaquin Valley. The first occurrence of wet weather came during the first weekend of the month as a closed Low trekked southward along the California coast then made a left turn into northern Baja on the 7th. Wraparound moisture associated with this storm system moved over the southern half of the HSA that weekend. Rain amounts varied from as little as a hundredth of an inch to around a half inch in locally heavier showers. Little or no precipitation fell north of Fresno county from this storm system. A cold frontal passage on the night of the 11th was accompanied and followed by blustery northwest winds in the San Joaquin Valley and the Kern county desert. In its wake, drizzle and light rain fell along the western slopes of the Sierra and the north facing slopes of the Tehachapi mountains on the 12th. A rather deep marine intrusion in the San Joaquin Valley was accompanied by a good deal of cloudiness on the 12th where afternoon temperatures got no higher than 70 degrees in several locations. That marine air mass remained in the San Joaquin Valley and lower foothills through the 16th where high temperatures remained much cooler than normal. Minimum temperatures in the San Joaquin Valley during this period were as chilly as the lower 40s in some locations. Another strong inland push of ocean cooled air occurred during the morning of the 26th and the marine layer was deep enough to bring a rare infiltration of low stratus into much of the San Joaquin Valley. The marine stratus lingered most of the day on the east side and south end of the San Joaquin Valley on the 26th and kept maximum temperatures several degrees cooler than normal. The month had its share of unseasonably warm days, too, with 10 or more days of 90-degree high temperatures in the San Joaquin Valley, lower foothills and the Kern county desert The longest spell of extremely warm weather occurred from the 19th through the 24th. May 23rd was the hottest day of the month and it was the first day this year of widespread triple digit heat in the San Joaquin Valley. The Summerlike

warmth was a result of a strong upper level ridge of high pressure that anchored itself over California.
A cold frontal passage on the morning of the 31st lowered high temperatures a good 10 to 20 degrees and ended the month much cooler than it began. Additionally, this cold front brought light precipitation into the San Joaquin Valley and much of the higher terrain on the 31st. Rain amounts were rather nominal with this front and generally less than two tenths of an inch. Despite the large variance in high temperatures during the month, May, 2017 averaged slightly warmer than normal.



HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flood Warnings

Merced River @Pohono Bridge	1528Z	2-MAY
Merced River @Pohono Bridge	1532Z	9-MAY
Merced River @Pohono Bridge	1529Z	12-MAY
Merced River @Pohono Bridge	1424Z	22-MAY
Merced River @Pohono Bridge	1540Z	28-MAY

Flood Statements

Merced River @Pohono Bridge	0915Z	4-MAY
Merced River @Pohono Bridge	1515Z	4-MAY
Merced River @Pohono Bridge	2033Z	4-MAY
Merced River @Pohono Bridge	1452Z	5-MAY
Merced River @Pohono Bridge	1538Z	5-MAY
Merced River @Pohono Bridge	2022Z	5-MAY
Merced River @Pohono Bridge	1535Z	6-MAY
Merced River @Pohono Bridge	0517Z	7-MAY
Merced River @Pohono Bridge	1958Z	9-MAY
Merced River @Pohono Bridge	1507Z	10-MAY
Merced River @Pohono Bridge	2102Z	10-MAY
Merced River @Pohono Bridge	1527Z	11-MAY
Merced River @Pohono Bridge	2337Z	11-MAY
Merced River @Pohono Bridge	2232Z	12-MAY
Merced River @Pohono Bridge	1520Z	13-MAY
Merced River @Pohono Bridge	1557Z	23-MAY
Merced River @Pohono Bridge	1946Z	23-MAY
Merced River @Pohono Bridge	1441Z	24-MAY
Merced River @Pohono Bridge	2050Z	24-MAY
Merced River @Pohono Bridge	1428Z	25-MAY
Merced River @Pohono Bridge	2133Z	25-MAY
Merced River @Pohono Bridge	1535Z	29-MAY
Merced River @Pohono Bridge	1423Z	30-MAY
Merced River @Pohono Bridge	2032Z	30-MAY
Merced River @Pohono Bridge	1417Z	31-MAY
Merced River @Pohono Bridge	2030Z	31-MAY

Hydrologic Outlooks

High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	2033Z	18-MAY
High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	1559Z	19-MAY
High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	1554Z	20-MAY
High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	1550Z	21-MAY
High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	1645Z	26-MAY
High flows along rivers; Flood threat for upper Merced River @Pohono Bridge	1600Z	27-MAY

Hydrologic Statements

San Joaquin R @Newman, Merced R @Stevinson	1601Z	1-MAY
San Joaquin R @Newman, Merced R @Stevinson	2023Z	1-MAY
Merced R @Stevinson,	1530Z	2-MAY
Merced R @Stevinson,	2033Z	2-MAY
Merced R @Stevinson,	1812Z	3-MAY
Merced R @Stevinson,	2034Z	3-MAY
Merced R @Stevinson,	1538Z	7-MAY
Merced R @Stevinson,	2036Z	8-MAY
Merced R @Stevinson,	1510Z	14-MAY
Merced R @Stevinson,	1547Z	15-MAY
Merced R @Stevinson,	2139Z	15-MAY
Merced R @Stevinson,	1518Z	16-MAY
Merced R @Stevinson,	2050Z	16-MAY
Merced R @Stevinson,	1500Z	17-MAY
Merced R @Stevinson,	2020Z	17-MAY
Merced R @Stevinson	1437Z	18-MAY

CC:

W/OH12x1
W/WR2
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