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: **APRIL** YEAR: **2012**

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: May 1, 2012

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.

April brought a wide variety of weather to the central California interior. The month delivered a damaging late season frost on the morning of the 6th, record setting heat during the weekend of the 21st and 22nd , and 3 consecutive days of hail producing thunderstorms in the San Joaquin Valley on the 11th, 12th and 13th. That 1-2-3 convective punch came from three separate but cold Pacific storm systems as they trekked through the central California interior between the 11th and 13th. In addition to triggering afternoon thunderstorms with small hail in the San Joaquin Valley, the combined effects of these storms produced impressive 3-day precipitation totals throughout the HSA. The San Joaquin Valley and adjacent foothills were drenched with1 to 3 inches of rain while the storms dumped up to 3 feet of snow over the higher elevations of the Sierra. Friday the 13th was an unlucky day for anyone traveling into the mountains because it was the day the third and coldest of the trio of storms dumped a thick blanket of snow as low as 2500 feet. The snow clogged major arteries between Los Angeles and the San Joaquin Valley during the evening of the 13th and forced CHP to close Interstate 5 through the Grapevine until the following morning. Over the higher elevations of Kern County, this storm alone dumped two feet of snow on Pine Mountain Club. Locally heavy rain in the San Joaquin Valley and adjacent foothills produced minor urban and highway flooding on the afternoon of the 13th. Otherwise, Friday the 13th was unseasonably cool with temperatures no higher than the 40s in the lower foothills and upper 50s at best in the San Joaquin Valley.

The storm track shifted north of California by the 15th and remained well north of the district through the 24th as an upper level ridge of high pressure took control of the pattern. Until this ridge amplified and gained solid footing over central California on the 20th, weak but dry cold fronts occasionally venturing in from the north kept temperatures from straying too far from normal throughout the HSA. A major warming trend from the 20th through the 22nd brought temperatures to summer-like levels. Thermometer readings soared into the 90s for the first time this year in the San Joaquin Valley and the Kern county desert during the third weekend of April. Although the spell of unseasonably warm weather only lasted four days, it caused rapid melting of snow over the mountains with an increase in water levels and flows along many of the rivers in the southern Sierra. The Merced river at Pohono Bridge in Yosemite National Park rose to within two and a half feet of flood stage during this period.

Fortunately, the weather turned cooler but unsettled by the 25th as a Pacific storm approached the central California coast. Although the storm tracked inland over southern California with the bulk of its precipitation on the night of the 25th, it still brought up to a half inch of rain to the San Joaquin Valley with as much as 1.5 inches of water in the foothills and higher elevations of the Sierra. The storm also spawned an intense line of thunderstorms from the Kern county portion of the San Joaquin Valley into Tulare county and the adjacent foothills during the evening of the 25th. The thunderstorms produced street and urban flooding in the city of Visalia where nearly three-quarters of an inch of rain fell in just a 2-hour period. A cold front brought additional showers to the HSA on the 26th. Until then, snow levels remained generally above 9000 feet. The combination of rain and snowmelt below this elevation caused further rises along most rivers in the Sierra. As a result, the Merced river at Pohono Bridge crested just two feet below flood stage on the afternoon of the 26th. Dry weather finished out the month as an upper level ridge of high pressure anchored over the eastern Pacific regained control of the pattern across central California. A prevailing onshore flow kept temperatures pretty close to normal through the 28th. The last two days of the month finished several

degrees warmer than normal as the eastern Pacific ridge of high pressure built more strongly into the central California interior.

In summary, April was wetter and warmer than normal. Despite above normal precipitation, the month ended with a seasonal deficit of about 3 inches and most of the major reservoirs were holding only 67 percent of their normal water capacity. As of May 1st, the snowpack over the southern Sierra Nevada averaged about 35 percent of normal…a far cry from the 170 percent of normal only one year earlier.

HYDROLOGIC PRODUCTS ISSUED

Urban/Small Stream Flood Advisory…Kern county desert	2019Z	13-APR
Urban/Small Stream Flood Advisory…San Joaquin Valley, Sierra foothills	2309Z	13-APR

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO