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: **2013**

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 4, 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).

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

May 2013 was drier and much warmer than normal throughout the central California interior. In fact, it was the 7th warmest May on record in Fresno with climatological data going back to the late 1800s. Although high temperatures peaked in the 90s in the San Joaquin Valley on several occasions, May 12th was the hottest day of the month with widespread triple-digit heat, and not just in the San Joaquin Valley, but in the lower foothills and the Kern county desert. The high temperature of 102 degrees in Fresno on the 12th set a new record for the date. Fortunately, the spell of hot weather only lasted a few days (May 11th through the 13th) and was put to an end by a dry cold frontal passage on the 14th. In contrast, just two days later, high temperatures were only in the 70s in the San Joaquin Valley, thanks to a healthy influx of ocean-cooled air. Temperatures rebounded to unseasonably warm levels again on the 20th and 21st until a robust onshore flow brought marine reinforcements back into the San Joaquin Valley, cooling high temperatures into the 70s again on the 22nd and 23rd . The weather remained cooler than normal in the San Joaquin Valley for the next several days and it wasn't until the 31st that temperatures finally rose above normal.

Only one storm system brought measurable rain to the San Joaquin Valley as it moved across the HSA from the 6th through the 8th. Although rainfall was generally light in the valley (generally under two tenths of an inch) heavier showers in the vicinity of Chowchilla and on the northwest side of Bakersfield produced minor flooding. Showers were more numerous over the mountains and produced nearly an inch of rain in a few localities. Tropical moisture spun up by this storm system also produced isolated thunderstorms over the HSA on the 6th and 7th. One thunderstorm spawned a weak tornado in the Bakersfield area during the evening of the 6th. Fortunately, the tornado formed in the dry riverbed of the Kern River and posed no harm to lives or property, yet it was a sight to behold. Another noteworthy thunderstorm developed in Yosemite National Park during the afternoon of the 9th and dumped small hail on the floor of Yosemite Valley along with nearly two inches of rain. A drier and more stable air mass finally moved into the HSA by the 10th as the storm system exited into northern Arizona. A much weaker storm system brought isolated light showers to the higher elevations of the Sierra north of Kings Canyon on the 16th while the lower elevations from Fresno county northward received nothing more than sprinkles out of this storm system.

The month was also highlighted by occasionally strong and gusty winds, particularly in Kern county and not just in the usual places such as the mountains and desert. Winds gusted as high as 50 mph on the west side of the San Joaquin Valley from the afternoon of the 4th through the evening of the 5th . In the Bakersfield area, winds were clocked at 45 mph on the 5th with reports of blowing dust, fallen trees and blown tumbleweeds. The strongest winds were observed at the foot of the Grapevine where a peak gust of 59 mph occurred at the CHP weigh station during the late afternoon hours of the 5th. The brisk onshore flow event that began on the 22nd produced wind gusts to 38 mph and 44 mph in Merced and Lemoore Naval Air Station respectively with gusts as high as 56 mph in the Kern County mountains and desert. Blustery winds continued with regularity through and below the mountain passes of Kern County and along the west side of the San Joaquin Valley through the 28th . The persistence of this strong onshore

flow was the result of a deep upper level Low pressure system that remained nearly stationary over the Pacific Northwest. The most serious impact from the strong winds was blinding dust in the Kern County desert on the 28th. Visibilities dropped to near zero that afternoon just south of Rosamond and caused numerous traffic accidents along Highway 14.

Reservoirs, which are still normally filling with water from snowmelt this time of year, received little or no replenishment this month because of a depleted snowpack over the Sierra. As a result, the water capacity at most reservoirs was no higher at the end of the month than it was at the beginning. As of June 1st, the average water capacity of the major reservoirs throughout the HSA was about 43 percent of normal. That's a stark contrast from one year earlier when reservoirs were nearly 72 percent full.

NO HYDROLOGIC PRODUCTS ISSUED THIS MONTH

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO