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: **2015**

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 5, 2015

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.

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Only two moisture-laden storm systems brought water into the central California interior during the month, and it was hardly enough to ease the long term drought. The first of these two storms packed a double punch, the first of which sailed through the HSA on the 5th with generally light precipitation. The second part of this storm system produced copious rain and high elevation snow from the evening of the 6th until its exit into the Great Basin on the morning of the 8th. The cold and unstable atmospheric environment associated with this system triggered isolated thunderstorms with small hail, gusty winds and vivid cloud to ground lightning in the San Joaquin Valley and adjacent foothills on the afternoon of the 7th. The storm dumped 6 to 12 inches of fresh snow on the Sierra above 6500 feet by the morning of the 8th. Rain drenched the lower elevations north of Kern County with a quarter of an inch to three quarters of an inch. In Kern County, rain amounts varied from less than a tenth of an inch in the San Joaquin Valley to a quarter to a half inch in the mountains. The Mojave Desert was rain shadowed by strong downslope winds during this 3 day period.

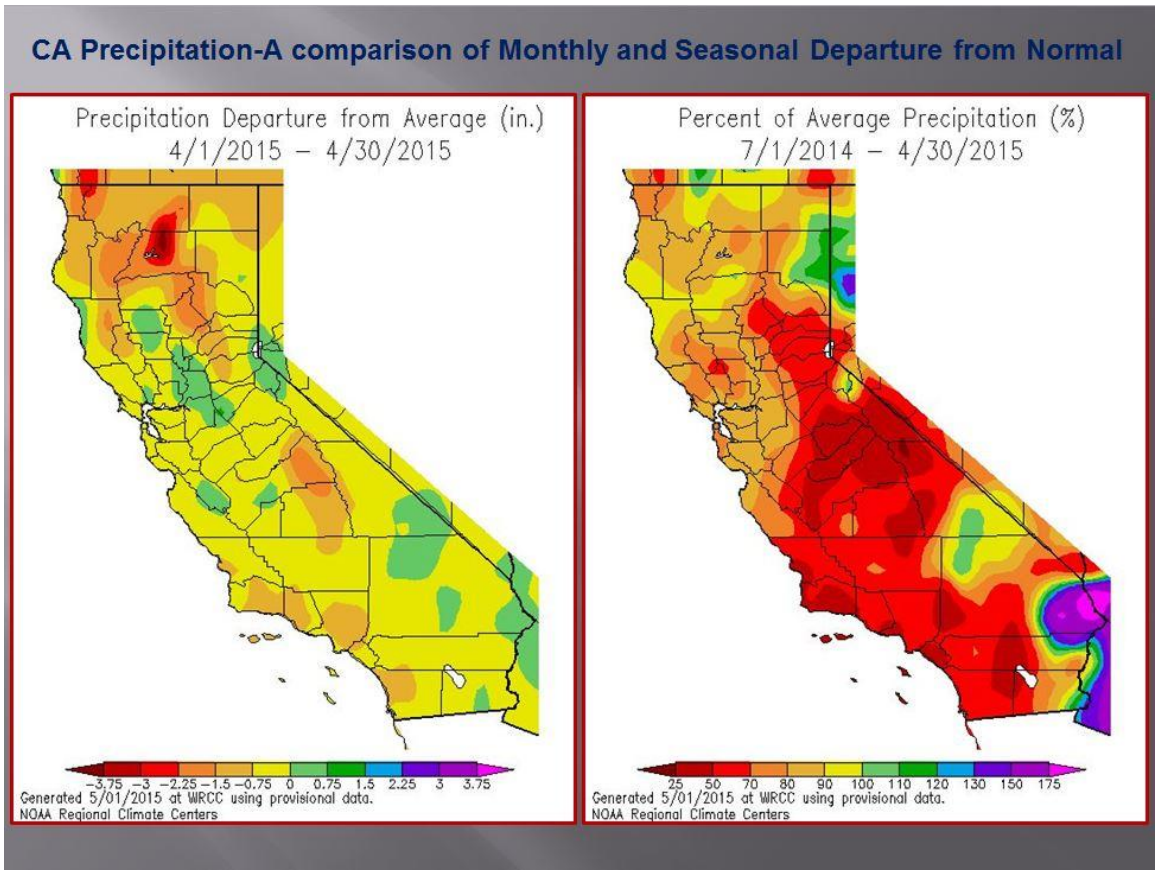
The second storm was a quick hitter but packed a wet wallop as it barreled southward through the HSA on the morning of the 25th. Much like its predecessor, the storm brought the heaviest precipitation north of Kern County and left a fresh 4 to 8 inch blanket of snow on the Sierra above 5000 feet. Snow even accumulated to a depth of about two inches on the floor of Yosemite Valley (elevation 4000 feet). The lower elevations north of Kern County received a good soaking rain with amounts ranging from two tenths of an inch to nearly an inch in the San Joaquin Valley and upwards of nearly two inches in the Sierra foothills. Generally a quarter of an inch or less fell in the Tehachapi Mountains from this storm. Less than a tenth of an inch of rain fell in the Kern County portion of the San Joaquin Valley while the desert was again rain shadowed by brisk westerly winds that gusted to 45 mph or higher.

The storms referenced above were really just anomalies in an otherwise dry month. An upper level ridge of High pressure held dominance on the weather pattern across central California for most of April. Weak storm systems that formed over the Eastern Pacific were deflected southward by this ridge, eventually ending up over northern Baja and too far south to bring measurable precipitation into central California. The ridge was also to blame for unseasonably warm weather across the HSA this month. On at least 23 days, temperatures averaged well above normal at most climate stations and on nearly half of those days, high temperatures were in the 80s in the San Joaquin Valley and lower foothills. Temperature-wise, April 2015 averaged warmer than normal.

By the end of April, the snowpack over the southern Sierra was pitiful, averaging only 3 percent of normal, while water in the reservoirs were at historically low levels. As the HSA was readying up for its traditional dry season, grave concerns surfaced about the scarcity of water to irrigate San Joaquin Valley farmland and the potentially detrimental impact it would have on lives, agriculture and the state's economy in the months ahead. Governor Brown imposed statewide mandatory water restrictions for residences and businesses while the National Park Service geared up for an early start to the Fire Weather season. As of

May 1st, the water capacity of the reservoirs within the HSA averaged only 22 percent of normal while low flows persisted on all of the downstream rivers. Pictured below is a comparison of the state's precipitation departure from normal for April, 2015 (in inches) and the percentage of normal since the season began on July 1, 2014.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.



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W/OH12x1
W/WR2
CNRFC
WFO HNX
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