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: **SEPTEMBER** YEAR: **2018**

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: October 10, 2018

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.

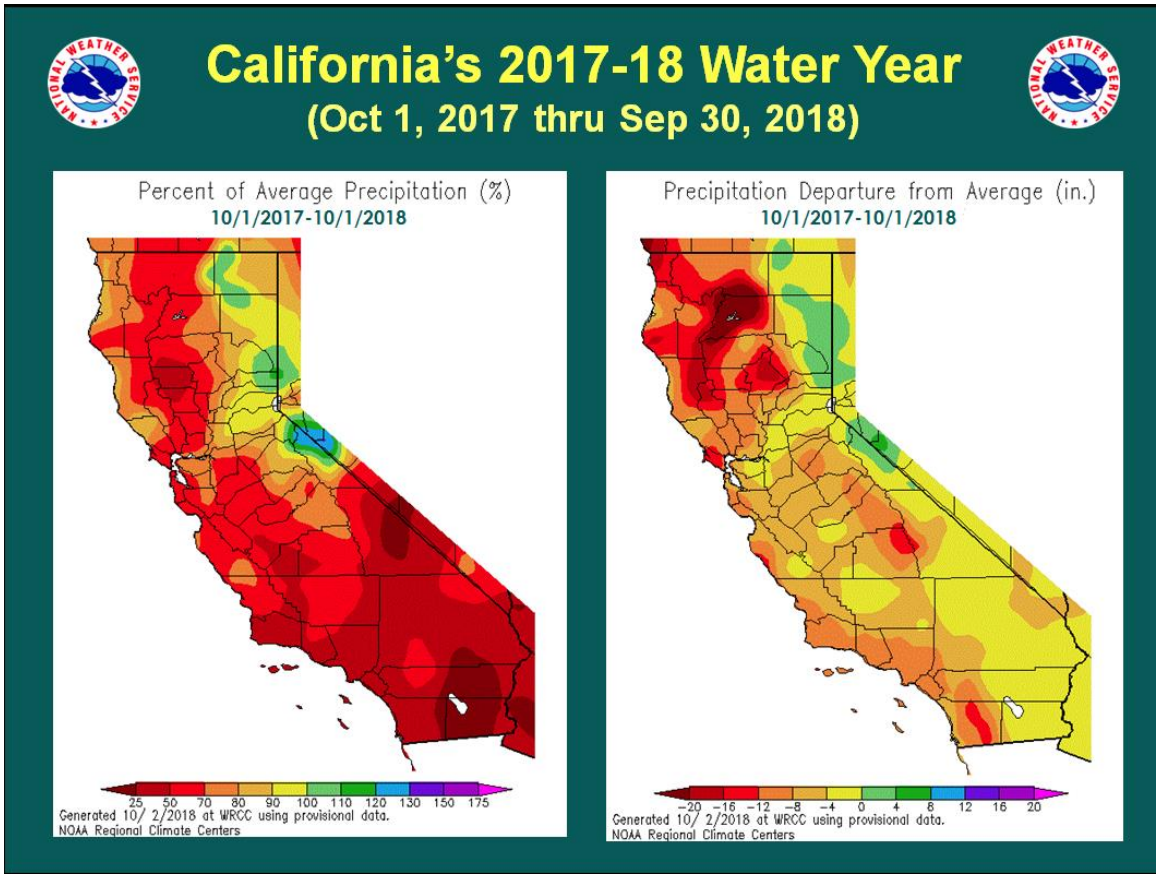
September, 2018 brought a dry finish to an already abnormally dry water year throughout central California. In fact, much of the Golden State ended up with a substantial precipitation deficit for the 12-month period ending September 30th. The most profound deficit was in the Mount Shasta region. Additionally, much of southern California was extraordinarily dry as can be seen in the maps below this summary.

September's dry weather was largely the result of a strong upper level ridge of high pressure. This ridge parked itself near the California coast during the first 11 days of the month. Upper level disturbances that overtopped this ridge slid down its eastern side and into the Great Basin between September 3rd and September 6th and sparked isolated afternoon thunderstorms near the Sierra crest. Those were the only days of convection the entire month. Much like August, September, 2018 there was an absence of northerly influxes of monsoonal moisture into central California. .Otherwise, the first eleven days of September were highlighted by dry weather and unseasonably warm afternoons. A significantly cooler air mass invaded the HSA on the 12th and was ushered into the HSA by strong, gusty winds, especially through and below the mountain passes, thanks to a storm system that moved into the Pacific Northwest. Otherwise, an onshore flow prevailed over the central California interior through the 20th and kept temperatures cooler than normal throughout the HSA. Well above normal temperatures returned to the district by the 21st and persisted through the 28th as the upper level ridge of high pressure became reestablished over the Golden State. A robust onshore flow during the last two days of the month brought a substantially cooler air mass into the HSA, as a low pressure system over the Eastern Pacific approached the central California coast.

Water levels gradually lowered in all of the major reservoirs through the month. By early October, the percentage of water capacity ranged from only 6 percent of normal at Terminus Dam to 59 percent of normal at New Exchequer. The average water capacity of all nine major reservoirs ended up at approximately 30 percent of normal by the first week of October.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.

On the next page, we get a perspective of how dry the 2017-2018 Water Year was across much of the Golden State. The Water Year typically runs from October 1st through September 30th. The maps were generated from the Western Region Climate Center.



CC:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO