S
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:

MONTH: JUNE YEAR: 2010

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:

National Weather Service/Office of Hydrology
1325 East-West Highway #7116 Kevin Durfee
Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: July 4, 2010

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).

+---+  $\mid$  An  ${\bf X}$  inside this box indicates that no flooding occurred for the month +---+ within this hydrologic service area.

During the first three weeks of June, central California served as a battleground between an upper level storm anchored off the coast of British Columbia and an upper level ridge of high pressure parked over southern California and Arizona. For much of this period, cold fronts that moved into the Pacific Northwest fell apart by the time they ended up in central California while the upper level ridge to the south fought for dominance. Temperatures averaged a good 3 to 5 degrees above normal during the first week of the month and accelerated snowmelt over the higher elevations of the Sierra which led to an increase in water levels on all rivers above the major reservoirs. As a result, rising waters along the upper Merced River produced minor flooding in Yosemite National Park during the first weekend of the month until about mid morning on June 8<sup>th</sup>, at which time the river finally began to recede as cooler air invaded the HSA. The Merced River at Pohono Bridge first rose to flood stage during the early morning hours of the 6<sup>th</sup> with diurnal fluctuations just above flood stage during the overnight hours of the 6<sup>th</sup> and 7<sup>th</sup>. Further details for the Merced River at Pohono Bridge are included in the supplemental NWS Form E-3. (attached) Otherwise, peak flows on all of the mainstem rivers in the HSA remained well below their respective monitor stages.

By the 9<sup>th</sup> of June, the storm off the British Columbia coast deepened and produced a healthy onshore flow across the central California interior through the 11<sup>th</sup> with significantly cooler weather as a result. Temperatures during this period averaged 4 to as much as 10 degrees below normal across the HSA. During the second weekend of June, the upper level ridge over southern California began building northward again. The warming trend that followed brought the first 100 degree temperatures of the year to Fresno on the 14<sup>th</sup> with thermometer readings in the upper 90s over the remainder of the San Joaquin Valley. Soon afterward, the storm off the British Columbia coast deepened and brought a robust onshore flow of cooler air into the central California interior on the 16<sup>th</sup>. An onshore flow prevailed through at least the 21<sup>st</sup> as dry cold fronts moved southward across the HSA and kept temperatures several degrees below normal.

The high pressure ridge over southern California built northward again on the  $22^{nd}$  and  $23^{rd}$  and warmed temperatures a few degrees above seasonable levels, but it wasn't long before the upper level trough off the Pacific Northwest coast settled southward and brought the return of a brisk onshore flow and cooler than normal temperatures to the HSA from the  $24^{th}$  through the  $26^{th}$ . Afterward, the high pressure ridge flexed Its muscle northward again and brought a dramatic warmup. Triple digit heat became widespread in the San Joaquin Valley and the Kern County desert during the last few days of the month as a result.

The 2009-2010 rainfall season across central California, which traditionally runs from July 1<sup>st</sup> through June 30<sup>th</sup>, averaged 110 percent above normal.

## HYDROLOGIC PRODUCTS ISSUED

Flood Watch for the Merced River @ Pohono Bridge 1017Z 04-JUN Flood Warning for the Merced River @ Pohono Bridge 1557Z 06-JUN

(Note: subsequent Flood Statements were issued daily for the Merced River @ Pohono Bridge until the threat of snowmelt flooding ended on the morning of June 8<sup>th</sup>. The final Flood Statement for this event was issued June 8<sup>th</sup> at 1628Z.

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO