

MONTHLY REPORT OF RIVER AND
FLOOD CONDITIONS

REPORT FOR:

MONTH: **OCTOBER** YEAR: **2010**

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: November 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).

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

October turned out warmer than normal with above average precipitation in most areas. The first 7 days were unusually wet as a storm system stalled near the central California coast brought daily occurrences of showers and thunderstorms to the HSA. The slow moving nature of these thunderstorms on October 2nd resulted in debris flows on Caliente Bodfish Road in Kern county and road flooding in Yosemite National Park between El Portal and Yosemite Valley. Isolated thunderstorms also developed in the San Joaquin Valley and produced locally heavy downpours. Portions of highway 33 in the vicinity of Taft became flooded on October 6th as a result. A drier and more stable airmass finally moved into the central California interior on the 7th as a ridge of high pressure began to build in from the Pacific. This ridge dominated the weather pattern through the 15th and brought clear skies and unseasonably warm afternoon temperatures to the HSA. Thermometer readings were in the 90s in the San Joaquin Valley and the Kern County desert on the 13th, 14th and 15th. A cold front moved southward across the HSA on the 16th with a few showers and was followed by unseasonably cool and unsettled weather afterward from the 17th through the 19th. A couple of thunderstorms approached severe levels on the 17th and the 19th in the Kern County mountains and desert.

The weather finally settled down by the 20th and remained dry and rather tranquil through the 22nd. In the meantime, a powerful storm system was brewing in the eastern Pacific. This Pacific storm, equipped with an abundance of subtropical moisture, dumped copious precipitation on the southern Sierra Nevada late in the weekend of October 24th. From its onslaught during the afternoon hours of the 24th until its abatement by the midday hours of the 25th, the storm drenched the higher terrain with 3 to 5 inches of rain and created rapid water rises on many rivers and streams along with excessive runoff. In Yosemite National Park, the Merced River at Pohono Bridge rose 5 feet in a 12 hour period and crested only a half foot below flood stage shortly before daybreak on the 25th. Minor flooding occurred in Yosemite National Park as a result. Warm air that accompanied this storm raised snow levels above 9000 feet in the Sierra. Fortunately, there was not an established snowpack beforehand. Otherwise, flooding in Yosemite National Park could have been potentially disastrous.

A much drier and colder airmass settled in behind this storm system on the 25th and 26th. For the first time since April, temperatures in some localities of the San Joaquin Valley and the Kern county desert bottomed out in the mid 30s during the predawn hours of the 27th. October 28th and 29th brought warmer afternoon temperatures as a ridge of high pressure aloft moved over California. Although the ridge slowed the eastward movement of a storm system over the eastern Pacific, it was finally kicked inland during the early morning hours of the 30th. This system brought generous precipitation to much of the HSA and blanketed the highest elevations of the Sierra with 4 to 8 inches of snow. The month ended dry and slightly cooler than normal, which was much the opposite of how it began.

HYDROLOGIC PRODUCTS ISSUED

Urban and Small Stream Flood Advisory...Kern County mountains	2048Z	01-OCT
Flash Flood Warning.....Kern County mountains	2131Z	02-OCT
HYDROLOGIC PRODUCTS ISSUED (continued...)		
Small Stream Flood Advisory.....Kern County mountains	0030Z	07-OCT
Urban and Small Stream Flood Advisory...San Joaquin Valley portion of Fresno/Tulare counties	0120Z	07-OCT
Urban and Small Stream Flood Advisory...San Joaquin Valley in the vicinity of Taft	2348Z	17-OCT
Hydrologic Statement.....Merced River @Pohono Bridge	2131Z	24-OCT
Hydrologic Statement.....Merced River @Pohono Bridge	1637Z	25-OCT

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO