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: **2020**

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 4, 2020

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 no flooding occurred for the month within this hydrologic service area.
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The parade of storms through southern California since the beginning of March continued undaunted through the third week of April. As you might expect, the water that was brought into the HSA from these storms, in addition to being extremely beneficial, left much of the central California interior wetter than normal for the month of April. Southern California, including Kern County, benefitted the most from these water loaded storms. Bakersfield experienced its third wettest April on record with historical archives dating back to the late 1800's. New daily rainfall records were set at Meadows Field airport on two consecutive days, April 8th and 9th, with rain totals of 0.67 inches and 0.62 inches, respectively. For the overall HSA, April precipitation ranged from a half inch to two inches in the San Joaquin Valley, two to four inches in the Sierra foothills and three to six inches in the mountains with local totals as high as eight inches. The Kern County desert also got waterlogged with up to two inches of rain in some locations. On the other hand, much of northern California was severely short changed on precipitation because most of the month's storms tracked too far west and remained well offshore the northern California coast. Maps showing precipitation departures from normal for the month and the percentage of normal precipitation for the month, the season, and the water year across the Golden State are provided below this summary. Enough precipitation fell over the southernmost part of the HSA in April to bring Kern County out of its ranking of "abnormally dry". Meanwhile, the drought intensified over the northern part of the state. This can be seen in the California Drought Monitor for April 30th below this summary.

Ninety percent of April's precipitation fell between the 4th and the 10th as storm systems tracked in quick succession through the southern part of the state. From the evening of the 7th through the morning hours of the 9th, enough rain fell to produce flooding in parts of Kern County. Street and urban flooding was reported in the Bakersfield area during this period. CHP observed mud and debris along eastbound lanes of Highway 58 southwest of McKittrick by the morning of April 9th. In the Kern county mountains, highway 178 had to be closed on the evening of April 8th because of rock slides. Large boulders blocked eastbound and westbound lanes of that highway until road crews could remove them. In the Kern County desert, sections of Red Rock-Randsburg road frequently flooded between the 7th and 9th as well. Meanwhile, up to a foot of snow fell in the Kern county mountains above 6,000 feet while up to three and a half feet of snow accumulated over the highest elevations of the Sierra. Elevations as low as 3,000 feet picked up a dusting of snow by the morning of April 6th.

Much of the HSA got a break from wet weather from the 10th through the 16th, but it wasn't long before the stormy cycle started up again. Like their predecessors, storms that brought water into the HSA tracked southward over the eastern Pacific parallel to but well offshore the northern and central California coast before turning inland at the latitude of the Channel Islands. Again, the bulk of the precipitation from these storms fell over the southernmost part of the HSA and generally in the mountains, especially in Tulare County and Kern County. Rain totals ranged from a tenth of an inch or less in the Kern County desert and the San Joaquin Valley to as much as 1.5 inches in the mountains. Isolated thunderstorms on the afternoon of the 17th dumped up to a half inch of rain on the west side of the San Joaquin Valley and produced rainfall rates of more than

an inch per hour in the Sierra. A cluster of thunderstorms in the vicinity of the Ferguson/Briceburg burn scar during the late afternoon hours of the 17th forced the precautionary closing of Highway 140 in Mariposa County. Fortunately campgrounds in Yosemite National Park were vacant and there was little if any vehicular traffic due to the closure of the park and schools in accordance with the "stay at home" order as a result of the Coronavirus pandemic. Incidences of flooding were localized and relatively minor on the 17th. CHP reported nuisance urban and highway flooding in the Fresno area and along a portion of highway 99 near Prosperity Avenue during the evening of the 17th. By April 21st, the storm track shifted well to the north of the HSA and remained over the Pacific Northwest for the remainder of the month.

April, 2020 ended up slightly warmer than normal, thanks to a spell of unseasonably warm weather during the last week of the month. April 25th marked the first day of ninety degree high temperatures in the San Joaquin Valley since October 8th, 2019. Much warmer than normal temperatures during the last several days of April accelerated the snowmelt process over the high Sierra. Despite modest water rises along rivers and streams below the dams, the threat of flooding remained low. After all, the amount of available snow to melt over the high Sierra averaged between 40 and 50 percent of normal during the final week of the month. In the meantime, water levels increased slightly in most of the reservoirs. As of May 1st, the water capacity of the reservoirs averaged 56 percent of normal.

HYDROLOGIC PRODUCTS ISSUED

Flash Flood Watches

Kern County desert	1248Z	08-APR

Flash Flood Warnings*

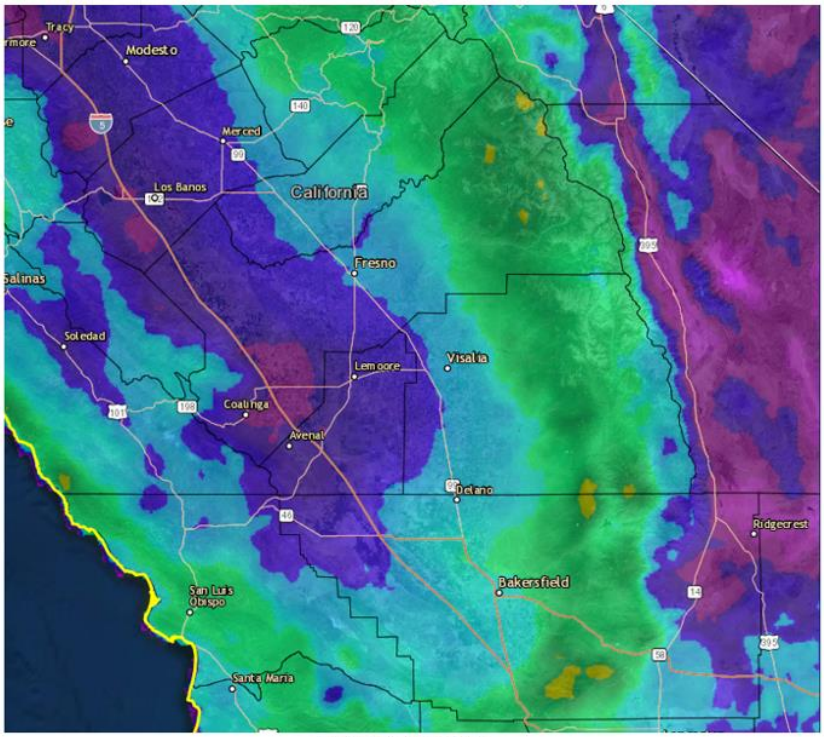
Briceburg/Ferguson Burn Scar (Mariposa County)	0153Z	06-APR
Mariposa County (El Portal, Badger Pass)	2147Z	17-APR
Briceburg/Ferguson Burn Scar (Mariposa County)	2204Z	17-APR

*Numerous Flash Flood Statements were issued as follow ups to the Flash Flood Warnings

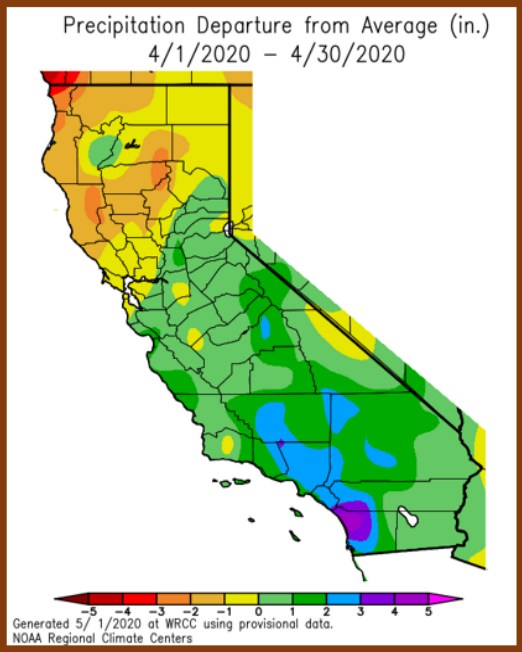
Flood Advisories

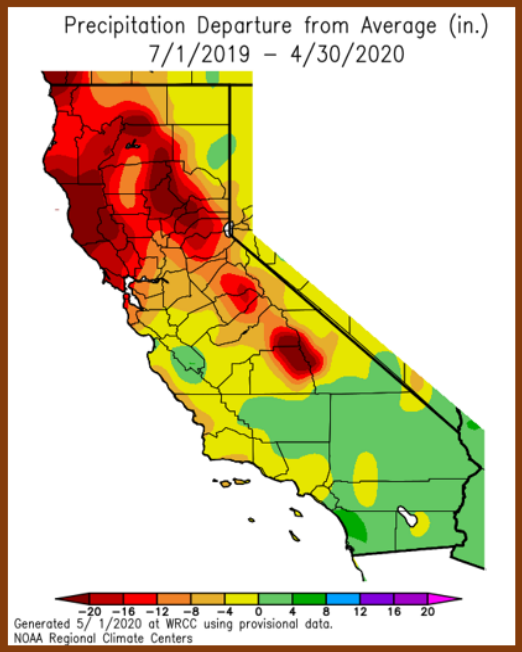
Merced County – Livingston, Ballico, Hilmar	2203Z	05-APR
Sierra foothills (Mariposa, Madera, Fresno, Tulare counties)	0254Z	06-APR
Kern County (Temblors and west side of the San Joaquin Valley)	0507Z	06-APR
Sierra foothills (Mariposa, Madera, Fresno, Tulare counties)	0557Z	06-APR
Urban/Small Stream – San Joaquin Valley (Madera County/Fresno County)	0727Z	06-APR
Kern County (Temblors and west side of the San Joaquin Valley)	0802Z	06-APR
Urban/Small Stream –San Joaquin Valley in Kern County	0834Z	06-APR
Small Stream – Tulare County foothills (Springville, Camp Nelson)	1039Z	06-APR
Tehachapi mountains and Kern County portion of San Joaquin Valley	0138Z	08-APR
Kern County (Temblors and west side of the San Joaquin Valley)	0304Z	08-APR
San Joaquin Valley portion of Kern County (Delano, Wasco, Belridge)	0443Z	08-APR
Kern County desert	1621Z	08-APR
Kern County mountains and the San Joaquin Valley in Kern County	1756Z	08-APR
Kern County mountains and the San Joaquin Valley in Kern County	2102Z	08-APR
San Joaquin Valley (Kings, Tulare and Kern counties)	0749Z	09-APR
Small Stream – Sierra foothills (Mariposa and Madera counties)	0040Z	18-APR
Small Stream - Sierra foothills (Madera and Fresno counties)	0501Z	18-APR

APRIL, 2020 PRECIPITATION (in inches)

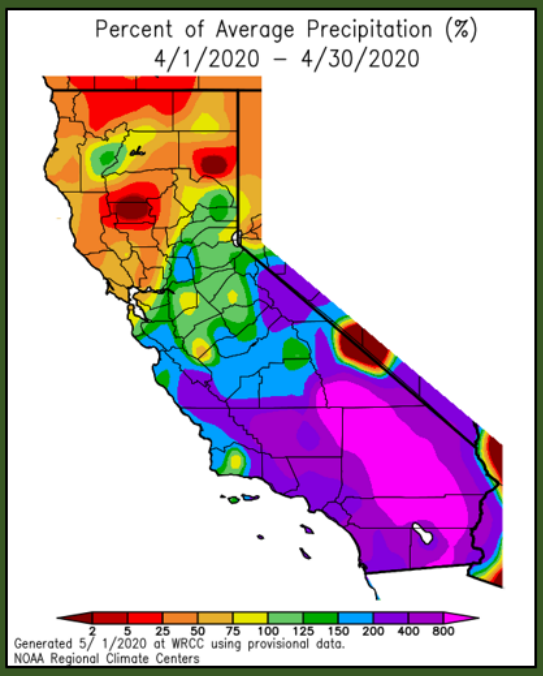


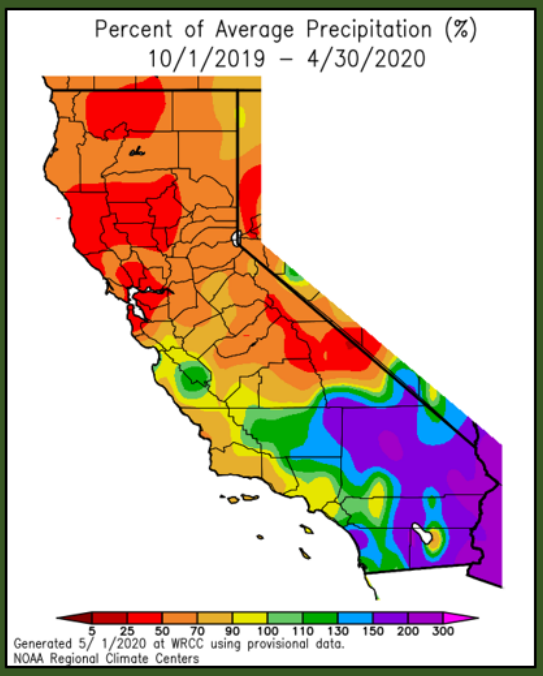
Departure from Normal Precipitation – April, 2020 and for the Season since July 1, 2019



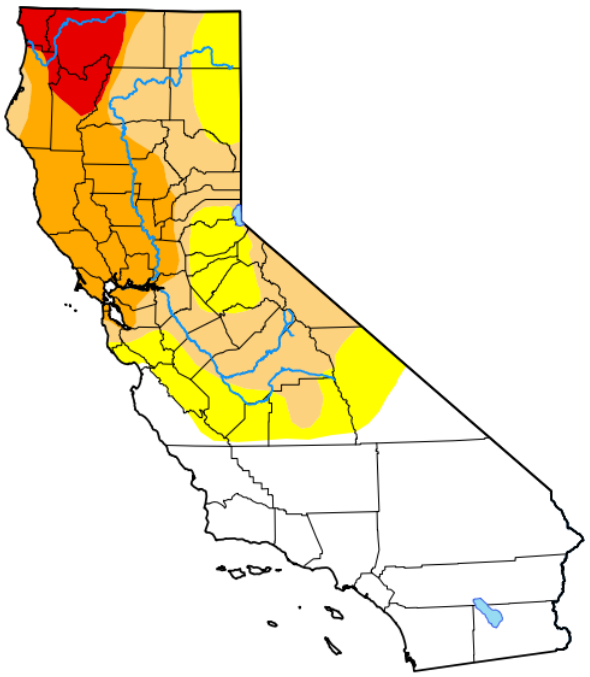


Percentage of Normal Precipitation – April, 2020 and for the Water Year since October 1, 2019





U.S. Drought Monitor
California



April 28, 2020

(Released Thursday, Apr. 30, 2020)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	41.80	58.20	41.58	19.59	4.66	0.00
Last Week *04-21-2020*	41.80	58.20	35.70	19.59	4.66	0.00
3 Months Ago *01-28-2020*	65.72	34.28	0.00	0.00	0.00	0.00
Start of Calendar Year *12-31-2019*	96.43	3.57	0.00	0.00	0.00	0.00
Start of Water Year *10-01-2019*	95.29	4.71	2.06	0.00	0.00	0.00
One Year Ago *04-30-2019*	94.03	5.97	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

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National Drought Mitigation Center

droughtmonitor.unl.edu

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W/OH12X1
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