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

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE: Kevin Durfee National Weather Service/Office of Hydrology (In Charge of Hydrologic Service Area)

National Weather Service/Office of Hydrology 1325 East-West Highway #7116 Silver Spring, MD 20910

September 2, 2020

DATE:

MONTH: AUGUST YEAR: 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).

X An X inside this box indicates no flooding occurred for the month within this hydrologic service area.

August 2020 finally brought an uptick of hydrologic activity after a Summer long absence of monsoonal influxes. Moisture from three tropical cyclones...Elida, Fausto and Genevieve, infiltrated the HSA from the 13th through the 24th. The northward influx of tropical moisture from these storms produced thunderstorms over mainly the higher elevations of the HSA during this period. Unfortunately, the thunderstorms were more of a curse than a blessing. The lightning that accompanied them sparked new wildfires over the higher terrain while a few of them produced locally heavy rain and flash flooding. Thunderstorms that trained through the Tehachapi mountains on the afternoon of the 15th dumped nearly two inches of rain in just one hour near Pine Mountain Club where there were reports of road flooding. The thunderstorms that brought heavy rain over the Sierra were isolated and occurred in remote locations mainly above 7000 feet. The bigger outcome from these thunderstorms was the numerous wildfires they ignited. Allegedly, a total of about 12,000 lightning strikes during the weekend of the 15th sparked more than 500 wildfires over the coastal counties and the northern part of the state. Within the HSA, the most notable fire started in the hills northwest of Coalinga on the 15th. It was named the Hills wildfire. Another lightning caused fire (the Castle Wildfire) erupted in the Tulare County mountains during the weekend of the 22nd. This fire merged with smaller lightning caused fires and was renamed the SQF Complex. Smoke from wildfires burning in the northern part of the state was carried into the HSA by northwesterly winds aloft between the 17th and 21st. The smoke choked visibility to less than a mile in some locations of the northern San Joaquin Valley by the 19th and produced extremely poor air quality over much of central California for several days. A noticeable improvement in visibility finally occurred by August 25th yet the air quality remained poor over the HSA through the 31st as high altitude smoke from the SQF Complex blanketed much of the central California interior.

One might think weekends were the worst for wildfires. In addition to the weekends referenced above, two human caused fires impacted travel through the Grapevine on the afternoon of August 2nd and again the following Sunday afternoon, August 9th. In both instances, traffic was severely disrupted along I-5 through the Grapevine and had to be closed for a time until the fires were extinguished.

Another weather highlight of the month was the extreme heat. August 2020 ended up as one of the hottest Augusts on record. Based on climate archives dating back to the late 1800's, it was the 2nd hottest August ever in Fresno and the 4th hottest in Bakersfield with eighteen days at or above the century mark in both locations. Supporting evidence that our climate may be getting warmer is the fact that five of the past eight Augusts ranked as the top 10 hottest in Bakersfield. In Fresno,

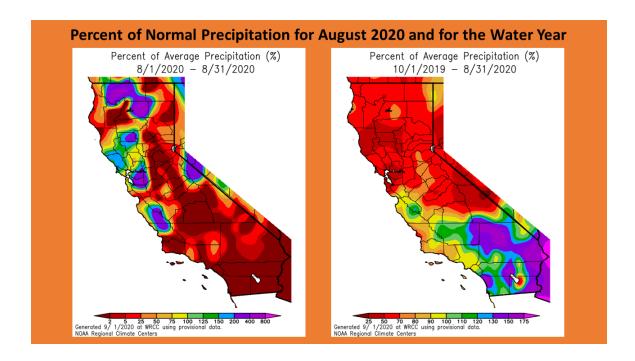
August 2020 was one of seven Augusts in the Top 10 hottest Augusts since 2005. Record high maximum and minimum temperatures were established at several climate stations within the San Joaquin Valley during the month. Thermometer readings topped 110 degrees in Merced, Madera, Fresno and Bakersfield on the 16th and made it the hottest day of the month and also the hottest day yet of the Summer in many locations. Nighttime temperatures remained above 80 degrees in Fresno and Bakersfield during the peak of the heat wave from the 15th through the 19th. During this period, several livestock in the San Joaquin Valley succumbed to the heat in Fresno County. The last time cattle losses occurred from extreme heat was in July 2006. Practically every day from August 9th through the 20th recorded triple digit high temperatures in the San Joaquin Valley. The exception was August 13th. On that day, clouds from the remnants of tropical cyclone Elida moved northward into central California. The clouds kept high temperatures below 100 degrees in much of the San Joaquin valley and produced sprinkles in various locations including Fresno and Bakersfield. Isolated sprinkles also fell in the San Joaquin Valley on the 23rd as moisture from the remnants of tropical cyclone Genevieve moved into central California.

Hot weather also produced more tragedy in area rivers during the month. On the afternoon of August 5th, an 8-year old girl, one of three children wading in the Kings River, was swept downstream by the swift currents. A man attempting to rescue the young girl was caught up in the swift water of the river and drowned. Although the girl was eventually pulled out of the water, she died six days later while on life support in the hospital. Additionally, two water rescues were made on the Kern River during the afternoon of August 8th.

Water releases continued from area dams to meet irrigation needs over the eastern third of the San Joaquin Valley throughout the month. Consequently, water levels gradually lowered in all of the reservoirs. By September 2nd, the average water capacity of the reservoirs was reduced to 24 percent of normal. That was a drop of about ten percent since the beginning of the month.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Watches		
Kern County mountains and desert	1040Z	16-AUG
Southern Sierra Nevada/Kern County mountains and desert	1930Z	18-AUG
Flash Flood Warnings		
•	22117	15 110
Tehachapi mountains	2311Z	15-AUG
Tehachapi mountains (Frazier Park, Pine Mountain Club)	2316Z	15-AUG
Southwest Kings Co/Southwest Fresno Co (Avenal, Kettleman Hills)	2323Z	15-AUG
Tehachapi mountains (Pine Mountain Club)	2042Z	16-AUG
Tulare County mountains (Blackrock, Pascoes)	2349Z	16-AUG
Tulare County mountains (Sierra crest)	2238Z	18-AUG
Tehachapi mountains (Pine Mountain Club, Mount Pinos)	2321Z	18-AUG
Fresno County (Sierra crest)	2301Z	23-AUG
Fresno County (Sierra crest)	0017Z	24-AUG
Flood Advisories		
Madera County (Sierra crest)	2243Z	11-AUG
Kern County mountains (San Emigdio mountains)	2226Z	15-AUG
Tehachapi mountains	2229Z	15-AUG
Kern County desert (Inyokern, China Lake, Indian Wells Canyon)	0221Z	17-AUG
Tehachapi mountains	2248Z	18-AUG
Kern County mountains (Bodfish, Lake Isabella)	2257Z	18-AUG
Fresno County (Sierra crest)	22127	23-AUG



CC:

W/OH12X1 W/WR2 CNRFC WFO HNX WFO STO