Storm Data and Unusual Weather Phenomena - September 2022

Location Date/Time Deaths & Property & Event Type and Details
Injuries Crop Dmg

CALIFORNIA, South Central

(CA-Z300) WEST SIDE MOUNTAINS NORTH OF HIGHWAY 198, (CA-Z301) LOS BANOS-DOS PALOS, (CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z303) PLANADA-LEGRAND-SNELLING, (CA-Z304) COALINGA - AVENAL, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z308) WEST SIDE MOUNTAINS SOUTH OF HIGHWAY 198, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z313) BUENA VISTA, (CA-Z314) BAKERSFIELD, (CA-Z315) SOUTHEAST SAN JOAQUIN VALLEY, (CA-Z316) SOUTH END SAN JOAQUIN VALLEY, (CA-Z317) MARIPOSA - MADERA FOOTHILLS, (CA-Z318) MARIPOSA - MADERA LOWER SIERRA, (CA-Z319) FRESNO - TULARE FOOTHILLS, (CA-Z320) FRESNO - TULARE LOWER SIERRA, (CA-Z321) SOUTH END SIERRA FOOTHILLS, (CA-Z322) SOUTH END OF THE LOWER SIERRA, (CA-Z324) YOSEMITE VALLEY, (CA-Z332) KERN RIVER VALLEY, (CA-Z337) INDIAN WELLS VALLEY, (CA-Z338) MOJAVE DESERT SLOPE(S), (CA-Z339) MOJAVE DESERT

09/01/22 00:00 PST 0 Excessive Heat 09/09/22 19:00 PST 0

A large area of high pressure that was centered over the Great Basin area built westward into California on August 31st and brought a period of hot and dry weather to the area which prevailed across the area through much of early September. An Excessive Heat Warning was issued for a large portion of the area including all of the San Joaquin Valley, the West Side Hills, the Sierra Foothills, Yosemite Valley, The Kern River Valley and the Kern County desert areas and remained in effect until the evening hours of September 9. The large high pressure area finally broke down on September 9 and temperatures remained below dangerous levels on September 10.

(CA-Z300) WEST SIDE MOUNTAINS NORTH OF HIGHWAY 198, (CA-Z301) LOS BANOS-DOS PALOS, (CA-Z302) MERCED-MADERA-MENDOTA, (CA-Z303) PLANADA-LEGRAND-SNELLING, (CA-Z304) COALINGA - AVENAL, (CA-Z305) WEST SIDE OF FRESNO AND KINGS COUNTIES, (CA-Z306) CARUTHERS - SAN JOAQUIN - SELMA, (CA-Z307) FRESNO - CLOVIS, (CA-Z308) WEST SIDE MOUNTAINS SOUTH OF HIGHWAY 198, (CA-Z309) BUTTONWILLOW- LOST HILLS - I5, (CA-Z310) DELANO - WASCO - SHAFTER, (CA-Z311) HANFORD - CORCORAN - LEMOORE, (CA-Z312) VISALIA - PORTERVILLE - REEDLEY, (CA-Z313) BUENA VISTA, (CA-Z314) BAKERSFIELD, (CA-Z315) SOUTHEAST SAN JOAQUIN VALLEY, (CA-Z316) SOUTH END SAN JOAQUIN VALLEY, (CA-Z317) MARIPOSA - MADERA FOOTHILLS, (CA-Z318) MARIPOSA - MADERA LOWER SIERRA, (CA-Z319) FRESNO - TULARE FOOTHILLS, (CA-Z320) FRESNO - TULARE LOWER SIERRA, (CA-Z321) SOUTH END SIERRA FOOTHILLS, (CA-Z322) SOUTH END OF THE LOWER SIERRA, (CA-Z323) YOSEMITE NP OUTSIDE OF THE VALLEY, (CA-Z324) YOSEMITE VALLEY, (CA-Z325) SAN JOAQUIN RIVER CANYON, (CA-Z326) UPPER SAN JOAQUIN RIVER, (CA-Z327) KAISER TO RODGERS RIDGE, (CA-Z328) KINGS CANYON NP, (CA-Z329) GRANT GROVE AREA, (CA-Z330) SEQUOIA NP, (CA-Z331) SOUTH END OF THE UPPER SIERRA, (CA-Z332) KERN RIVER VALLEY, (CA-Z333) PIUTE - WALKER PASS (BASIN?), (CA-Z334) TEHACHAPI, (CA-Z335) GRAPEVINE, (CA-Z336) FRAZIER MOUNTAIN COMMUNITIES, (CA-Z337) INDIAN WELLS VALLEY, (CA-Z338) MOJAVE DESERT SLOPE(S), (CA-Z339) MOJAVE DESERT

09/01/22 00:00 PST 0 Drought 09/30/22 23:59 PST 0

Central California remained abnormally dry in September 2022. A record setting heat wave on the first nine days of the month made the ongoing drought conditions worse as the intense heat continued to dry out the soil. The heat wave was followed by scattered showers and thunderstorms between the 10th and the 12th as moisture from Hurricane Kay surged into the area. A winter like storm brought some light precipitation to the area on September 18 and 19. However, these events did little to improve the long term drought conditions. By the end of the month, nearly all of our area remained in an extreme or exceptional drought as most of our area has received less than a third of normal precipitation since July 1, 2020.

MARIPOSA COUNTY --- 2.2 SSE CHINQUAPIN [37.62, -119.69]

09/10/22 13:00 PST 25K Thunderstorm Wind (EG 35 kt)
09/10/22 15:00 PST 0 Source: NWS Employee

An Incident Meteorologist at the nearby Red Fire in Yosemite Park reported a car damaged by a large tree branch which was knocked down by strong thunderstorm outflow gusts.

Moisture from Tropical Storm Kay which was centered just off the Baja coast surged northward into central California during the morning of September 10. While the deeper moisture remained to the south and east of central California, enough moisture made it into the area and combined with an unstable airmass left over the area in the wake of a heat wave that persisted for several days over the region. Widespread showers and scattered thunderstorms fired up across the area during the afternoon of September 10 and moved rapidly toward the northwest. The rapid movement of the thunderstorms inhibited flooding potential, but several locations in the higher Sierra Nevada and the Tehachapi Mountains picked up between a quarter to a half inch of rainfall. Amounts in the San Joaquin Valley and the Kern County Desert areas generally ranged from a trace to a few hundredths of an inch of rainfall with the most noticeable impacts being from outflow winds from some of the stronger cells over the Sierra Nevada.

TULARE COUNTY --- 1.8 ESE WILSONIA [36.72, -118.94], 1.5 ESE WILSONIA [36.72, -118.95], 1.4 ESE WILSONIA [36.72, -118.95], 1.8 ESE WILSONIA [36.72, -118.94]

09/11/22 15:15 PST 0 Flood (due to Heavy Rain / Burn Area)

09/11/22 18:15 PST 0 Source: Park/Forest Service

Page 1 of 2 Printed on: 07/27/2023

Storm Data and Unusual Weather Phenomena - September 2022

Location Date/Time Deaths & **Event Type and Details** Property & Injuries Crop Dma A mudslide occurred on the Generals Highway between Quail Flat and the intersection with SR 180. This resulted in a lengthy road closure as Generals Highway remained closed until the following morning for clean-up. While the remnants of Tropical Storm Kay took a westward turn off of the northern Baja coast and away from our area, enough moisture from the surge that moved over central California during the previous day remained in place; and with daytime heating resulting in widespread instability over the area; another round of showers and thunderstorms broke out during the afternoon of September 11. While rainfall amounts were generally light, one slow moving thunderstorm produced heavy rainfall in the Sierra Nevada over the 2021 KNP Fire burn scar which resulted in a mudslide over Generals Highway in Sequoia National Park and closed the highway for several hours until the following morning. KERN COUNTY --- 8.8 WSW CABLE [35.08, -118.63] 0 09/12/22 11:34 PST Heavy Rain 09/12/22 12:04 PST 0 Source: Public A privately owned rain gage in Stallion Springs measured 1.14 inches of rainfall in 30 minutes. KERN COUNTY --- 1.2 NW ERIC [35.14, -118.31], 1.2 NW ERIC [35.14, -118.31], 1.1 NW ERIC [35.14, -118.31], 1.1 NW ERIC [35.14, -118.31] 09/12/22 11:59 PST Flood (due to Heavy Rain) 0 09/12/22 14:59 PST 0 Source: Law Enforcement California Highway Patrol reported 8 vehicles were stuck behind roadway flooding at the intersection of Sand Canyon Rd. and Pine Canyon Rd. east of Tehachapi. KERN COUNTY --- 6.3 WSW CABLE [35.11, -118.60], 6.3 WSW CABLE [35.11, -118.60], 6.6 WSW CABLE [35.11, -118.60], 6.5 WSW CABLE -118.601 09/12/22 12:03 PST 0 Flood (due to Heavy Rain) 09/12/22 15:03 PST 0 Source: Social Media Reports posted on Facebook showing flooded roadways in Stallion Springs. MADERA COUNTY --- 9.8 WSW DEVIL'S POSTPILE N.M. [37.57, -119.25] 09/12/22 12:19 PST 0 Heavy Rain 09/12/22 14:19 PST 0 Source: RAWS The Green Mountain RAWS measured 0.66 inches of rainfall in 2 hours from strong thunderstorm which produced heavy rainfall. Moisture from Tropical Storm Kay which surged northward into central California on September 10 remained over our area as steering currents over the region became weak. This allowed for scattered slow moving showers and thunderstorms to develop over the area during the afternoon of September 12. While rainfall amounts were once again generally light, several stations the Sierra Nevada, Tehachapi Mountains and the desert areas in Kern County picked up between a tenth and a third of an inch of rainfall. A few thunderstorms did produce locally heavier rainfall amounts and resulted in roadway flooding in the Tehachapi area.

(CA-Z323) YOSEMITE NP OUTSIDE OF THE VALLEY

09/20/22 07:00 PST 0 Winter Weather 09/21/22 07:00 PST 0

An upper trough pushed through the region on September 19 and 20. This system brought scattered showers to the area mainly impacting areas from Fresno County northward. The snow level remained above 10000 feet for most of the event, but lowered to 8000 feet during the morning of September 20; and much of Yosemite Park above 8000 feet picked up between 1 and 3 inches of new snowfall between the morning of September 20 and the early morning of September 21 during this early season event.

Page 2 of 2 Printed on: 07/27/2023