Storm Data and Unusual Weather Phenomena - January 2011

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

MADERA COUNTY --- 0.9 SW MADERA MUNI ARPT [36.97, -120.13], 0.6 SSE BONITA [36.94, -120.20], 2.7 WSW BORDEN [36.92, -120.08], 1.4 WNW

MADERA [36.98, -120.09]

01/02/11 06:46 PST 0 Flood (due to Heavy Rain) 01/02/11 10:00 PST 0 Source: Newspaper

Water up to 3 feet deep on roads near Santa Lucia Drive and Manresa.

TULARE COUNTY --- 1.3 WSW STRATHMORE [36.14, -119.07], 0.8 WNW STRATHMORE [36.16, -119.06], 0.7 SSE STRATHMORE [36.14, -119.05], 1.7

SSW STRATHMORE [36.13, -119.06]

01/02/11 07:00 PST 25K Flood (due to Heavy Rain) 01/02/11 11:00 PST 0 Source: Broadcast Media

Local TV broadcasters reported flooding in the town of Strathmore.

(CA-Z095) KERN CTY MTNS

01/02/11 10:00 PST 0 High Wind (MAX 77 kt)

01/02/11 16:00 PST 0

KERN COUNTY --- 0.7 S BAKERSFIELD [35.36, -119.00], 1.6 ESE JASTRO [35.37, -119.04], 1.5 N GOSFORD [35.34, -119.08], 0.7 SSW WIBLE ORCHARD

[35.32, -119.03]

01/02/11 12:00 PST 12.70M Flood (due to Heavy Rain) 01/02/11 12:00 PST 0 Source: Newspaper

Kern County estimated damage from the storms of December 17th to January 2nd at 12.7 million dollars.

KERN COUNTY --- 0.7 S DELANO [35.76, -119.25], 1.0 W DELANO [35.77, -119.27], 1.0 NNE DELANO [35.78, -119.25], 1.5 NNE DELANO AIRPORT

[35.77, -119.22]

 01/02/11 12:00 PST
 0.80M
 Flood (due to Heavy Rain)

 01/02/11 12:00 PST
 0
 Source: Newspaper

Damage to Delano schools from the storms of December 17th to January 2nd estimated at 800,000 dollars.

(CA-Z095) KERN CTY MTNS, (CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS, (CA-Z098) INDIAN WELLS VLY, (CA-Z099) SE KERN CTY

DESERT

01/02/11 12:00 PST 0 Winter Storm

01/03/11 09:45 PST 0

FRESNO COUNTY --- CLOVIS [36.82, -119.70], 1.6 NW CLOVIS [36.83, -119.72], 0.0 E GLORIETTA [36.85, -119.67], 1.0 SE GLORIETTA [36.84, -119.66]

01/02/11 14:14 PST 10K Flood (due to Heavy Rain)
01/02/11 16:00 PST 0 Source: Law Enforcement

CHP reported water and mud flooding the slow lane of westbound State Route 168 just west of Bullard Road.

MADERA COUNTY --- 1.3 E BORDEN [36.93, -120.01], 2.0 E BORDEN [36.94, -119.99], 2.1 ENE BORDEN [36.94, -120.00], 1.5 NE BORDEN [36.94, -120.01]

01/02/11 17:56 PST 5K Flood (due to Heavy Rain) 01/02/11 20:00 PST 0 Source: Law Enforcement

The CHP reported flooding on Avenue 13 at Road 30.

MADERA COUNTY --- 5.9 NNW DAIRYLAND [37.09, -120.38], 5.8 WSW MINTURN [37.10, -120.38], 4.2 WSW MINTURN [37.10, -120.35], 4.6 SW

MINTURN [37.09, -120.35]

 01/02/11 18:28 PST
 5K
 Flood (due to Heavy Rain)

 01/02/11 20:30 PST
 0
 Source: Law Enforcement

The CHP reported flooding on Avenue 24 at Road 10.

TULARE COUNTY --- 4.1 ESE CAMP NELSON [36.13, -118.55], 3.6 ESE CAMP NELSON [36.13, -118.56], 4.5 ESE CAMP NELSON [36.12, -118.55], 4.6 ESE CAMP NELSON [36.13, -118.54]

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Storm Data and Unusual Weather Phenomena - January 2011

Date/Time Deaths & Property & **Event Type and Details** Location Injuries Crop Dmg 01/02/11 21:27 PST 20K Flood (due to Heavy Rain) 01/02/11 23:27 PST n Source: Law Enforcement

The CHP reported a mudslide on State Route 190 just west of Pierpoint Drive.

FRESNO COUNTY --- 4.6 SE CLARKS CORNER [36.56, -119.31], 7.3 SE CLARKS CORNER [36.52, -119.29], 7.4 SSE ORANGE COVE [36.54, -119.26], 6.0 SE ORANGE COVE [36.56, -119.25]

01/02/11 22:00 PST 50K Flood (due to Heavy Rain) 01/03/11 02:00 PST n Source: Broadcast Media

Local TV broadcaster reported flooding in the town of Orosi. Water was reported 1 foot deep.

TULARE COUNTY --- 0.6 E CINOWTHS CORNER [36.33, -119.32], 2.2 WSW TULARE AIRPARK [36.14, -119.37], 0.6 W PONCA [36.03, -119.03], 3.1 ESE

LEMONCOVE [36.37, -118.97]

01/03/11 00:00 PST 4.50M Flood (due to Heavy Rain) 01/03/11 00:00 PST 0 Source: Newspaper

Four and a half (4.5) million dollars estimated damage to Tulare County roads from December 17th to Jjanuary 2nd storms.

FRESNO COUNTY --- HURON [36.20, -120.10], 5.7 ENE OILFIELDS [36.28, -120.22], 3.4 SSE CALFAX [36.31, -120.07], 1.3 SSW WESTHAVEN [36.21,

-120.011

01/03/11 10:10 PST Flood (due to Heavy Rain) n 01/03/11 12:10 PST Source: Law Enforcement

CHP reported State Route 269 closed between State Route 198 and Huron due to flooding.

TULARE COUNTY --- 1.3 WSW STRATHMORE [36.14, -119.07], 2.7 SSW STRATHMORE [36.12, -119.07], 1.5 NNE ZANTE [36.12, -119.02], 0.9 WNW

STRATHMORE JCT [36.16, -119.03]

01/03/11 10:12 PST 5K Flood (due to Heavy Rain) 01/03/11 12:12 PST 0 Source: Law Enforcement

The CHP reported the Orange Belt Highway closed between Avenue 188 and Avenue 194 due to flooding.

The new year (and decade) began with the latest in a series of Pacific storms that stretched back to December 17th, 2010. This storm brought strong, gusty winds to the region, especially to the base of the Grapevine, where gusts up to 89 mph were recorded on January 2nd. Snow fell on both the Grapevine and Tehachapi Pass, closing both routes between the San Joaquin Valley and southern California. Unlike the storms in December, this storm was focused more on Fresno, Kings, and Tulare counties, Fresno recorded 1.51 inch of rain on January 1st-2nd, while Bakersfield only received 0.16 inch. This was a cold storm, with the snow level falling to around 2500 feet. With the San Joaquin Valley floor and the lower foothills saturated from the record rains of the latter half of December, flood watches were posted for the New Year's Day holiday weekend.

As the night of January 1st-2nd progressed, wind gusts to 50 mph were recorded in the far south end of the San Joaquin Valley, at the base of the Grapevine. Over an inch of snow had fallen in Squirrel Valley--at 2700 feet in the hills above Lake Isabella--by 9:45 PM. The winds at the base of the Grapevine continued through the 2nd, with a peak wind of 89 mph recorded during the afternoon. Several roads on the San Joaquin Valley floor flooded due to runoff from locally heavy rains onto the saturated ground. In the Tehachapi Mountains, heavy snow closed Interstate 5 over the Grapevine (a total of 8 inches of snow fell at Lebec), and 52 cars were stuck on Highway 168 in the Southern Sierra Nevada at the 7000 foot level near Kaiser Point. Snow even fell in the Kern County deserts, with Ridgecrest reporting accumulating snow and snow falling at Edwards Air Force Base. The CHP reported numerous vehicles stuck on ice-covered southbound Hwy 395 just south of the junction with Hwy 178 and on northbound Hwy 395 just south of Ridgecrest Boulevard. A trained weather spotter in Ridgecrest measured 4 inches of new snow. The fire department in Mojave measured 4 inches. The fire department in California City measured 7 inches. The fire department in Randsburg measured 5 inches of the white stuff. The CHP reported vehicle stuck in the snow on Garlock Road just east of southbound Hwy 395.

The upper-level low moved south to off Point Conception on January 3rd. This kept a southerly flow over the Tehachapi Mountains, with advisory-level winds continuing at the base of the Grapevine. Although the precipitation had mostly ended, lingering runoff continued to create flooding hazards.

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY

01/05/11 03:00 PST n Dense Fog

01/06/11 06:00 PST 0

(CA-Z093) S SIERRA FOOTHILLS, (CA-Z094) TULARE CTY FOOTHILLS

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Storm Data and Unusual Weather Phenomena - January 2011

Location	Date/Time	Deaths &	Property &	Event Type and Details
		Injuries	Crop Dmg	
	01/10/11 00:00 PST		0	Winter Weather
	01/10/11 10:00 PST		0	

Once the early January storm passed through the region, persistent high pressure, along with a fairly strong inversion layer above the area began to set up by the 3rd. This initially created foggy conditions by the evening of the 3rd throughout the central and southern San Joaquin Valley, albeit patchy in nature.

With abundant standing water on the San Joaquin Valley floor, dense fog developed during the night of January 4th-5th. The fog lifted into a stratus layer that blanketed the San Joaquin Valley during the afternoon of the 5th, with the stratus persisting through the night of the 8th-9th.

Locations in the mountains rose to above normal temperatures, while those in the San Joaquin Valley remained consistently below normal, or from the upper 30s to lower 40s, even into the daylight hours during the period from the 4th through the 9th.

An upper-level trough that moved through California, on the 8th-9th, had little impact on the stratus, other than to raise the bases of the clouds. This resulted in the stratus spreading into the Southern Sierra Nevada foothills, creating areas of fog. Temperatures in the foothills fell below freezing during the morning of January 10th, and moisture from the fog froze to create icy road surfaces.

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY
01/21/11 00:00 PST
0 Dense Fog

01/26/11 13:00 PST 0

A mid-level atmospheric disturbance that tracked across central California during the late afternoon and early evening of January 17th squeezed some drizzle out of the stratus, but the layer remained intact. The stratus persisted through the 18th before an upper-level trough brought some clearing to the west side of the San Joaquin Valley during the morning of January 19th. An offshore flow developed over California on the 20th, drying the airmass over the San Joaquin Valley and breaking up the stratus.

Although the fog and stratus kept central and southern San Joaquin Valley temperatures near or below normal, mountain and desert locations once again experienced above normal temperatures. Once the stratus broke up, central and south Valley temperatures also warmed to above normal for a few days before sufficient moisture had evaporated and resaturated the lowest levels of the atmosphere. While dense fog had been a nightly occurrence since January 21st, by the 24th, the fog was lingering well into the late morning with only partial afternoon clearing. Locations experienced near zero visibility at times during most of late January. This persistent dense fog continued for the next several days, affecting air travel into and out of the San Joaquin Valley and keeping high temperatures well below normal.

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY

01/26/11 17:00 PST 0 Dense Fog

01/29/11 06:00 PST

Very persistent dense fog conditions continued to impact the San Joaquin Valley and adjacent foothills through late January.

(CA-Z096) S SIERRA MTNS

The persistent ridge of high pressure finally gave way to a low pressure system that originated from the Gulf of Alaska by the early morning hours of the 30th, when snow began to fall on the higher elevations of the southern Sierra Nevada. Some locations received several inches of snow from the early morning until the following evening. A brief break from the generally warmer and dry conditions above the valley floor and the persistent fog and stratus over the San Joaquin Valley finally commenced. Windy conditions occurred in the desert areas in eastern Kern County, with reports of wind damage to power poles, as a result of this low on the 30th. This low trekked across central California during the afternoon and evening on the 30th, and instability was enough for a few afternoon thunderstorms to develop in areas of the southern San Joaquin Valley that briefly received sufficient solar radiation. As a result of this convection, some areas received over half an inch in a period of around an hour and a half. This low moved out of the area by the evening of the 30th, and a cooler airmass remained over the region into the last day of the month.

Prevailing high pressure during most of this month allowed the region to realize below normal precipitation throughout the central California interior and warmer than average temperatures above the persistent inversion layer, or above the valley floor. Much of the San Joaquin Valley actually remained near normal in temperatures, since there were a sufficient number of cloudy days that kept the high temperatures a little below average, while low temperatures generally remained above average due to this cloud cover.

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