NOVEMBER 2014 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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November began with interior central California remaining under the storm that reached the region on Halloween. Fresno received nearly a third of an inch of rain on November 1st, pushing its season total to just over an inch. Temperatures were below normal, with Fresno only reaching a high of 61 degrees, and Bakersfield coming in just two degrees warmer.

As the storm moved east of the region, high pressure began building back into the state. Temperatures warmed to near-normal by November 4th, and continued warming the next couple of days. The presence of high pressure aloft over the San Joaquin Valley strengthened the inversion over the region, creating a stagnant air mass. As ground moisture evaporated into the lower atmosphere, conditions became favorable for the development of patchy dense fog as early as the 2nd of the month. Morning fog was thickest in the Hanford-Visalia-Corcoran area during the 4th and through the next couple of days, but light fog was prevalent across the San Joaquin Valley, giving way to hazy skies in the afternoons.

Temperatures cooled several degrees on November 7th as a disturbance moving through the Pacific Northwest weakened the high pressure over California, but the high rebounded the next day for more warming. The warming was more pronounced above the inversion, with Oakhurst setting a record high of 81 degrees (old record: 78 in 2006), and Mariposa at 78 degrees, nearly tying its record high of 81 that was last set in 2007.

Patchy dense fog developed in the central San Joaquin Valley during the morning of November 9th, but was confined mainly to Merced and Madera Counties. Temperatures remained well above average through the 10th in much of the central California interior.

A low-pressure system weakened the ridge on November 11th, with temperatures down several degrees from the previous day. Another system arrived two days later, bringing measurable rain to the northern half of the San Joaquin Valley and to the southern Sierra Nevada and Tehachapi Mountains. Nearly a quarter inch of rain fell at Merced, but rainfall amounts tapered off sharply with Fresno only receiving a couple of hundredths of an inch of rain. A similar trend was seen in the mountains, where Fish Camp (near Yosemite National Park) reported 0.77 inch of rain, but Shadequarter and Camp Nelson in Tulare County registered a tenth of an inch, and the Kern County mountains reported a tenth of an inch or less.

A third storm approached central California on November 15th. Ahead of the storm, strong winds developed over the mountain and desert areas of Kern County. The strongest winds were during the afternoon and evening of the 15th, when gusts to 71 mph were recorded at Bird Spring Pass in the Piutes (about 10 miles southeast of Piute Peak) and to 52 mph at Red Rock Canyon in the Kern desert. The next day, the winds turned easterly and dried out the airmass over the Kern County mountains. Relative humidities plummeted into single digits, and a Red Flag Warning was issued for the Kern Mountains from November 16th through the 18th.

Conditions improved on November 19th as a weak storm moved through the northern part of the San Joaquin Valley and Southern Sierra Nevada. Moisture from this storm brought light rain to Merced, Mariposa and Madera Counties, and clouds to much of the region.

High pressure returned to the San Joaquin Valley on November 20th, and areas of dense "Tule" fog developed overnight on the 20th-21st. However, the next day saw another weak storm pass through the region. Precipitation stayed mainly north of Fresno, but gusty winds developed over the mountains and desert. There were gusts as high as 80 mph measured in some locations of the Kern County mountains, including at Bird Springs Pass, which is located about 15 miles northeast of the Piute Peak in the Piute Mountains, and Jawbone Canyon. In the Kern County desert, winds gusts to 52 mph at Edwards AFB.

Each of these weak storms added moisture to the lower atmosphere, and patchy late night and morning fog developed in the normally fog-prone parts of the San Joaquin Valley on November 24th and 25th. Similar weather occurred until Thanksgiving Day, or the 27th, with mainly clear skies and warm high temperatures, except for patchy nighttime and morning fog in the San Joaquin Valley, as high pressure continued to prevail over the forecast area.

Dense fog also developed during the early morning hours on the 28th and was more widespread. Visibility was as low as 100 feet in some areas, including in Lemoore. The fog dissipated by around 9:30 AM, and temperatures warmed to above average in much of the region. The San Joaquin Valley and Sierra foothills saw temperatures mainly in the 70s, and a few locations in the foothills even rose to around 80 degrees.

High pressure gave way to a low pressure system that moved over northern California on the 29th. This system clipped the northern portion of NWS Hanford's forecast area, over Merced and Mariposa Counties and brought rainfall to these areas. Some locations received around one half of an inch of rain such as Atwater (0.48 inch) and Gustine (0.50 inch). Temperatures were much cooler than during the previous day where the rain fell; temperatures elsewhere rose to above average, or similar to the previous day. Bakersfield reached two degrees shy of the record high of 80 degrees.

On the last day of the month, another low pressure system brought light showers to the forecast area. Locations further south received rainfall with this system, although amounts were generally around a tenth of an inch or less. Hanford recorded a trace of rainfall, and Fresno reported a hundredth of an inch. Merced received 0.03 inch of rain.

November ended well above average for temperature (see Figure 1) and below average to near average for precipitation (see Figure 2) over much of the region. Bakersfield reached 4.3 degrees above its monthly average temperature (at 59.4 degrees, tied for 9th warmest) and 0.01 inch of rain, or 0.63 inch below its monthly average rainfall. Fresno reached 3.4 degrees above its average temperature for the month (at 57.7 degrees, ranked at10th warmest) and received 0.40 inch of rain, or 0.67 inch below the monthly average rainfall.

Figure 1 – Temperature Departure From Average (degrees F) for Central California Nov 1-30, 2014

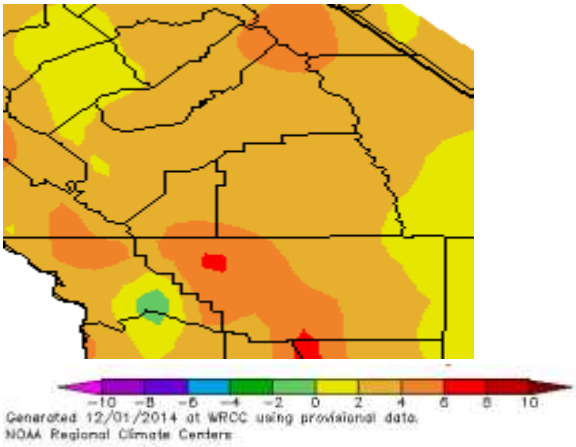

Figure 2 – Precipitation Departure from Average (inches) for Central California Nov 1-30, 2014