## JANUARY 2015 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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New Year's Day began with below average temperatures, especially during the nighttime and morning hours. Below freezing temperatures, as low as the mid- to upper-20s, were reported in much of the San Joaquin Valley, and Kern County desert temperatures were in the teens for the first two days of the month. High pressure remained offshore, and northerly winds allowed the airmass to remain dry and cold over the central California interior; Tule fog development was prevented during this period.

A weak upper-level disturbance moved through central California during the morning of January 4<sup>th</sup>. This disturbance brought some sprinkles to the region, including Yosemite Valley, and also kept temperatures cool. The offshore high pressure finally built onshore on January 5<sup>th</sup> and 6<sup>th</sup>, with central and southern San Joaquin Valley highs on the 6<sup>th</sup> mostly in the lower to mid 60s (normal is the mid 50s). A strong inversion set up over the San Joaquin Valley, and sites above the inversion saw highs as warm as the mid-70s.

While high pressure that brought relatively warm temperatures to locations outside of the San Joaquin Valley persisted well beyond the first week of the month, there was a wet low pressure system that affected much of Kern County on the night of the 10<sup>th</sup>. This system continued to impact the southern part of NWS Hanford's county forecast/warning area through the afternoon of the 11th. Bakersfield received 0.63 inch of rainfall on January 11<sup>th</sup>; this broke the record for the date. A few locations in the Tehachapi Mountains received over an inch of rain and as much as 1.6 inches.

By the 12<sup>th</sup>, fog and low stratus clouds returned to the San Joaquin Valley as high pressure rebuilt over the region. Nighttime fog and low clouds were the general rule over the next several days in the San Joaquin Valley, while the rest of the area, including the Sierra Nevada foothills, as well as the Kern County mountain and desert areas, experienced mostly clear skies and warmer than average temperatures. These locations that remained above the fog and stratus clouds, warmed into the 60s and low 70s during the afternoons due to dry air and abundant sunshine. On some occasions during the second week of the month, the fog and stratus cleared early enough in the day in parts of the San Joaquin Valley, particularly the south end, so that temperatures rose into the lower 60s.

As of the third week of the month, no measurable rain has fallen in much of the region north of Kern County. However, the low clouds have precipitated occasional drizzle in the San Joaquin Valley, so the air has remained damp in these areas. Diurnal temperature ranges, or the difference between daily maximum and minimum temperatures, have been very small due to cloud cover over the region. However, the mountains, foothills, and desert areas continued above average in terms of temperature, especially daily maximum temperature.

Low clouds and fog persisted even as late as the morning of January 26<sup>th</sup> in the San Joaquin Valley. One interesting note is the San Joaquin Valley has experienced only three days since the 14<sup>th</sup> when the entire valley had clear skies during the afternoon; these days were the 15<sup>th</sup>, 22<sup>nd</sup>, and 25<sup>th</sup>. Much above average daytime high temperatures continued outside of the San Joaquin Valley until the 25<sup>th</sup>. No storms have impacted NWS Hanford's warning/forecast area since the 11<sup>th</sup> as high pressure was persistent over this region.

A low pressure system finally brought precipitation to the warning/forecast area by the afternoon of the 26<sup>th</sup>. Some light rain showers fell in northeastern Kern County, including in Ridgecrest during the afternoon. During the following evening, scattered showers had spread over much of the forecast area, including the mountains and San Joaquin Valley. Light showers continued at times through the afternoon of the 27<sup>th</sup> as the low pressure system began to move out of the region.

On the 28<sup>th</sup> and 29<sup>th</sup>, weak high pressure returned, although it was enough to bring the return of Tule Fog to the San Joaquin Valley each night and morning. Nighttime and morning fog remained a daily occurrence until the end of the month as high pressure persisted over the central California interior.

Overall, January ended above average in terms of temperature and well below average in terms of precipitation. Bakersfield reached 59.5 percent of normal for precipitation, as a storm brought abundant rainfall to much of Kern County back on the 10<sup>th</sup>-11<sup>th</sup>. On the other hand, Fresno received 9.6 percent of normal. Many other locations were well below 10 percent of normal; in fact, Merced received less than one percent of normal!

On the next page, Fig 1 shows the departure from average temperature for central California, while Fig 2 shows the percent of normal (average) precipitation.

Fig 1 - Departure from average temperature for January 2015:

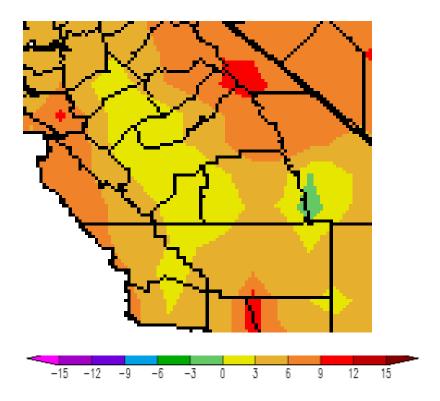


Fig 2 - Percent of normal precipitation for January 2015:

