

# Fresno's last three years the driest on record

**Mark Grossi, Fresno Bee, 6-28-14**

California got just enough rain to avoid the driest winter in memory, but Fresno still will reach an all-time landmark — the worst three-year drought since record-keeping began in 1878.

The last three years here have been drier than the Dust Bowl-era years of 1931 to 1934, the previous worst dry spell in the city's records.

"The headline for this year really is Fresno's three-year total," said National Weather Service meteorologist Paul Iniguez in Hanford.

The record becomes official at midnight Monday, which is the end of the 2013-14 rainfall season. Rainfall is counted from July 1 through June 30.

The coming winter might be a downer, too, even though the warm water of El Niño is building in the Pacific Ocean. El Niño can mean a wet winter in California, but it does not look strong enough yet to create more than a 50-50 chance of breaking the drought.

With the rainfall season officially ending Monday, Fresno's 4.81-inch total ranks second-driest for a one-season total, behind the 4.43 inches of 1933-34, the National Weather Service said. But Fresno's record three-year run of drought holds relevance well beyond the city limits.

The dry years are at the heart of the desperation unfolding along millions of acres of farm country surrounding Fresno and the rest of the Valley. Wells are drying up, a lot of farmland has been left to tumbleweeds and the Valley economy is expected to take a big hit.

If not for a few storms in February and March, the season would have been catastrophic through much more of California. The National Weather Service reported that California will wind up with its second-lowest rainfall total on record, the driest being 1923-24.

The Northern Sierra picked up just enough precipitation to avert the worst of the drought problems, said Fresno-area meteorologist Steve Johnson, who consults for many farming customers. But the storms didn't reach far enough south, he said.

"The dry year was worse toward the Tulare Lake Basin," Johnson said. "The spring storms were thunderstorms that didn't affect wide areas. We're living through a disaster here."

Early in the rainfall season, things already looked pretty grim in Fresno. It didn't rain from Dec. 7 through Jan. 28, an astounding 52-day dry spell in late fall and winter. Other Valley cities, such as Bakersfield, stayed dry during that stretch, too.

In February, the storms finally began getting past a freakish high pressure system — a stubborn bump in the atmosphere — that had parked off the California coast for weeks.

Fresno accumulated slightly higher-than-average rainfall with 2.11 inches, but it was far too little, too late. March and April remained below average.

"The number of days with at least .10 of an inch of rain was just 13 in Fresno," said Iniguez. "Average is 26."

Bakersfield in the arid southern end of the San Joaquin Valley had just 2.41 inches for the season, its third driest on record. To the north, Modesto had 6.99 inches, fourth driest on record.

Of the 10 Central California cities featured by NOAA in its online precipitation chart, only Modesto and Stockton were above 50% of average — both 53%. Fresno was 42% of average. Hanford in Kings County was lowest at 28%.

El Niño in the Pacific Ocean offers hope for next winter because it raises the odds of a wet year in parts of California, particularly Southern California.

NOAA's Climate Prediction Center says there is an 80% chance of the phenomenon now. But meteorologists are saying average rainfall is not guaranteed, and some media reports have overstated the prospects. Right now, predictions are that the Pacific Ocean won't get warm enough to be a strong El Niño.

"Don't pay attention to the hype about El Niño," Johnson said. "So far, it looks like a moderate or weak El Niño."

Moderate or weak El Niños have often been dry years in California. There was a moderate event in 1991-92 at the end of a five-year drought and in 1976-77, one of the driest years on record.

On the other hand, a moderate El Niño was in play during two massive rainfall years over the last four decades. The years were 1977-78, when Fresno got 18.16 inches, and 1994-95, when the total was 19.03. Both are among the wettest 10 years on record in Fresno.

"Bottom line, we don't have much certainty about what will happen," Iniguez said. "People might be getting excited about the possibility of more rain this winter, but it's not a slam dunk by any means."