

El Niño -- when will it start raining in California?

Paul Rogers, Bay Area News Group, 10-9-15

One of the strongest El Niño winters ever recorded since modern records first began in 1950 continues to grow in the Pacific Ocean, federal scientists reported Thursday.

So, with the likelihood for a wet winter increasing across drought-parched California, residents staring at empty reservoirs and dead lawns are asking: "When will it start pouring?"

The answer, experts said Thursday, is that winter storms in strong El Niño years typically bring more rain to California than normal, but they don't do it any earlier.

An analysis of the five winters back to 1950 in which strong El Niño conditions similar to this year have occurred shows that in the Bay Area during those years, October has been only slightly wetter than the historic average. November has been nearly twice as wet in most. December has been oddly drier than normal in all five strong El Niño winters. And the bulk of the rain -- the real downpours with high risk of floods and mudslides -- have occurred in January and February.

"For the most part, our rainy season really gets going in November, and El Niño is an add-on to our regular rainy season," said Jan Null, a meteorologist formerly with the National Weather Service who runs Golden Gate Weather Services in Saratoga.

Using San Francisco rainfall as a baseline for the Bay Area, in four of the five strong El Niño years -- 1957-58, 1972-73, 1982-83 and 1997-98 -- the overall annual rainfall totals have exceeded the historical average of 23.9 inches. In the wettest, 1997-98, the rainfall was double the average, at 47.22, with relentless rainfall in January and February that soaked the state and caused flooding and mudslides. Other Bay Area cities showed similar patterns.

"If we don't see a lot of rain in December, we should realize that's not a big deal; it's happened before in strong El Niño years," said Null, who compiled the data. "January and February have been big months."

Only once, in 1965-66, when the annual rainfall totaled 15.84 inches, was there a drier-than-normal year in the Bay Area during a strong El Niño.

On average, 70 percent of the Bay Area's yearly rain total falls during just four months: November, December, January and February, a staple of Northern California's Mediterranean climate. Similarly, during the soaked winter of 1997-98, about 77 percent of the Bay Area's rain fell in those same four months.

On Thursday, scientists at NOAA issued their monthly El Niño update. It reported very warm Pacific Ocean temperatures at the equator in a key area that indicates El Niño strength. The water there, off Peru, averaged 4.1 degrees Fahrenheit warmer than the historic average in September, up from 3.72 degrees above average in August and slightly above September 1997, when it was 4 degrees warmer.

"This El Niño continues to be a strong event, and we have every expectation that it will remain this way through the winter," said Mike Halpert, deputy director of the National Oceanic and Atmospheric Administration's Climate Prediction Center in College Park, Maryland. "The ocean has gotten a little warmer. It continues to strengthen."

NOAA scientists said there continues to be a 95 percent chance that El Niño conditions will continue through the end of this year -- up from 85 percent in June and 50 percent last spring.

El Niño is a disruption in the weather patterns over the Pacific Ocean, when the ocean's surface warms more than normal. Those warm waters release heat, changing wind directions and the jet stream, which often brings more and wetter storms to California.

Halpert agreed that this year, if big storms come, they aren't likely to come any earlier than in a normal winter.

For Californians wishing for soaking rains, Halpert said it's important to remember that too much water too fast can also create major problems. He cited South Carolina, where 17 people have died this week in flooding related to Hurricane Joaquin, and at least 11 dams have breached.

"If you get 15 or 20 inches of rain in a few days, nobody has the infrastructure to deal with that," he said. "I have expectations this winter when I turn on the news that I will see houses sliding into the Pacific Ocean. It's not a good thing, but it's almost a hallmark of these kinds of El Niño winters."

However, Halpert noted that if storms aren't cool enough they won't build up the Sierra snowpack, a key water source for California. And with a significant rainfall deficit in most parts of the state, even a very wet winter might not end the drought in one year.

Nevertheless, with the likelihood of strong storms growing, California residents have begun preparing. Roofing companies are booked solid. Cities and water districts are stockpiling sandbags and clearing clogged stream channels. Utilities are trimming dead trees from four years of drought away from power lines.

"We are taking the prospect of a wet winter very seriously," said Matt Nauman, a spokesman for Pacific Gas & Electric, which provides electricity and natural gas to 16 million people from Bakersfield to Eureka. Nauman said the company has 350 arborists and foresters and 650 tree crews working to trim trees on 134,000 miles of overhead power lines to reduce the risk of blackouts when storms knock dead branches into power lines. Widespread blackouts happened during the 1997-98 and 1982-83 storms.

"We need to be ready whatever the weather ends up being," he said.