

Talk of an El Niño year cools, but dont despair yet about winter

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Ignore El Niño if you can.

With the media attention, it's not easy to look away from this rock star of California weather. El Niño, a sprawling blob of warm water in the Pacific Ocean, appeared in spring, raising the chances of a gully-washing winter.

But the blob has cooled a little and so have hopes that it would break this desperate drought -- at least in the media. Meteorologists say this is just a dose of reality, and it's no time to despair.

There are other blobs in the sea.

"I've been downplaying El Niño all year," said Fresno-area meteorologist Steve Johnson. "I haven't lost hope for winter storms. I just think you have to look in other places around the Pacific to get clues."

Among the other things happening in the 64 million square miles of the Pacific Ocean, there is a warm-water pocket in the Gulf of Alaska. That warm water was around last winter, Johnson said.

There is a depressing chance it could factor into another dry season, he said. There also is a chance it could change things and allow more storms into California. Or, maybe El Niño still will come riding to the rescue.

In other words, it's too early to forecast winter precipitation with any real confidence.

So, the right questions to ask at the moment: Exactly what are scientists tracking in that giant storm incubator called the Pacific? And why?

They're watching water temperature changes and repeating trends -- El Niño, the Madden-Julian Oscillation in the western Pacific and the Pacific Decadal Oscillation in the north Pacific.

El Niño and his cool-water sibling La Niña are the biggest celebrities in this group, but long-term forecasters pay attention to all the trends.

Why? Ocean warmth and energy connect with the air and the jet stream, a wind blasting up to 200 mph. Driven by the Earth's rotation and heated air, this wind flows at about the elevation of commercial jets. It delivers storms to your doorstep.

"Winter storms go where the jet stream takes them," said NOAA meteorologist Gerald Bell, based in College Park, Md. "You get increased probability of rainfall in California during a strong El Niño because the jet stream can shift in that direction."

El Niños happen when trade winds die down at the equator. Without that wind, the water warms up from the sun, huge plumes of tropical moisture float into the air and the jet stream moves toward it.

The phenomenon's name, El Niño, is Spanish for "Christ child." Fishermen first noticed and named it

because the warm water appeared around Christmas along the coast of Ecuador and Peru -- and it ruined fishing when it happened.

The world woke up to El Niño during the powerful warming of 1982-83. Monsoon rain fell in the central Pacific, instead of the western Pacific. Droughts and forest fires hit Indonesia and Australia. Many parts of California had their biggest rain and snow totals on record.

It caused billions of dollars in damage around the globe, prompting the research community to launch major efforts at understanding it. With all the data and further understanding, El Niño quickly became a forecasting advantage.

California has come to lean heavily on that advantage. This winter, there is about a 65% chance of an El Niño, but scientists warn that it does not look like it will be very strong. Warmer is stronger, cooler is not so strong.

But strong or weak, El Niño doesn't always mean rain in California. The phenomenon happened twice during a six-year California drought from the mid-1980s to the early 1990s.

La Niña, the cool-water flip side of El Niño, is associated with cooler, drier weather in California. Yet it occurred only once in that six-year drought.

The other three years of the drought were neutral, neither warm nor cool. So was 1992-93, the year the drought was decisively broken. The Sierra snowpack wound up at 150% of average, and statewide precipitation was 145% of average, according to the state Department of Water Resources.

"We have a very solid understanding of the physical reasons El Niño alters weather patterns," meteorologist Paul Iniguez of the National Weather Service in Hanford said. "But it is clear there is not an absolute one-to-one relationship that works without fail."

Fresno-area meteorologist Johnson said he continues to notice the warm water near Alaska. It is considered to be the warm phase of the Pacific Decadal Oscillation, which is like El Niño but over a longer time period.

The warm water near Alaska was present when California experienced a damaging freeze in early December last year, Johnson said. Thereafter, a freakish high pressure pattern settled off the coast of California, bouncing away storms the rest of December, January and part of February.

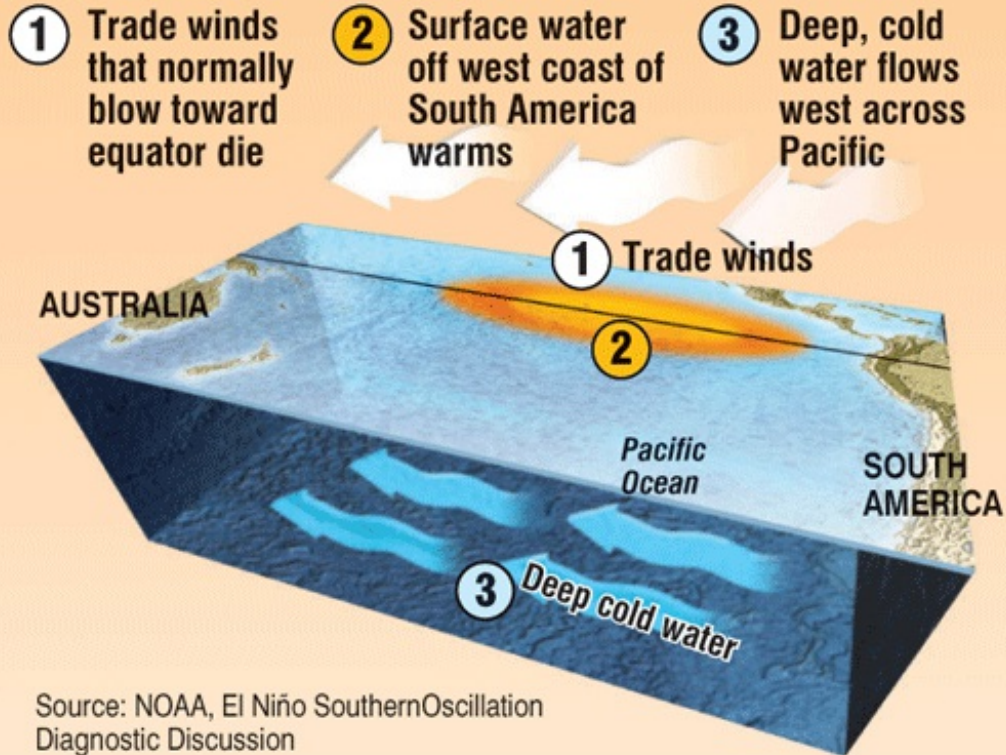
If the warm water in the Gulf of Alaska shifts slightly, Johnson said, it might open the door to more storms this winter.

The point is that warm water in the Gulf of Alaska is just one of many factors, the meteorologist said. It's wise not to focus on one phenomenon, such as El Niño.

Johnson said: "When you get that myopic, that's when you really get whacked with something you didn't expect."

El Niño

The warm water near South America can mean torrential downpours in California and a milder winter in the northeastern U.S. Scientists forecast a 65% chance of El Niño this winter.



Source: NOAA, El Niño Southern Oscillation Diagnostic Discussion

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