



Source: National Oceanic and Atmospheric Administration (NOAA)

## Forecast for 2012: Look for La Niña Again

by Kindra Gordon

It was a La Niña weather system that caused the drought, floods and severe tornados across the country during 2011, and forecasters say a second La Niña is brewing for 2012.

Well-known Iowa State University Professor of Agricultural Meteorology Elwynn Taylor is calling for this winter to be a near repeat of last year across the U.S. But he adds that it may not be as extreme. An example of this is that some periodic moisture is forecast for the South, which would help temper the effects of the drought.

Taylor explains that the La Niña responsible for last winter's weather restrengthened in October, and he gives it better than 50-50 odds that it will continue through the winter.

Forecasters with the National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center say La Niña winters are often associated with drier-than-normal — and warmer — conditions across the southern tier of the U.S., which indicates the drought is likely to continue in Texas, Oklahoma and New Mexico. A La Niña also typically causes wetter than normal conditions

in the Northwest and Ohio Valley — and a colder than normal winter in the Northwest and Northern Plains.

### Historical reference

Taylor explains that a La Niña brings on a drought for the South. He says, "People in Texas and Oklahoma who are old enough may remember the droughts of the early 1950s and 1974. Both of those droughts were associated with very strong winter La Niñas, as was the drought this past summer."

Taylor reports that the La Niña of last winter was the third strongest on record. The strongest ones were those that preceded the droughts of the 1950s and 1974. "In both of the previous cases, the La Niña weakened come summertime, but then strengthened again in the fall. There are indications this one is doing the same thing."

As for growing-season weather in 2012, Taylor notes that the drought of the early 1950s lasted three years. In 1974, though, a bad-weather year was followed by a not-so-bad year. "If a strong La Niña comes back this year, we can only hope things turn out more

like they did for 1975," he says.

While forecasters concur that the La Niña is gradually strengthening and will continue to shape this winter's weather, there is a wildcard that could influence the weather as well. That is the Arctic Oscillation.

Mike Halpert, deputy director of NOAA's Climate Prediction Center, explains that the erratic Arctic Oscillation is always present and fluctuates between positive and negative phases that can generate strong shifts in the climate patterns that could either overwhelm or amplify La Niña's typical impacts. As an example, the negative phase pushes cold air into the U.S. from Canada — often causing outbreaks of cold and snowy conditions.

However, winter storms caused by these conditions are generally not predictable more than a week in advance — so how the winter shapes up is still truly a wildcard.

### What to expect

The December through February outlook by region from the Climate Prediction Center forecasts the following:

- **Pacific Northwest:** Colder and wetter than average, with increased mountain snow. This may set the stage for a repeat of spring flooding in the Missouri River Basin.
- **California:** Wet and cool in northern California, while the southern tier is drier than average with an increased risk for wildfires.
- **Northern Plains:** Colder and wetter than average with a concern for spring flooding.
- **Southern Plains and Gulf Coast:** Warmer and drier than average, which will likely exacerbate drought conditions.
- **Ohio and Tennessee Valleys:** Wetter than average with potential for increased storminess and flooding.
- **Northeast and Mid-Atlantic:** Winter weather for these regions is influenced primarily by the Arctic Oscillation rather than La Niña. If enough cold air and moisture are in place, these areas could see above average snowfall. **HW**