

"Currents" June 2023

What El Niño Means to Texas

This year we received our "April showers" in May and the rain has brought along with it plenty of vegetation growth. Denizens of Kerr County are almost always thankful for rainfall, but since we've been in a drought for almost a year and half, the spring moisture was especially welcome. However, the recent rains only provided a short-term improvement to drought conditions and the oppressive heat is quickly eliminating any gains. Are there indications of more rain on the horizon?

One of the most important tools scientists use to predict natural variations in seasonal climates is ENSO (El Niño-Southern Oscillation). ENSO is made up of three phases: "El Niño" and "La Niña", which are opposites of each other, and then a "Neutral" phase where conditions are generally close to average. These variations are caused by warming and cooling temperatures in the Pacific Ocean coupled with atmospheric changes. The effects of ENSO differ around the world, but in Texas, La Niña typically means drier weather and El Niño means wetter weather. There will always be regular climate variations that influence day to day weather, but being in an El Niño phase means we might get extra help on the precipitation side of things. Based on predictions from the National Oceanic and Atmospheric Administration (NOAA), we have been in El Nino since the beginning of June and the phase is expected to continue into the winter. This means there is a good chance we will receive above normal rainfall during this fall and winter.

Even if we get the predicted rains, it's important to remember that water levels have been very low for an extended period. Droughts don't just impact river flow, they also lower groundwater levels, decimate vegetation, and exhaust soil. Water is stored in many places in our environment, and those sources will be recharged at the same time as the river. It will take steady rain over a long duration to soak in and replenish what has been depleted over the last year and a half. Even with the one month of heavy precipitation from May, our annual rainfall is still behind the 30year average.

Increased storms and rainfall can also have negative impacts that many people from the region are familiar with. The Texas Hill Country is one of the most flash flood prone parts of the country, known as Flash Flood Alley. During intense rainfall events, the steep and rocky topography, that makes the area so beautiful, increases the velocity of floodwaters leading to intense localized flooding.

As important as it is to practice water conservation during times of drought, it's also important to be cautious of the risk of flooding. There are many ways you can "Be Flood Aware" such as paying attention to weather forecasts and never driving through floodwaters. You can learn more about being flood aware on our website at <u>www.ugra.org/public-information/education/blog/be-flood-aware</u>.

Let's Keep Our River Clean

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