

## *Texas Seasonal Outlook*

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The state of Texas received a large and substantial amount, with many records broken, of rainfall as we entered into the summer season; all courtesy of El Niño making a return for the first time in about 5 years. It is not unusual for El Niño to not have huge impacts, in the way of rainfall, for Texas during the summer months. We have clearly seen this occur over much of July & August as some parts of the state have witnessed a “flash drought.” A flash drought is typically an onset of unusually high temperatures and little to no rain leading to a rapid decrease of soil moisture. In turn, parts of East Texas have gone from too much rain to a moderate/severe drought in a short amount of time.

El Niño refers to the large-scale warming of ocean temperatures over the east-central Equatorial Pacific Ocean. Going into the winter season, El Niño typically means above normal rain and below normal temperatures for Texas and much of the southeastern half of the United States. The image below (Figure 1), provided by NOAA, shows how the Pacific Jet Stream dips further south and brings more moisture and rainfall into parts of California, Arizona, New Mexico and Texas. Conversely, when a La Niña is present the jet stream shifts further north and below normal rainfall and above normal temperatures are typically forecast for Texas.

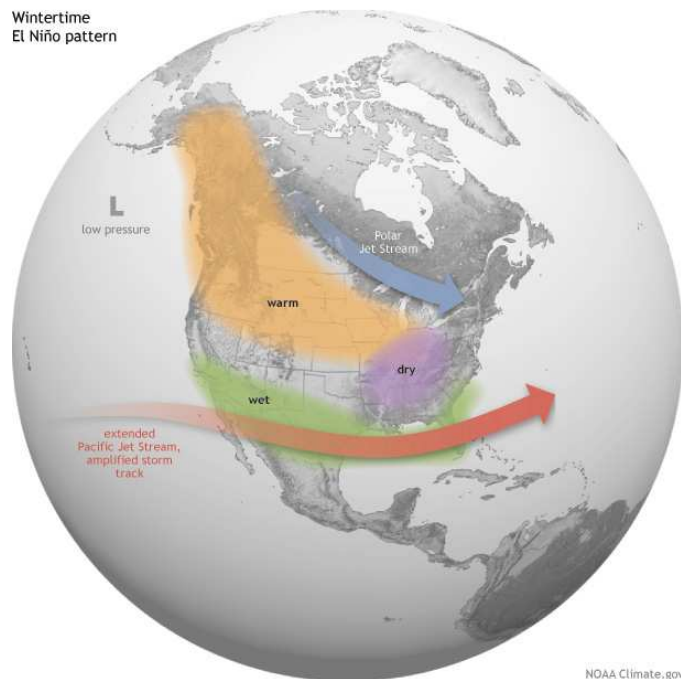


Figure 1 - NOAA Wintertime El Niño Pattern

Forecasters with the Climate Prediction Center (CPC) currently have an El Niño Advisory issued based on the ENSO Alert System. They are predicting a greater than 90% chance that El Niño will continue through the Northern Hemisphere winter 2015-16, and around an 85% chance it will last into early spring 2016. With a few weeks left before the official end of summer, occurring on September 22, much of the state should continue to expect above normal temperatures and below normal rainfall. As previously mentioned, El Niño impacts typically wane during the summer and are at their strongest during the winter period.

This can be seen on the CPC’s three-month outlook for September/October/November (Figure 2 A&B). The opportunity for above normal rainfall begins to return mainly in North and West Texas along with below normal temperatures in the Fall. An “equal chance” of above normal, below normal or normal rainfall and temperatures sets in East and Southeast Texas.

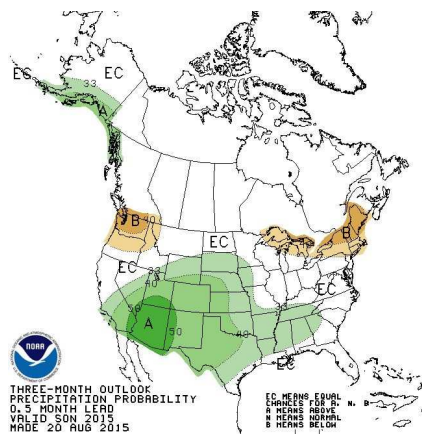


Figure 2 A CPC 3-Month Outlook Precipitation for SON

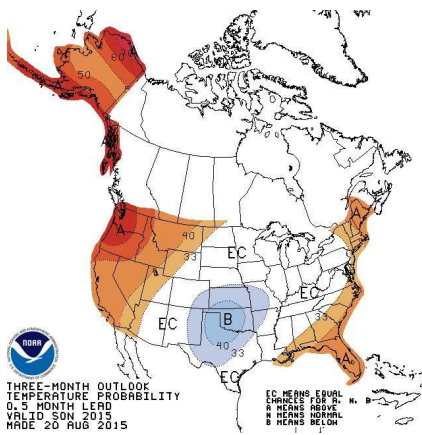


Figure 2 B CPC 3-Month Outlook Temperature for SON

As we move further in Fall and go into the Winter season, the opportunity for above normal rainfall begins to spread state-wide; along with below normal temperatures. The images below (Figure 3 A/B) are 3-month outlooks provided by the CPC for October/November/December, November/December/January, and December, January/February.

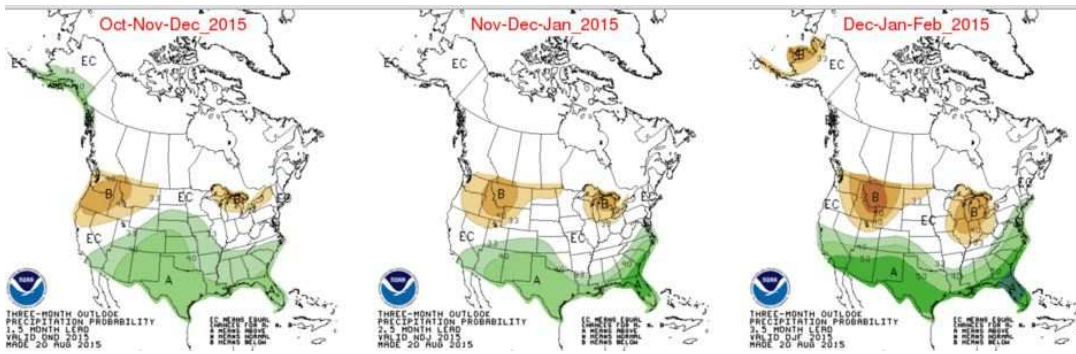


Figure 3 A - CPC 3-Month Outlooks for OND/NDJ/DJF



Figure 3 B - CPC 3-Month Temperature Outlooks for OND/NDJ/DJF

To sum up, there are strong indications that Texas will encounter more rainfall and cooler temperatures as we head to the end of the year. El Niño is expected to peak in the late fall and early winter before beginning to taper off back to a neutral phase.