Bi-monthly Educational Topic #15 for CCGCD
by Texas Hill Country Weather Services, LLC
August 11, 2025

Current conditions:
As of August 7, 2025, the intensity of the drought ranges from D0 (abnormally dry) in the northern two-thirds of the county to D1 (moderate drought) across a southern section of the county increased back to D2 (severe drought) across a very small section of far southern section of the county (per the latest available US Drought Monitor map provided below). Despite our Summer rains in June and July, our drought continues. Even though this Summer has not been typical, we have entered into a more usual August weather pattern meaning less frequent rainfalls, more sunshine and increased drying. However, our tropics are active, and this weather pattern is still giving us chances of infrequent rainfalls throughout the rest of August. This same pattern looks to dominate through September. During the Fall season coming to us, we should expect an uptick for some more frequent rainfalls.

Texas
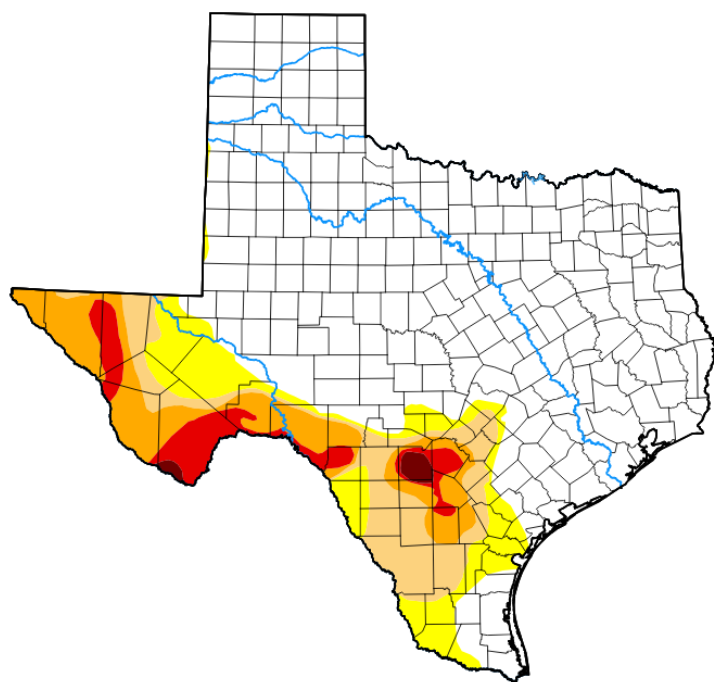
Map released: Thurs. August 7, 2025
Data valid: August 5, 2025 at 8 a.m. EDT

Intensity
- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors
United States and Puerto Rico Author(s):
   Richard Tinker, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):
   Lindsay Johnson, National Drought Mitigation Center

This topic is a follow-on from Topic #14. A brief review of the last topic follows. A rainfall forecast was given for Kendall County for the weekend of July 26/27 using weather modeling datasets from the July 26 00z runs. 48-hr model total precipitation forecasts were tabulated in which an actual rainfall total forecast for Kendall County was provided on the District's Facebook page.

The average total precipitation forecasted from the models for our county was 0.29 of an inch with a standard deviation value of +-0.30 of an inch. The forecast that was delivered to the Facebook page was a total precipitation across the county was to range from 0.10 of an inch to a 0.25 of an inch with isolated

0.50 of an inch values. The forecast provided to the Facebook page on Friday July 26th in the morning valid for that weekend is quoted below.

"Rainfall is expected. Even though the atmosphere will be loaded with moisture, rainfall totals by the end of the weekend look to be on the low end generally ranging from 0.10 of an inch to a 0.25 of an inch across Kendall County. There could be isolated 0.5 of an inch to one inch rainfall totals in the county."

So, did the provided forecast to the Facebook page verify relative to what actually happened? The average rainfall across the county for that weekend that happened was 0.13 of an inch. The standard deviation was +-0.14 of an inch, meaning a range of 0 inches of rainfall up to 0.27 of an inch of rainfall was common across the county. A max rainfall amount of 0.37 of an inch occurred.

Based on what actually happened and without getting heavy into verification procedures, the forecast verified well and the calculations associated with the modeled dataset verified fairly well. The values from modeled dataset landed higher than the forecast and what happened.

To be critical, this is just one sample exercise. The key to developing forecast skills in which the public and the District will build trust with the human weather forecaster and the models being used is to do this verification exercise for every model vs. forecast vs. actual occurrence sample.

One way to depict forecast skill is to use a Probability of Detection (POD) table. In the next topic, we will go into more detail about forecast skill.

Stay tuned into CCGCD's website page, as TXHCWS will soon be providing more educational materials.