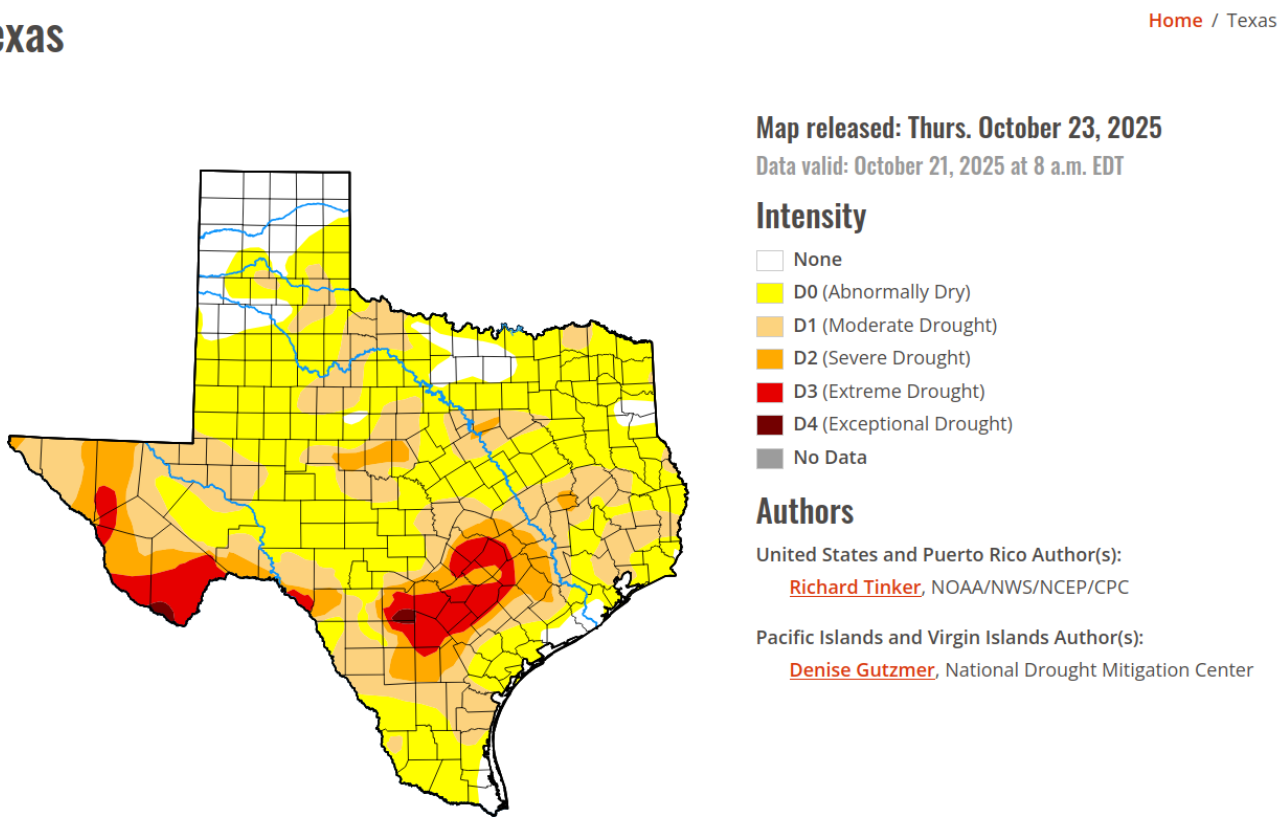
Bi-monthly Educational Topic #20 for CCGCD
by Texas Hill Country Weather Services, LLC
October 28, 2025

Current conditions:

As of October 21, 2025, 100% of the county is back into drought. The intensity of the drought ranges from D0 (abnormally dry) to D2 (severe drought) across Kendall County. Until this past weekend, our county had not had any rainfall for almost two consecutive months. The rainfall we received this past weekend was not enough to reach our historic September and October monthly rainfall averages; thus, the intensity of our on-going drought did not diminish. Our weak La Niña event will continue to bring us drier than average and warmer than average conditions through early next year.



Within the last educational topic, the expected increase in frequency and expansion of drought across the US was discussed. This topic discusses the expected increase in frequency and intensity of heat waves across the US through 2059.

Because heat waves are hazardous to life here on Earth, the Department of Civil and Environmental Engineering at the University of Tennessee in Knoxville, TN recently conducted a modeling analysis to study heat waves and published a research article[1] this topic, which is discussed herein.

The study identifies heat waves across the US from 2020 to 2059 as analyzed using an ensemble of the Couple Model Intercomparison Project Phase 6 (CMIP6) modeling system.

Results from the modeling indicate the following:

- Summer and winter heat waves are forecast to last on average across the US approximately 4 consecutive days.
- Summer heat waves are projected to last 9 – 12 days on average in the South and Southwest.
- Winter heat waves are projected to last 9 – 12 days on average in the Northern Midwest and Rocky Mountain regions.
- There is a positive trend in future winter heat waves.
- Summer heat waves are increasing in intensity and duration faster than winter heat waves.
- The regions experiencing the highest temperatures on these heat wave days are consistently in the South and Southwest both during the summer and the winter.
- The number of heat wave events in a given year is forecast to increase for summers and winters.
- An increase in the number of people experiencing heat wave days is forecast.

The cumulative result is heat waves commonly occur at the same time as droughts, leading to greater mortality and environmental impacts from the compounding events.

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

[1]https://iopscience.iop.org/article/10.1088/1748-9326/adf4f9. Rubin, H. J., Zhang, L., Fu, J. S., Rastogi, D., Kao, S. C., & Ashfaq, M. (2025). Dynamically downscaled seasonal heat wave projections in the CONUS. Climate and Atmospheric Science (2025) 8:233. https://doi.org/10.1038/s41612-025-01055-3