Drought Information Statement for North and Central Texas

Valid September 28, 2023

Issued By: NWS Fort Worth

Contact Information: sr-fwd.webmaster@noaa.gov

- This product will be updated October 31, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/fwd/DroughtInformationStatement for previous statements.
September rainfall was inadequate to prevent an expansion of Extreme Drought (D3).

Drought Intensity and Extent

- D4 (Exceptional Drought): portions of Central Texas, including Killeen
- D3 (Extreme Drought): much of North and Central Texas, including Dallas/Fort Worth and Waco
- D2 (Severe Drought): areas with lesser long term precipitation deficits, including Sherman/Denison
- D1 (Moderate Drought): the Big Country and portions of East Texas
Recent Change in Drought Intensity

Link to the latest 12-week change map for North and Central Texas

- 12-Week Drought Monitor Class Change
  - Drought conditions intensified across nearly the entire region this summer.
  - Portions of Central Texas experienced a 5-category degradation, from no classification to Exceptional Drought (D4) in a matter of weeks.

U.S. Drought Monitor 12-week change map
(July 4 to September 26)
Image from National Drought Mitigation Center (NDMC)
The image on the left shows September rainfall. Some spots (in red) topped 5 inches, but many locations (in green) received less than 2 inches, which is below normal.

The image on the right shows departure from normal rainfall during the last 12 months. Areas in orange have 12-month deficits in excess of 8 inches, and areas in red have deficits of more than a foot.

Imagery from Advanced Hydrologic Prediction Service (AHPS)
After one of the hottest summers on record, September was also several degrees warmer than normal.

At DFW Airport, there were 8 days during September with triple-digit temperatures, which is an all-time record. Of these, 5 were daily record highs, including 110° on September 8 (which was the third occurrence of 110° this year).

Both Waco and Killeen recorded 10 days with triple-digit temperatures during September. Both tallies fell short of the record, which is 11 days in 2011 for both locations.
Summary of Impacts

Hydrologic Impacts
- Reservoir levels are critically low from the Big Country into Central Texas.

Agricultural Impacts
- Autumn rainfall has so far been inadequate for fall planting. Stock tanks remain low.

Fire Hazard Impacts
- Across much of the region, vegetation is dormant or otherwise drought-stressed and remains conducive to fire initiation and spread.

Other Impacts
- For many areas, the current drought is now over 2 years in duration, resulting in deep soil moisture deficits that are adversely impacting native trees.

Mitigation Actions
- Water conservation measures are widespread. Since water restrictions vary, residents should keep informed with the current guidelines from their municipality or water utility provider.
Reservoirs remain healthy across North Central and East Texas but are critically low from the Big Country into Central Texas.

- Lake levels at Waco, Belton, and Stillhouse Hollow are among the lowest on record.
- Lake Palo Pinto is just above 30% full, and Proctor Lake has fallen to 26%.

Water Conservation Measures:

- Dallas and Fort Worth - twice-per-week limit, only hand watering 10 am to 6 pm (for Dallas the daytime limit is only from April to October)
- Waco - Stage 2: twice-per-week limit, no outdoor watering from 8 am to 7 pm
- Killeen - Stage 2: twice-per-week limit, no outdoor watering from 10 am to 8 pm (identical restrictions for Temple, Belton, Harker Heights and Copperas Cove)
Fire Hazard Impacts

- September rainfall was sufficient enough in some areas to begin the fall growing season.
- However, dry vegetation in other areas will maintain a wildfire threat.
- The days of greatest concern are those that are sunny and warm with low humidity and breezy winds.
- Be vigilant about fire usage. Avoid open flames near dry vegetation, and assure all coals and embers are fully extinguished.

Click here for the latest map of Outdoor Burn Bans across Texas.

The Keetch-Byram Drought Index (KBDI) is designed to assess fire danger.
- Climatologically, October is the second wettest month of the year across much of North and Central Texas (behind May).

- The fall rainy season looks to get a boost into the opening days of October.

- However, for many locations, weekly precipitation amounts during October need to be near or even in excess of one inch to keep pace with normal values. Tallies will need to be well above normal to significantly ease the drought.
El Niño may enhance precipitation amounts into the upcoming cold season.

As a result, precipitation outlooks through the end of the year favor above normal precipitation.

Climate Prediction Center (CPC) Seasonal Precipitation Outlook
Released September 21 - Valid Through the End of 2023
Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage.

- Although outlooks favor above normal precipitation, it will take some time to reverse the extraordinary deficits across the region.
- While some drought improvement may occur through the end of the year, the ongoing drought is likely to persist into 2024.

Links to the latest:
- Climate Prediction Center (CPC) Monthly Drought Outlook
- Climate Prediction Center (CPC) Seasonal Drought Outlook

Climate Prediction Center (CPC) Seasonal Drought Outlook
Released September 21 - Valid Through the End of 2023