DROUGHT

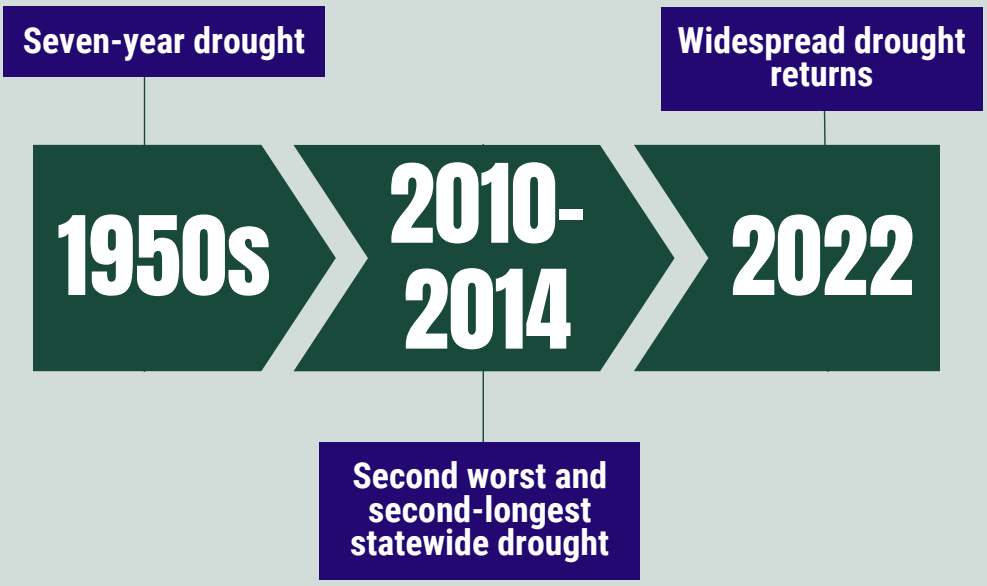
101

LOST PINES
GROUNDWATER
CONSERVATION DISTRICT

WHAT IS DROUGHT?

Texas is no stranger to drought.

The severe seven-year drought in the 1950s marked a significant moment in the state's history, leading to the creation of the Texas Water Development Board and later, Groundwater Conservation Districts, like the Lost Pines Groundwater Conservation District (LPGCD). Since then, Texas has experienced multiple droughts, including the second-worst and second-longest drought from August 2010 to October 2014. In 2022, drought conditions returned, reminiscent of 2011, once again showing the recurring danger droughts pose to Texas's economy and public health.

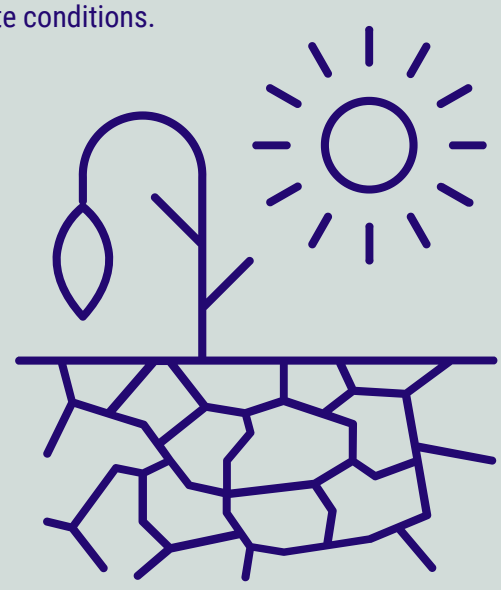


WHAT IS DROUGHT?

DEFINTIONS

The National Oceanic and Atmospheric Administration and the National Integrated Drought Information System define drought simply as a period of drier than normal weather. To determine if a dry spell is a drought, scientists compare current conditions to historical climate data. Given that some areas are now generally hotter and drier than a century ago, a more accurate method is to use the last 30 years as a reference for contemporary climate conditions.

The American Meteorological Society defines a drought as a period of abnormally dry weather sufficiently long enough to cause a serious hydrological imbalance. Unlike fast-moving disasters like hurricanes and tornadoes, droughts typically develop slowly. However, flash droughts can occur quickly due to a combination of low rainfall and high temperatures, winds, and solar radiation.



WHAT IS DROUGHT?

FOUR TYPES OF DROUGHT

METEOROLOGICAL

This begins with a period of unusually dry weather and low rainfall compared to the long-term average, but doesn't necessarily impact water supply.

AGRICULTURAL

Often following meteorological drought, it reduces soil moisture, harming crops and increasing irrigation needs, sometimes leading to drought disaster declarations and indicating potential hydrological drought.

HYDROLOGICAL

Characterized by below-average water levels in streams, aquifers, and reservoirs. It is a key focus to the water planning process at the LPGCD because it affects water supply.

SOCIOECONOMIC

Occurs when water shortages impact public health, safety, and quality of life, or when drought disrupts the supply and demand of economic products.

DROUGHT 101

CONCLUSION

Texas's history of droughts, notably the severe event in the 1950s, has shaped its approach to water management, leading to the establishment of the Texas Water Development Board and Groundwater Conservation Districts like the Lost Pines Groundwater Conservation District (LPGCD). Over the years, Texas has faced numerous droughts, with significant ones occurring from 2010 to 2014 and again in 2022, underscoring the ongoing threat droughts pose to the state's environment, economy, and public health.

Droughts are complex phenomena that can be challenging to define and monitor. They are categorized into four types: meteorological, agricultural, hydrological, and socioeconomic. Each type affects different aspects of the environment and society. Meteorological droughts involve prolonged periods of low rainfall, agricultural droughts impact crop production, hydrological droughts reduce water levels in streams and reservoirs, and socioeconomic droughts affect the supply and demand of economic products.

The American Meteorological Society and other scientific bodies describe droughts as extended periods of unusually dry weather causing significant hydrological imbalances. These periods can develop slowly but may intensify rapidly under certain conditions. Scientists use historical climate data, often from the past 30 years, to assess drought conditions accurately.

Understanding and planning for droughts, especially hydrological ones, is crucial for organizations like the LPGCD, which focus on maintaining water supply levels. This comprehensive approach helps mitigate the impacts of droughts on Texas's environment, economy, and public health.

LOST PINES

GROUNDWATER CONSERVATION DISTRICT

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THOUSAND RESIDENTS SERVED

We serve the residents of Bastrop and Lee County

We provide FREE water well monitoring and well water quality analysis to Bastrop and Lee County residents.

Our Purpose

The LPGCD is the state's preferred method of groundwater management in the Bastrop and Lee Counties. Per Texas Water Code Section 36.0015, LPGCD is to manage groundwater by balancing all property interests and providing for the preservation, protection, recharging, and prevention of waste of groundwater.

We are mandated by the state to provide educational programs to the public relating to the problems and issues concerning water management.

We manage 3,473 registered wells in our district.

The two largest water uses are for municipal and irrigation purposes.

There are six major aquifers in our district.

Our District's water needs are estimated to increase by 46% by 2070.

BOARD OF DIRECTORS

The Lost Pines Groundwater Conservation District is governed locally by ten citizens, five from each county, who have been appointed by their respective County Commissioners Courts to serve as directors for a term of four years.

Elvis Hernandez, President
Kay Rogers, Vice President
Mike Simmang, Secretary/Treasurer
Sheril Smith
Melissa Cole
Tom Arsuffi
Nick Textor
Herb Cook
Nancci Phillips-Burgess
Debra Phillips

LOST PINES
GROUNDWATER
CONSERVATION DISTRICT

CONTACT US

317 E Hempstead St.
Giddings, Texas 78942
(512) 360-5088
www.lostpineswater.org
lpgcd@lostpineswater.org

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Facebook.com/lostpinesgcd

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THINK SMART

SAVE WATER

SAVE MONEY