

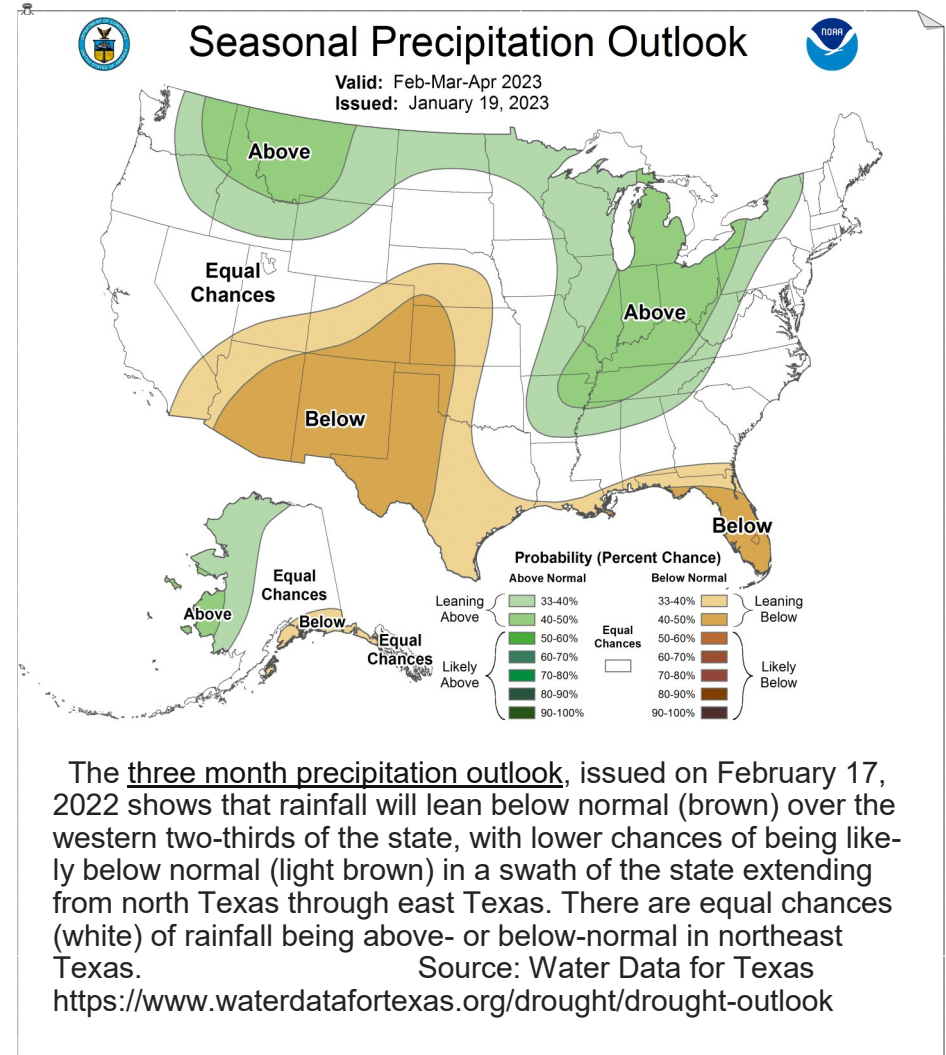


# PINEYWOODS GROUNDWATER CONSERVATION DISTRICT

The Water Newsletter  
Serving Angelina and Nacogdoches Counties

4th Quarter 2022

Pineywoods Groundwater Conservation District  
P.O. Box 635187  
Nacogdoches, Texas 75963-5187



The three month precipitation outlook, issued on February 17, 2022 shows that rainfall will lean below normal (brown) over the western two-thirds of the state, with lower chances of being likely below normal (light brown) in a swath of the state extending from north Texas through east Texas. There are equal chances (white) of rainfall being above- or below-normal in northeast Texas.

Source: Water Data for Texas

<https://www.waterdatafortexas.org/drought/drought-outlook>

PLACE  
STAMP  
HERE

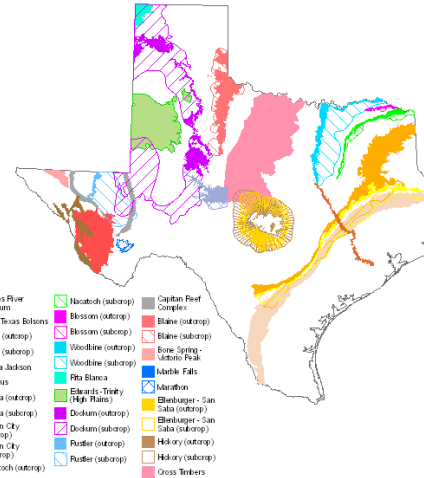
## In This Issue

- Seasonal Precipitation Outlook - p.1
- At a Glance - p.2
- Wells in the Database - p.2
- Upcoming Events p. 3
- Water Weekly - p. 4
- Rainfall comparison p.5
- Water Wise Conservation Steps—p. 5
- Acre Feet of Groundwater - p.6
- The Queen City Aquifer - p. 7

## At a Glance:

Wells in PGCD Database  
7/01/2022  
34 well applications in progress

Total Exempt wells – 1361  
Total Non-exempt wells – 296  
Total Production fee wells – 206  
O&G wells — 551  
Frac wells — 32  
Plugged wells — 615  
Total District wells recorded— 3,061



## The Queen City Aquifer

### Aquifer Facts

- Aquifer type: confined and unconfined
- Area of outcrop: 8,781 square miles
- Area of subsurface: 7,015 square miles
- Proportion of aquifer with groundwater conservation districts: 63 percent

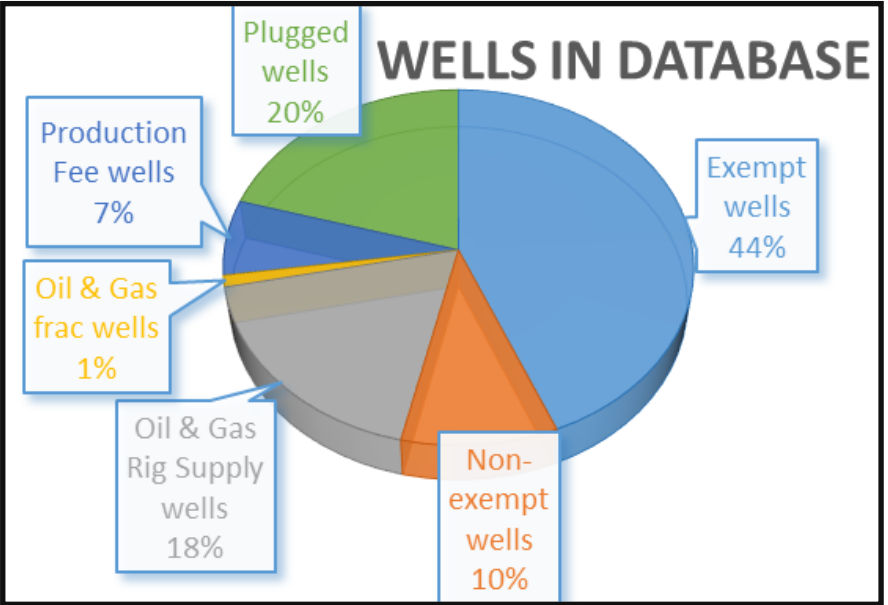
Number of counties containing the aquifer: 42

### Summary

The Queen City Aquifer is a minor but widespread aquifer that stretches across the Texas upper coastal plain. Water is stored in the sand, loosely cemented sandstone, and interbedded clay layers of the Queen City Formation that reaches 2,000 feet in thickness in South Texas. Average freshwater saturation in the Queen City Aquifer is about 140 feet.

Water is generally fresh, with an average concentration of total dissolved solids of about 300 milligrams per liter in the recharge zone and about 750 milligrams per liter deeper in the aquifer. Although salinity decreases from south to north, areas of excessive iron concentration and high acidity occur in the northeast.

The aquifer is used primarily for livestock and domestic purposes, with significant municipal and industrial use in northeast Texas.



**“It is better to suffer wrong than to do it, and happier to be sometimes cheated than not to trust. “**  
**Samuel Johnson**

# Water Weekly

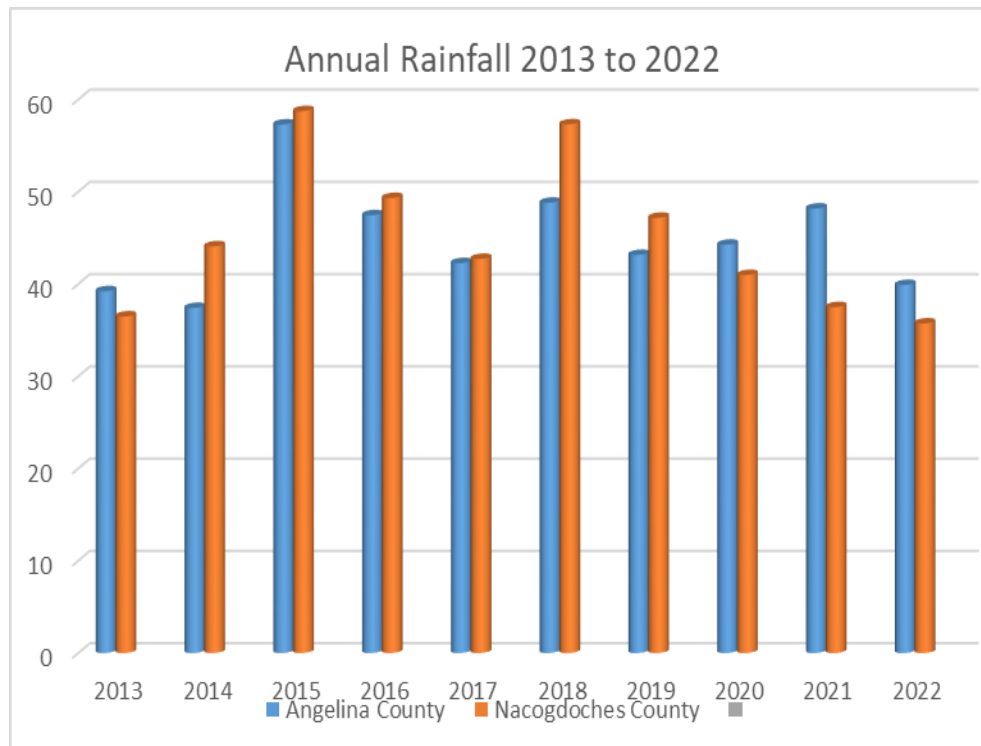
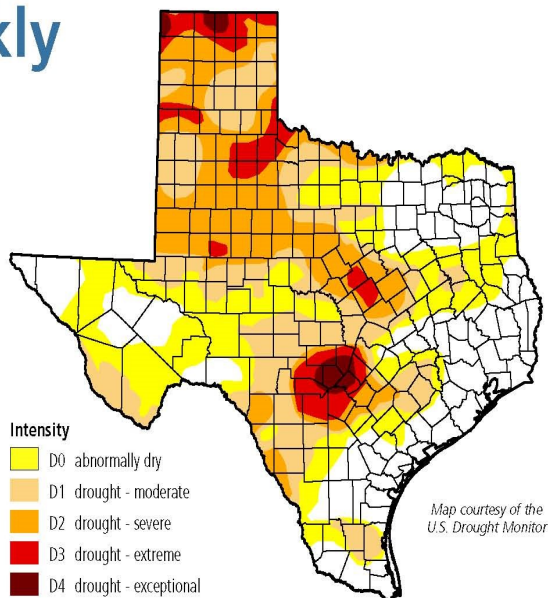
For the week of 01/02/23

## Water conditions

Thanks to seasonally cooler temperatures and dormant vegetation, drought conditions tend to change slower this time of year. This week's drought monitor map, for conditions as of December 27, is a perfect example. The latest map shows no changes from the previous week.

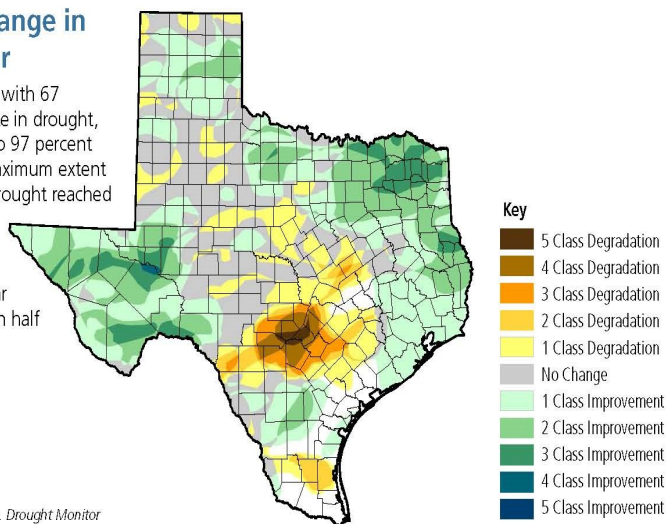
## Drought conditions

- ◆ 49% now
- ◆ 49% a week ago
- ◆ 61% three months ago
- ◆ 67% a year ago



## Drought change in the last year

Texas began 2022 with 67 percent of the state in drought, which expanded to 97 percent in late July—its maximum extent during the year. Drought reached its smallest extent for the year in late December and ended the year impacting less than half the state.



Written by Dr. Mark Wentzel — Dr. Mark Wentzel is a hydrologist in the TWDB's Office of Water Science and Conservation.

Bryan McMath, Governmental Relations | bryan.mcmath@twdb.texas.gov | 512-463-7850  
Media Relations | MediaRelations@twdb.texas.gov | 512-463-5129

www.twdb.texas.gov

Stay connected:



## Water Conservation Tip:

### Showers

- ◆ A water-efficient showerhead is one of the single most effective water-saving steps you can take inside your home.
- ◆ Take shorter showers. A full bathtub can use up to 70 gallons of water versus a 5-minute shower that uses as little as 10 gallons.





**Texas Water  
Development Board**

#txwater

## Board of Directors

Jimmy Mize—President  
David Alders—Vice President  
Gloria Montes—Secretary  
Tommy Carswell—Treasurer  
Stephen Raley—Director  
Kevin Gee—Director  
Roger Russell—Director

## Staff

John McFarland—General  
Manager  
Wil Blough—Administrative  
Assistant

## Contact Us

Pineywoods Groundwater  
Conservation District

**P.O. Box 635187**  
Nacogdoches, Tx 75963-  
5187

Phone: (936) 568-9292

Fax: (936) 568-9296

Email: [staff@pgcd.org](mailto:staff@pgcd.org)

202 E. Pilar, Room 132

## Upcoming Events

Regularly scheduled PGCD board meeting—  
February 8, 2023 @ 1:30, Nacogdoches City Hall

Regularly scheduled meeting of Regional Water  
Planning Area, Region I, - - - February 23, 2023

Regularly scheduled meeting of Regional Water  
Planning Area, Region D, - - - March 15, 2023

Regularly scheduled meeting of Groundwater  
Management Area 11 - - TBD

## District Holidays

The District Office will be closed for the following  
holidays:

Monday , January 2—New Year’s Day

Monday January 16—MLK Day

**Serving Angelina and Nacogdoches Counties**