Neches and Trinity Valleys Groundwater Conservation District

Groundwater Management & Planning

Our District, our aquifers, and how the District plans and manages groundwater

Public Stakeholder Meetings — June 30 & July 1, 2026

Presented by District Staff

What we will cover

1. **About the District** *Who we are – a groundwater conservation district - and what we do*
2. **Our aquifers** *The groundwater resources we manage*
3. **Wells & permits** *Exempt and non-exempt wells, which require operating permits*
4. **Texas groundwater planning** *Texas Water Development Board, Groundwater Management Areas, setting Desired Future Conditions for aquifers, and Modeled Available Groundwater for aquifers*
5. **Groundwater Management Area 11 joint planning** *Setting Desired Future Conditions for aquifers, together with neighboring groundwater conservation districts in our area*
6. **Our Management Plan** *The District's plan for action to manage groundwater locally*

WHO WE ARE

About the District

Established

We were created by the Texas Legislature in 2001 (S.B. 1821) as a groundwater conservation district under the Conservation Amendment of the Texas Constitution.

Where we are

We manage groundwater in Anderson, Cherokee, and Henderson Counties in East Texas.

How we are governed

We have a seven-member appointed Board of Directors, with two directors appointed by each commissioners' court, and one director appointed by the largest municipality in each county on a rotating basis every two years.

What we do

We conserve and protect groundwater, prevent waste, and protect the rights of groundwater owners — through permitting, well spacing, metering, conservation, and education, employing a general manager and staff, operating under District Rules first adopted in June 2003.

WHO WE ARE

Created to serve the public under Texas Water Code Chapter 36

The District's core statutory obligations fall into three distinct areas.

Adopt a Management Plan

Adopt a comprehensive, approved plan with goals for conservation, drought, and efficient use.

Regulate Wells and Protect Groundwater

Review and issue well construction, plugging and operating permits — with spacing and production limits.

Enforce its Rules

Monitor wells, metering, and reporting — and enforce the District's operational rules.

THE GROUNDWATER WE MANAGE

Our aquifers

The District manages four aquifers. The Carrizo-Wilcox is the deepest and most productive; the others are shallower sands and river alluvium.

1

Carrizo-Wilcox

The District's primary, most productive aquifer and the main source for most large users.

2

Queen City

A shallower sand aquifer above the Carrizo-Wilcox, used by many smaller wells.

3

Sparta

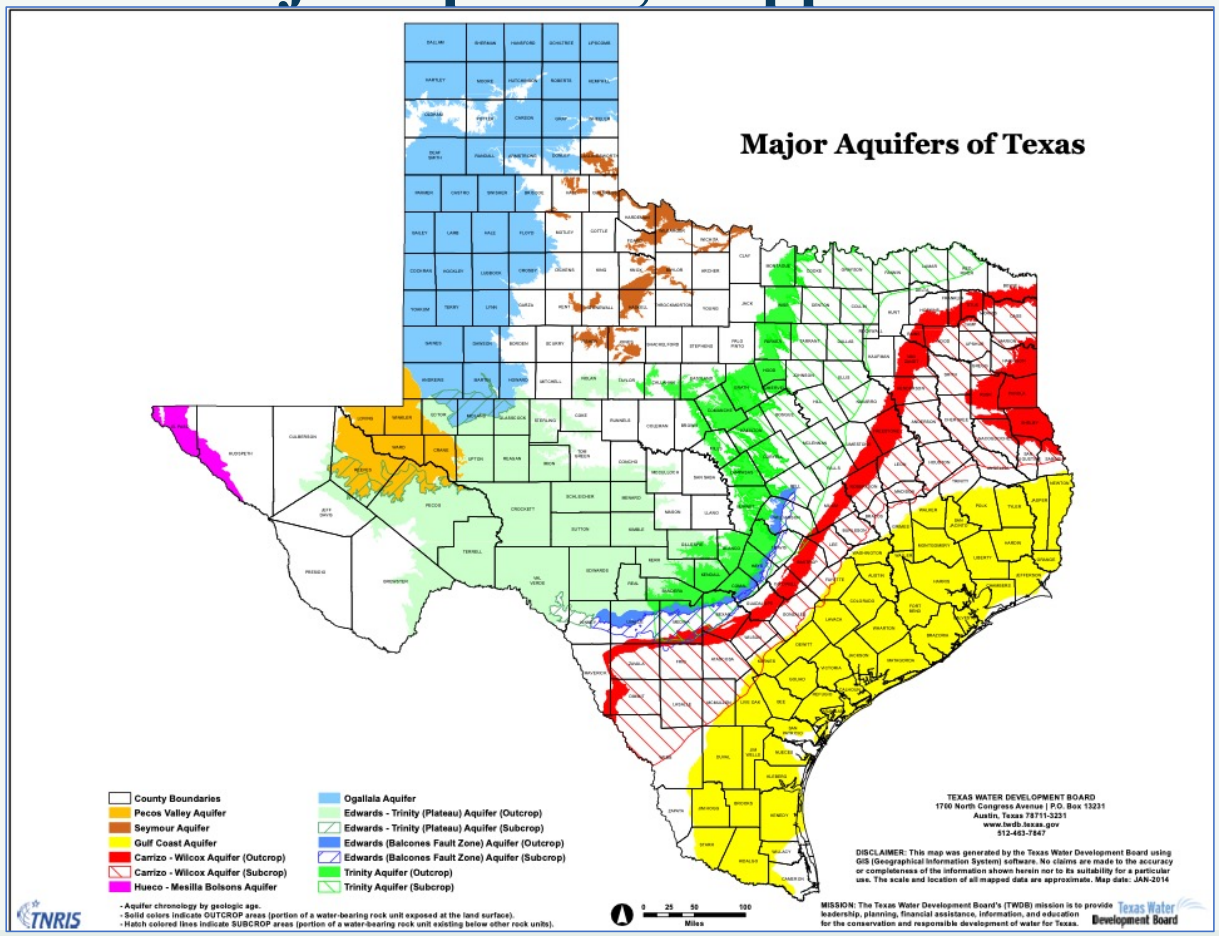
A shallower sand aquifer that supplies local domestic and stock wells.

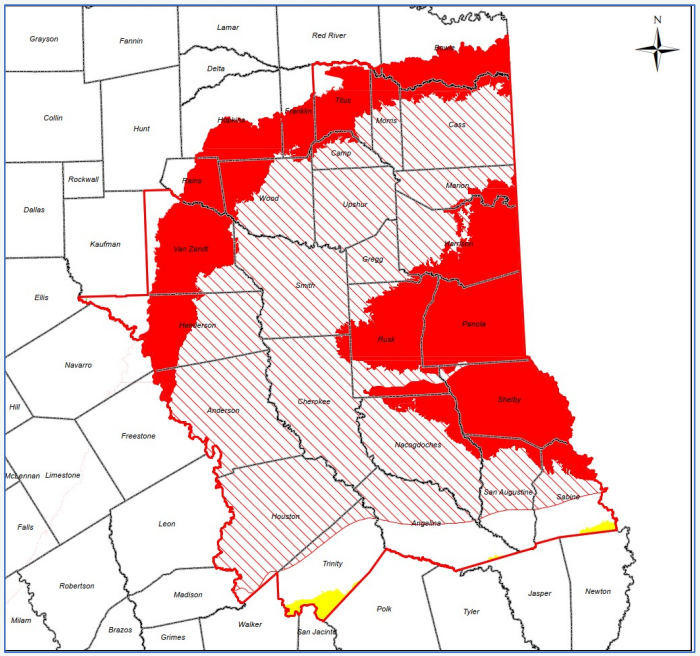
4

Trinity River Alluvium

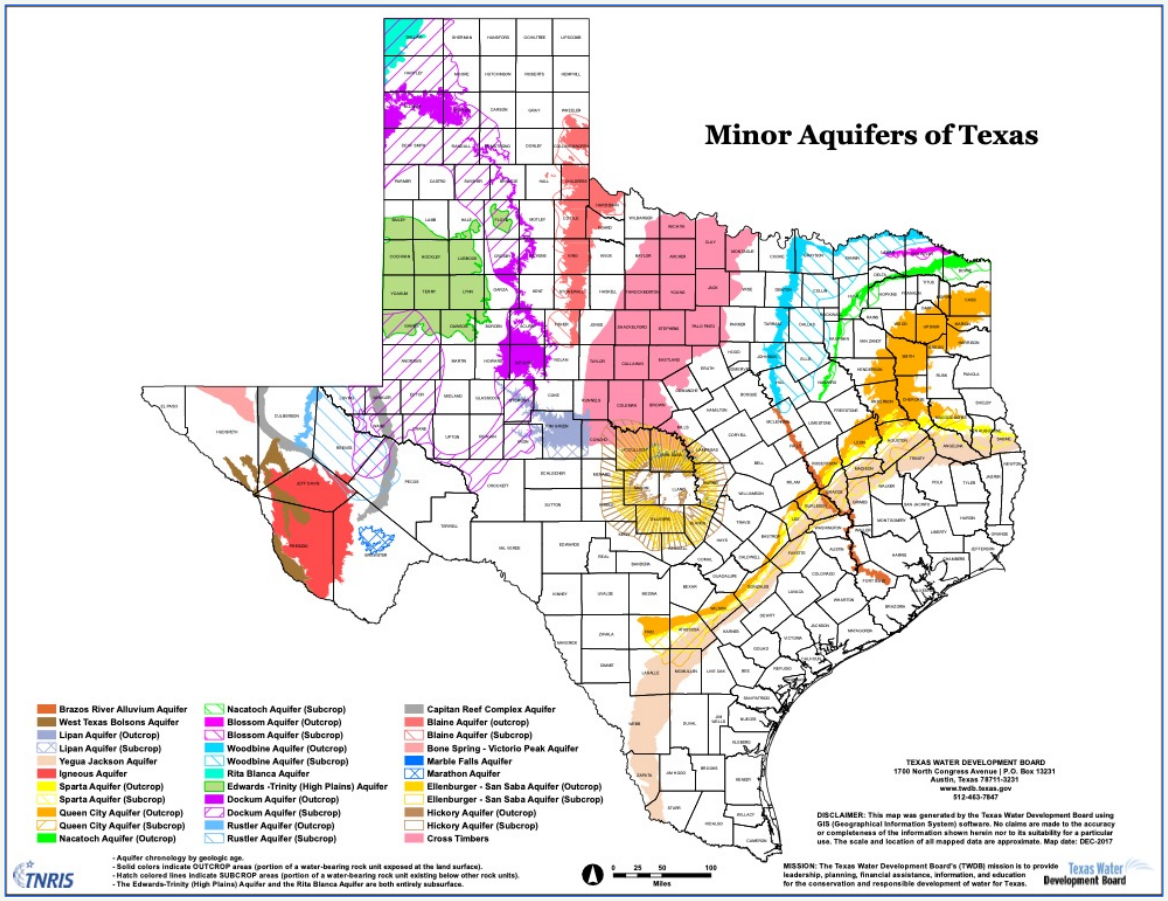
Shallow water-bearing deposits along the Trinity River corridor.

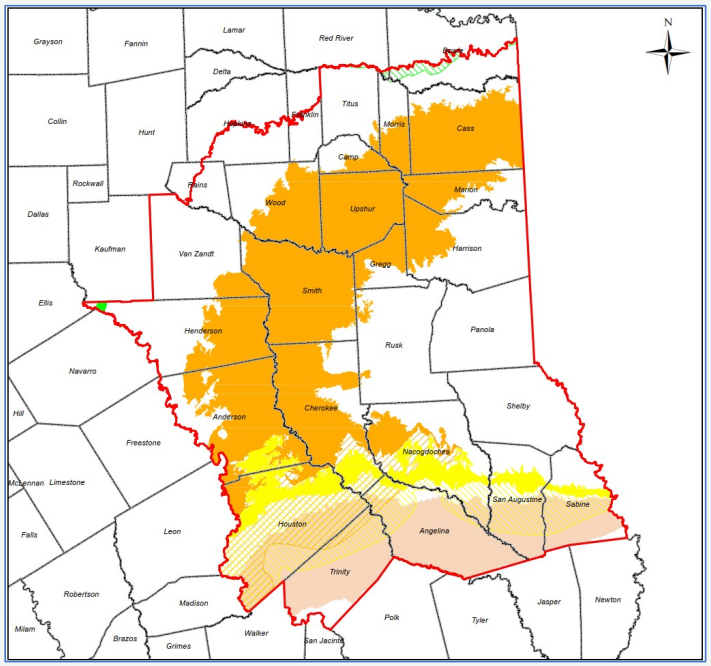
Texas major aquifers, mapped





Texas minor aquifers, mapped





PART TWO

How groundwater use is planned for in Texas

From establishing Desired Future Conditions for aquifers to setting the amount of water available to pump

HOW TEXAS PLANS GROUNDWATER

Regional and statewide groundwater planning in Texas

Across a regional groundwater management area, local districts set goals for how their aquifers should look in about 50 years — the Desired Future Conditions (DFCs). The Texas Water Development Board (TWDB) then models how much water can be pumped to meet them, and the District manages pumping accordingly.

1

Districts plan together

GCDs in a Groundwater Management Area (GMA) adopt Desired Future Conditions (DFCs) for aquifers in their area by a 2/3 vote.

2

TWDB sets the MAG

TWDB sets the Modeled Available Groundwater (MAG) — how much can be produced per county each year. The District adopts a TWDB-approved management plan and Rules to achieve the DFCs.

3

Regional & State Water Plans

A District representative helps the Regional Water Planning Group adopt a regional plan, which TWDB folds into the State Water Plan guiding state policy and recommendations to the Legislature.

4

District manages

The District permits and manages production to meet the DFCs.

Planning occurs on a regular, at least every five-year, adaptive cycle — data, models, and needs are revisited at least each round.

Two key terms: DFC and MAG

DFC — Desired Future Condition

- The condition we want our aquifers to be in at a future date — for this cycle, in the year 2080
- Adopted by groundwater conservation districts by a 2/3 vote through our Groundwater Management Area 11 joint planning
- Considers nine statutory factors in Texas Water Code Chapter 36, including aquifer uses, water supply needs, hydrologic conditions, environmental impacts, socioeconomic impacts, the impacts on property rights and the feasibility of achieving the DFC

MAG — Modeled Available Groundwater

- The amount of water the TWDB calculates can be produced each year on average and still achieve the DFC
- Calculated by the TWDB using its Groundwater Availability Model (GAM)
- May be recalculated if and when the DFC is updated

SETTING DFCs TOGETHER

GMA 11 and joint planning

What GMA 11 is

- Groundwater Management Area 11 — the groundwater management area that the District is part of, along with three other groundwater conservation districts and several other counties where there is no groundwater conservation district
- Texas law requires the districts in a GMA to jointly plan and adopt DFCs at least every five years

At least every 5 years districts revisit and adopt DFCs

How NTVGCD takes part

- Participates actively in joint planning meetings and technical review
- Brings local data — monitoring wells, historic use, and actual production
- Advocates to protect groundwater and surface water resources
- This cycle, GMA 11 agreed to NTVGCD's recommendations for the proposed DFC for the aquifers it manages

Desired Future Conditions for Aquifers in the District

Average groundwater drawdown by county (feet)

County	2030	2080
Carrizo-Wilcox Aquifer		
Anderson	172	186
Cherokee	168	188
Henderson	144	163
Sparta Aquifer		
Anderson	21	26
Cherokee	6	7
Henderson	0	0
Queen City Aquifer		
Anderson	46	56
Cherokee	25	30
Henderson	26	29

District Modeled Available Groundwater Numbers

MAG — Modeled Available Groundwater Nos. in District

2021 Adopted Modeled Available Groundwater Nos.
(average through 2080)

Carrizo-Wilcox Aquifer	**2020-2080**
Anderson	27,024
Cherokee	15,241
Henderson	7,222
District total	49,487 acre-feet

Queen City Aquifer	**2020-2080**
Anderson	16,591
Cherokee	8,812
Henderson	10,670
District total	32,608 acre-feet

Sparta Aquifer	**2020-2080**
Anderson	307
Cherokee	352
District total	659 acre-feet

MAG — Modeled Available Groundwater Nos. in District

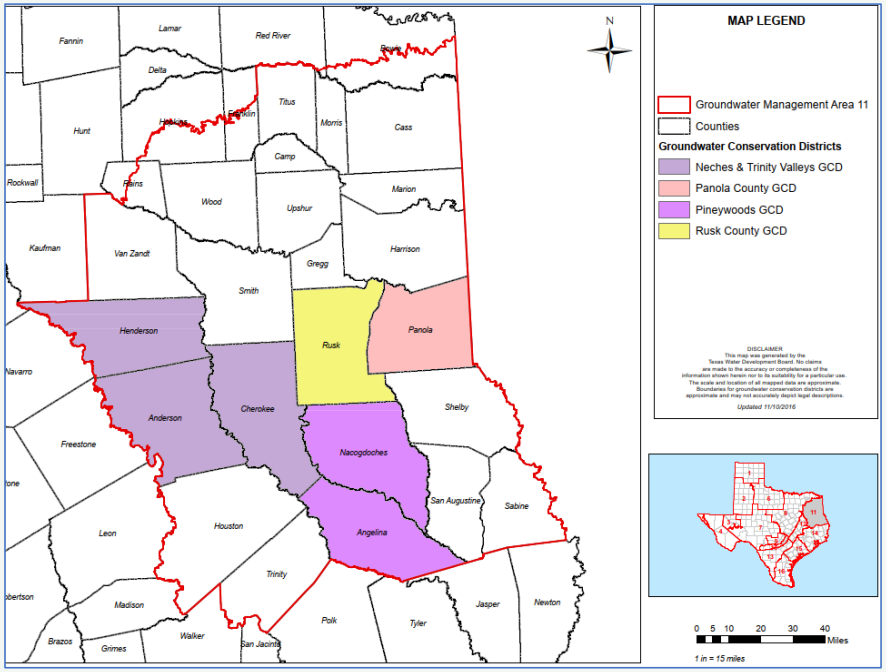
New 2026 Modeled Available Groundwater Nos. (with average numbers through 2080) will be adopted.

SETTING DFCS TOGETHER

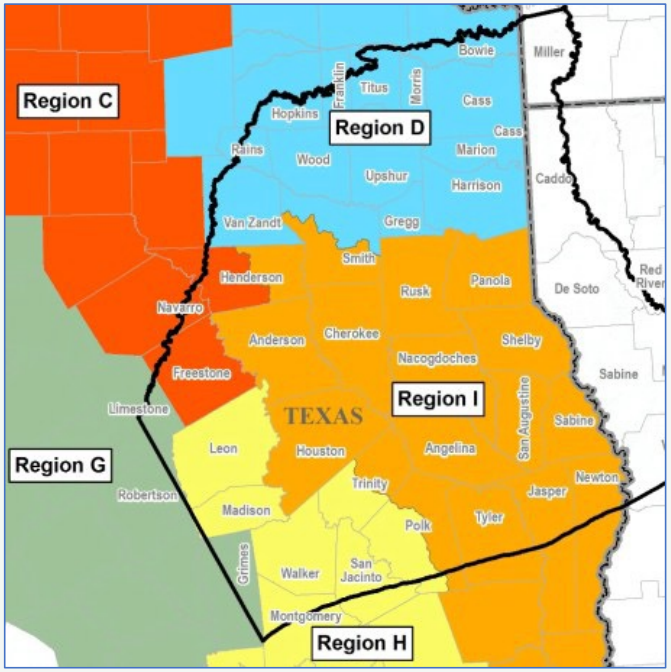
GCDs and Regional Water Planning Areas

Our District sits within Groundwater Management Area 11 and two of the State's regional water planning areas – Regions C and I.

Districts in GMA 11



Regional Water Planning Areas



GMA 11 — 2026

Where we are in the current regional water planning cycle

Currently, DFCs have been adopted through 2080 Groundwater Management Areas and groundwater conservation districts, including the District, are required to adopt DFCs by January 5, 2027.

Proposed DFCs adopted On April 28, 2026, GMA 11 adopted proposed (initial) DFCs, meeting the May 1 deadline.

More analysis underway GMA 11 asked for more model runs to better protect groundwater, including existing wells, and surface water; the modeling results are expected by July 1, 2026.

Next joint planning meeting GMA 11 is scheduled to meet again on August 11, 2026.

Public comment Public comment on the proposed DFCs is open through July 31, 2026, and public comments may be submitted to the District via email, its website or in person.

TURNING THE PLAN INTO ACTION

Our Management Plan

The District's Management Plan sets out the District's plan to manage groundwater resources, primarily achievement of the DFCs for the aquifers within its jurisdiction, and the actions it will take to achieve that plan. The plan is adopted by the Board and approved by the TWDB.

1. **Efficient use of groundwater**
2. **Control and prevent waste**
3. **Prevent subsidence**
4. **Conjunctive surface-water management**
5. **Address drought conditions**
6. **Promote conservation**

The District's primary purpose is to achieve the Desired Future Conditions for our aquifers.

2024 HIGHLIGHTS

The District's management under its Management Plan and District Rules in action

150

new operating permits issued in 2025, all meeting spacing rules

100%

of complete applications reviewed within 90 days

~400

students provided with information on water conservation across 4 school districts

Annual

review of the District's drought contingency plan

Pumping in the District has been below the modeled available groundwater, with all current permits issued.

Non-Exempt Wells: Permit Requirements & Considerations

To manage groundwater, the District must require non-exempt wells to obtain drilling and operating permits (Texas Water Code § 36.113(a)).

In deciding whether to grant or deny an operating permit, the District must consider:

- Whether the application meets Chapter 36 and the District Rules
- Whether the use would unreasonably affect existing wells, permit holders, and registered exempt wells
- Whether the use is dedicated to a beneficial use, in the amounts requested
- Whether the use is consistent with the Management Plan — efficient use and achieving the DFCs
- Modeled Available Groundwater, actual and projected production, and yearly precipitation patterns

TURNING THE PLAN INTO ACTION

The Proposed Rules — continuing to improve our management of groundwater

The District Rules are designed to put our Management Plan and statutory requirements to manage groundwater into everyday practice.

Operating permits allow us to manage to achieve the DFCs

1

Historic and new non-historic operating permits tie total production to the amount of water available to achieve the DFCs.

Meters & Reports track real use

2

Metering and annual reporting, along with a well monitoring program, allow the District to manage groundwater.

Drought response, conservation & enforcement

3

The rules allow the District to respond to droughts, move toward greater conservation measures and meaningful enforcement to ensure that groundwater is properly managed for the future for all those in our area who need it.

The Proposed Rules will be further presented chapter by chapter in the next presentation. The District's Board will hold a public hearing and consider taking action to adopt the Proposed Rules on July 16, 2026.

MARK YOUR CALENDARS

Key dates in 2026–2027

June 18, 2026	Public hearing was held on the proposed DFCs
June 30 & July 1, 2026	Public stakeholder meetings are being conducted in each county in the District – Anderson, Cherokee and Henderson Counties
July 16, 2026	District Board hearing on the Proposed Rules & District Board meeting to consider taking action to adopt the Proposed Rules (1:00 p.m.)
July 31, 2026	DFC public comment period closes
August 11, 2026	Groundwater Management Area 11 joint planning meeting
January 5, 2027	Final DFCs must be adopted

Questions & discussion

Thank you for taking part in this meeting. District staff are glad to answer questions about the District, our aquifers, and the planning process.

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