# Key Panel Session Takeaways from AGWT 2026 Texas Conference: *Groundwater Challenges and Data Needs in West Texas*

**Moderator:**
Charles Dunning, VP Hydrology at Wellntel

**Panelists:**
Greg Perrin, GM of Reeves County GCD
Amber Blount, GM of Sandy Land UWCD
Amy Bush, Hydrologist at RMBJ Geo

## Groundwater models are only as good as the pumping test data behind them

One of the panel's clearest, most repeated concerns: many of the models used to set Desired Future Conditions (DFCs) rest on very limited pumping test data — in one case, a single test for an entire aquifer.

- **Old data are being stretched.** Some pumping tests on file date to the 1960s (often from TCEQ-required municipal well tests) and may no longer reflect current aquifer behavior, but districts use them because it's all that they have.
- **Real-world consequences.** Reeves County recently found that a key groundwater-flow model used a transmissivity value that was too high — shifting the projected decline from roughly 8 feet to roughly 60 feet over 60–70 years. Better data changed the picture substantially.
- **New funding is opening up.** TWDB grants are now available to help districts conduct proper pumping tests — described as the "first breathing room" districts have had to address this, since it isn't a state mandate and most districts can't otherwise spare the time or money.
- **A gap in the process.** GAM (Groundwater Availability Model) reports document what data were used, but nobody is yet using the models themselves to identify where the next most valuable data point should be collected. That step is left to individual districts to figure out on their own.

## The five-year DFC review cycle is the system working as intended

Texas's joint planning process is built to be adaptive: every five years, districts and GMAs can revisit DFCs in light of actual measured data — population growth, impacts of drought, new production patterns — and adjust at the regional/local level rather than under a single statewide standard.

- Panelists framed this as a genuine strength: “Texas is too big for one-size-fits-all.”
- Reeves County's transmissivity correction is a real example of this cycle revising an original best value.

## Data centers are the dominant new pressure on water data — but the real concern is the unknown, not necessarily the usage

Every panelist and several audience members raised the issue of data centers. The consistent theme: actual water demand information from operators is largely informal (verbal assurances, NDAs) rather than verified data.

- **Claimed usage is low.** Operators describe closed-loop glycol cooling with minimal fresh water use — reportedly less than a typical irrigation pivot — with fresh water needed mainly for bathrooms and most consumption concentrated during construction.
- **But it's information, not data.** Panelists emphasised that none of this is independently verified or measured yet, since most facilities aren't fully operational. Amy Bush repeated this distinction ("that is information, that is not data") multiple times.
- **Existing-production vs. new-development matters.** In areas with established agricultural pumping (like the South Plains or Reeves County), a data center mostly swaps one user for another under existing rules and allocations. In undeveloped areas, a cluster of data centers represents genuinely new cumulative demand — a materially different planning problem.
- **Districts can't discriminate by user type.** Under Texas groundwater law and “beneficial use” standards, a GCD generally can't deny a permit because it doesn't like the applicant's purpose, provided the rules (well spacing, per-acre allocation) are met. This ties directly to private property rights.
- **Comparisons to the fracking boom.** Amber Blount drew a direct parallel to public concern over fracking water use 10–15 years ago — another case where data lagged public concern.

## Cities and counties have more negotiating leverage than they often use — but real limits remain

A back-and-forth with an Amarillo City Council member in the audience brought forward important considerations

- **Amarillo's experience:** The city negotiated favorable terms with one data center project (Project Matador) — charging roughly double its standard industrial rate — but the same operator then bought land and drilled wells in a neighboring county to expand outside city control, leaving the city without further revenue from that growth.

- **17 known data centers** are coming to the region's top 26 counties; the city often doesn't learn about new projects until construction begins.
- **Moratoriums are legally constrained.** Texas law limits municipal moratoriums to 90 days; a $100M lawsuit elsewhere in the state after a longer moratorium was cited as a cautionary example.
- **The core problem:** it's not the cities being approached — it's individual farmers and landowners selling land and water rights directly, often outside any city's jurisdiction entirely.
- **Amy Bush's response:** counties and cities should set explicit expectations for what makes a "good neighbor" (infrastructure investment, fair rates, no blanket tax abatements) and use that leverage proactively — while acknowledging this is harder where no formal jurisdiction exists.
- **Local tax/revenue impact can be dramatic:** one ISD near Amarillo (Claude, TX) saw projected annual revenue estimates jump from about $2 million to a potential $50 million+.

## "Export" and "transfer" are not consistently defined — and that ambiguity is heading to the legislature

- Chapter 36 only specifies "transfer outside the district," without scale context — meaning the term covers wildly different distances depending on a district's size (hundreds of miles for a large district like High Plains vs. ~15 miles for a small one like Sandy Land).
- Amber Blount is co-chairing a TAGD/TWCA committee examining this; clarification is expected to come up in the next legislative session.
- Amy Bush's caution: large, high-profile transfer projects are generating public outrage that could push toward "knee-jerk" policy responses rather than well-considered ones.

## Practical advice from the panel for other districts

- **Collect data now, even without a defined use for it.** Repeated by all three panelists — you can always analyze historical data later, but you can never go back and collect what wasn't recorded. (Amy Bush and Amber Blount specifically noted reusing years-old collected data for a recent unplanned analysis.)
- **Don't stop collecting data to save money.** Amber Blount cited a district considering phasing out rain gauges; she argued that her 26 county monitoring points give far better resolution than the 2 NOAA stations covering the same county.
- **Build partnerships with technical experts.** Districts bring local knowledge, policy, and relationships; outside hydrogeologists/consultants bring the science needed to validate and use the data collected.
- **Budget realistically for data work.** Every option — staff time, outsourcing, additional duties for existing staff — costs money; districts need to weigh this before committing to new data collection.
- **Engage your board and ask questions.** Greg Perrin emphasized active board engagement and thorough due diligence on incoming projects ("find out everything you can") as a baseline practice.

- **Consider phased, lower-cost testing requirements.** Amy Bush noted some districts are exploring scaled-down pumping test requirements for new wells that improve data without being cost-prohibitive for producers.

### District snapshots referenced in the panel:

- **Reeves County Groundwater (Greg Perrin):** ~2,640 sq. mi., ~14,000 population (mostly Pecos), GMA 3, Pecos Valley aquifer. Historic agricultural water use (cotton) has dropped sharply (250,000 → ~2,000 acres), with oil and gas now dominant.
- **Sandy Land Groundwater District (Amber Blount):** Single-county district (Yoakum County), GMA 2, Ogallala/Edwards-Trinity aquifer managed jointly. 36 years of water-level monitoring across 90 wells; 26 rain gauge/drought monitoring sites.
- **RMBJ Geo (Amy Bush):** Consults for roughly a dozen individual districts and serves as lead GMA consultant for GMA 4 (Far West Texas) and GMA 6 (Wichita Falls to Abilene).