

Marketing Texas Groundwater

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In 1997, Texas began to address emerging water shortages by initiating a comprehensive planning process designed to ease water shortages through action at the local level.

Rather than imposing a statewide solution from Austin, the legislature opted for a locally focused regional planning effort (see Center publication “Just Add Water” at recenter.tamu.edu/pdf/2066.pdf). Ideally, this system would evolve into an organized market allowing water-starved entities to contract with willing water rights owners channeling water to users most in need.

However, smoothly operating markets depend on well-defined rights and certainty about the amount and quality of the water associated with those rights. In 2000, a transaction negotiated by Moody Land and Cattle Company on behalf of a consortium of sellers transferred groundwater rights to the City of Amarillo (see Center publication “Got Water? Tapping a New Texas Market” at recenter.tamu.edu/pdf/1357.pdf). That sale suggested a number of conditions needed to move water from where it is to where it is needed. The key issues were:

- location,
- total quantity of water,
- legal guarantee to a specific amount of water each year,
- water quality and
- timing of the sale.

The Takeaway

Texas continues to rely on water marketing to allocate water resources where they are valued the most. However, the marketing process continues to face daunting obstacles in the quest to close transactions.

This sale by Moody appeared to be a breakthrough in the quest to solve water problems in Texas through transfer of groundwater. Owing to a number of impediments to the sale of surface water, marketing efforts have generally focused on groundwater transactions. As 2015 began, two projects in progress suggest that the promise of a smoothly functioning water market remains an elusive goal.

In 2012, the San Antonio Water System (SAWS) adopted an updated Water Management Plan. The plan combines a set of strategies aimed at allowing San Antonio to weather a repeat of the 1950s drought. These strategies include conservation, desalinization and various augmentation of existing supplies. The goal is limiting dependence on the Edwards Aquifer to 30 percent of total usage by 2020. As a point of reference, in the year 2000, SAWS would have relied on that aquifer for 70 percent of their supplies in a record drought.

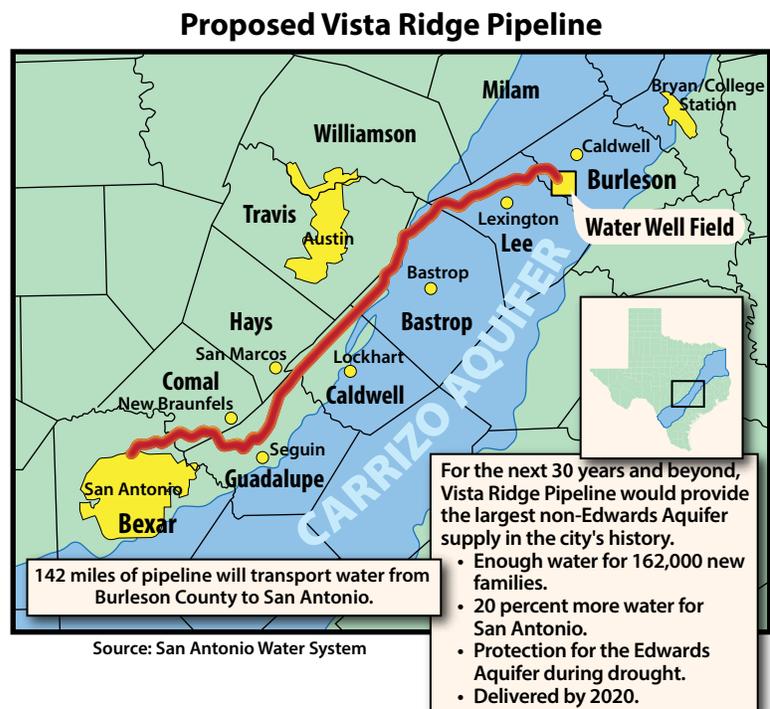
Part of the strategies envisioned a request for competitive sealed bid proposals (RFCSP) to provide up to 50,000 acre feet (approximately 16.29 billion gallons) to SAWS by 2018. This would supply more than 330,000 people at the targeted drought usage of 135 gallons per capita per day.

The RFCSP yielded nine bids with the evaluation process focusing on the Vista Ridge Consortium to provide the water. Blue Water Systems of Austin and Abengoa, an international company headquartered in Spain, make up the consortium, which currently holds groundwater leases permitting withdrawal of as much as 71,000 acre feet each year. Abengoa has a long history of building complex industrial projects.

The principals approved the contract in October 2014, initiating the development phase of the project, which is expected to take up to 30 months to complete, culminating in financial closing. A 42-month construction phase follows. The contract requires the consortium to complete well infrastructure, a pipeline and transfer facilities expected to cost more than \$844 million (see map). SAWS will build the interconnecting facilities at a cost of approximately \$100 million. When it becomes operational, perhaps as early as 2019, the project will deliver up to 50,000 acre feet of water per year to SAWS for 30 years. Blue Water currently holds 3,400 leases primarily located in Burleson and Milam Counties. When the operation phase ends, title to the pipeline transfers to SAWS with an agreement to continue buying water from Blue Water for 30 more years.

In addition to augmenting water supplies for San Antonio, SAWS reserves a right to commercial opportunities related to the project. That provides SAWS the opportunity to sell unneeded water to municipalities lying along the path of the pipeline. This project involves land in two groundwater conservation districts (GWCDs) in two counties. Many landowners in those GWCDs opted not to lease their water, and grassroots activists have embarked on efforts to stop the project to protect the integrity of the aquifers supplying the water. At this point, either of the parties to the contract may terminate the agreement, but once the development phase ensues, only SAWS can do so.

The issues involved in water marketing resulted in this complex arrangement that would introduce water into SAWS at a cost of \$2,000 per acre foot. That would result in an estimated 16 to 17 percent increase in the average water bill for San Antonio residents. Proponents argue that the deal locks in needed future supplies of water at today's prices and ensures San Antonio has adequate water supplies.



However, the project faces continued opposition. Only time will tell if this water marketing effort will yield drinking water for San Antonio. If the project proceeds to completion, San Antonio will no longer need to buy water, reinforcing the urgent issue of timing in marketing water.

In Hays County, Electro Purification LCC, a Houston-based company, has proposed withdrawing approximately 5,830 acre feet of water from the Trinity Aquifer. The water would supply the City of Buda, Anthem subdivision (a proposed municipal utility district), and the Goforth Special Utility District. The patchwork of rules and regulations governing groundwater have made this project especially contentious. Although surrounding lands are located in the Hays Trinity groundwater district, the proposed supplying well is not. It lies within the boundaries of the Edwards Aquifer Authority (EEA), which governs withdrawals from the Edwards Aquifer. EEA has no jurisdiction over the Trinity Aquifer from which the Electro Purification project would pump. That means the site appears to be governed by the generic rule of capture allowing virtually unlimited pumping from the Trinity Aquifer.

Surrounding residents have protested, fearing the project will lower the water table, making their existing wells useless. Although Electro Purification has offered to mitigate any such outcome, they face legal action to attempt to extend controls from existing agencies to cover this area. In addition, no less than four bills were filed to block this agreement. At this writing, the future of this marketing proposal is clouded because they have failed to resolve the legal guarantees to a defined quantity of water.

These two situations illustrate the potential minefields of political and legal intrigue surrounding water marketing. Perhaps this local approach will ultimately guide water to its most highly valued uses in optimal locations, but getting there will likely be a bumpy ride. ♣

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