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By Charles E. Gilliland

Texas really possesses enough water to meet its needs; however, much of it is in the wrong places. Further, most Texas water used in rural areas provides irrigation for farming. Solving the water shortage facing Texas includes transferring water from one location to another and changing from extensive agricultural uses to intensive urban uses.

Water marketing appears to offer an effective solution to water shortages in Texas cities and towns. The idea of marketing water to erase urban shortages produces varied visions among those most likely to be affected.

Some view the prospect with trepidation, fearing strangers from politically powerful cities will drain communities of this precious resource. Others see the opportunity to profit from selling water to the highest bidder.

Presently, many landowners have begun to contemplate selling their water. Without a functioning marketing system, however, they have no idea where to begin. Who will buy? What steps are needed to conclude a sale? What price should water command? Most of the recent activity focuses on sales of groundwater from rural areas to cities.

A recent transaction provides some insight into water marketing from a seller's viewpoint. The sale of the rights to groundwater under approximately 72,000 acres in western Roberts County by a group of landowners led by Salem Abraham of the Moody Land and Cattle Company of Canadian, Texas, provides insight into the elements of a successful marketing strategy. It is probably the first sale in Texas of sizable acreage, with multiple owners, initiated by the seller.

The City of Amarillo purchased these groundwater rights to ensure ample water supplies well into the next century. The sellers, operating as ranchers, foresaw no current nor future agricultural needs for the water under their land. Given these circumstances, the landowners preferred to convert their water rights into cash.

The path to a successful water sale depends first on the kind of water rights an owner possesses. Two different sets of laws and regulations apply to surface water and groundwater (see "Before the Well Runs Dry," *Tierra Grande*, January 1999). Once it reaches a water course, surface water belongs to the state. All of the surface water in Texas has been allocated.

Surface water generally contains many more contaminants than groundwater, making it more expensive to process and usually less desirable than good quality groundwater. Transfer of surface water rights requires a hearing process at the Texas Natural Resources Conservation Commission. In addition, current water laws make water rights that would transfer water out of its natural basin inferior to other water rights in that basin. Thus, cities, the primary bodies demanding water rights, generally prefer to acquire groundwater.

Currently, use of Texas groundwater depends on the *rule of capture* doctrine from common law adopted by the Texas Supreme Court in 1904. The rule of capture allows owners to withdraw a virtually unlimited amount of water from under their land. Recently, the Texas Supreme Court refused to overturn the rule of capture for the time being. However, writing about the case of *Sipriano v. Great Spring Waters of America, Inc.*, one supreme court justice observed:

What really hampers groundwater management is the established alternative, the common law rule of capture, which entitles a landowner to withdraw an unlimited amount of groundwater for any purpose

PANHANDLE RANCHERS POOLED their water rights, and Amarillo could not resist taking the plunge. The large-scale sale of water rights may serve as a model to others as Texas cities seek to secure future needs.



other than willful waste or malice, and as long as he is not negligent in causing subsidence of nearby property. When this Court adopted the rule of capture as a common-law rule ninety-five years ago in *Houston & Texas Central Railway. Co. v. East*, we believed it to have been adopted in England and by the court of last resort in every state in this country except New Hampshire. Thirty-five years later only eleven of the eighteen western states still followed the rule of capture; after two more decades, only three western states still followed the rule. Now there is but one lone holdout: Texas.

Therefore, except for the Edwards Aquifer, where a special authority presides over groundwater use, the rule of capture continues to apply. Thus, sales of groundwater in the areas outside the Edwards Aquifer depend on the rule of capture, and the Moody transaction transferred this kind of water right, as modified by regulations imposed by the Panhandle Groundwater Conservation District No. 3 (water district). Successful completion of the Moody transaction required skillful management of both local and state-level political matters to ensure cooperation among the principals and obtain a water district permit to pump water.

Beginning with core acreage owned by the Moody Land & Cattle Company, Abraham added water rights acreage from neighboring ranches to provide an accumulated package that would prove attractive to municipalities requiring a substantial quantity of good quality water. Knowing that too little water would fail to motivate the cities to act, the first task was to assemble enough water to attract the attention of potential purchasers.

Guiding the deal to fruition also meant keeping the neighboring ranchers on board and gaining a permit from the water district. To secure cooperation from other

ranchers, Moody bought half the water rights from many neighboring ranchers. Along with that sale, those ranchers agreed for Moody to market the half of the water rights the ranchers had retained, with all parties receiving the same price. This ensured that no one would enjoy an advantage over a neighbor and bound them in a common effort to complete the sale. In the end, Moody could offer a potential buyer water rights to more than 70,000 acres.

These water rights represent the right to pump under the rule of capture. The land consists mostly of rugged rangeland, never developed for irrigation because it is too rough for cultivation. Potential buyers could rely on general hydrology maps indicating the presence of substantial volumes of good quality water. Prior to making a commitment, how-

ever, any buyer surely would require a more exhaustive and recent analysis than the existing aquifer maps that were available.

To assure potential buyers of the quality of its water, Moody commissioned an extensive hydrology study to estimate the volume and quality of water under the land. The results established the Moody package as the land with the thickest known freshwater-bearing sands in the Ogallala Aquifer in Texas. The package contained

some sands that were 600 feet thick, with an average thickness of 325 feet. In addition, the water was found to be of extremely good quality.

With proven quantities of good quality water available, Moody identified the most likely buyers for this package of water rights. Canadian River Municipal Water Authority and Amarillo seemed to be likely candidates. However, to broaden the market and take advantage of all potential purchasers, Moody also commissioned engineering estimates of delivery cost to Fort Worth, the Brazos River Authority and San Antonio.

Mostly because of its location, approximately 70 miles to the west of Roberts County, Amarillo began to negotiate to acquire these water rights. Even with its nearby location,

Banding together in a cooperative effort allowed the individual ranchers to escape many of the disadvantages they would have faced in negotiating as individuals.

Amarillo faces pipeline construction costs estimated to run more than \$70 million in today's dollars when it eventually uses the water in 25 to 50 years.

In addition, the infrastructure for the gathering network will add another \$50 million in today's dollars to the project cost. This substantial investment in required transportation infrastructure materially limits the geographic extent of final demand for water rights. The pipeline for this project would not have to cross the Canadian River or any other major geographic impediment to reach the city. Thus, Amarillo enjoyed an advantage over communities lying at greater distances in bidding for the water.

Completion of the sale awaited resolution of one remaining obstacle. Amarillo officials nervously anticipated difficulties in obtaining a water district permit to withdraw water. However, when the group of ranchers approached the water district and requested a permit matching other residents in the water district, they obtained the coveted permit. This permit allowed Amarillo to obtain the right to withdraw one acre foot of water per surface acre of water right. The permit also guaranteed the city's right to a specific water quantity.

Negotiations produced an agreement that transferred landowner water rights to the City of Amarillo with specific exceptions and production provisions. First, landowners retained the right to use water for livestock and homes on their ranches. Homes were restricted to one residence per 160 acres. Second, the city agreed to postpone withdrawals for 25 years. When production begins, Amarillo will pay landowners for surface damages, including improving existing wells that provide water to livestock. This provision protects landowners from loss of domestic water as depletion lowers the water table. Moody and Amarillo closed the transaction in July 1999.

This large-scale sale of undergroundwater rights marks a significant event that may serve as a model for future water marketers dealing with cities scrambling to acquire supplies for their future needs. Besides the uncertainties caused by developments in water rights legislation, landowners may view a potential sale as a daunting task. However, the Moody-Amarillo sale provides owners with an average \$275 per acre for water rights to land that routinely sells for approximately \$200 per acre, including both surface and water rights. These ranchers used the market to guide water to its highest valued use and provide them a tidy windfall in the process. Studying this transaction provides useful insights into the difficulties presented in the water marketing problem.

As revealed in this transaction, the key issues that are considered in selling water rights are:

- location,

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

Every sale of water rights must address these issues.

Location dictates the most likely buyers for water rights. However, no one seemed interested in acquiring water rights from the ranches in question individually. Single owners reportedly had approached potential buyers, but the quantity of water that they could provide did not spark interest among the municipalities they approached. **Only after Moody had assembled a large acreage, with proven reserves of water, did Amarillo become interested.** Thus, the first step consisted of assembling a critical mass or quantity of water to become visible to potential users.

The quantity issue also involved local political bodies that might influence the amount of water available. Specifically, the locally controlled water district could seek to curtail extraction if they were threatened by withdrawals. However, by aligning sufficient numbers of ranchers in the transaction, many local owners had a stake in making the deal work. Further, the permit obtained by the ranchers assured Amarillo of acceptable quantities of water.

The hydrology study provided a measure of quality assurance for a city searching for a reliable water supply. The agreement further provided upgrades to ranchers' wells, effectively eliminating potential problems posed by livestock and humans using the same water systems. Quality was assured.

Timing also played an important role in this transaction. The turmoil unleashed as Texas began to cast about to find solutions to its water supply problems ensured that various entities would seek to secure water supplies. By binding so much acreage together, the group promised to deliver a critical mass, but they also ensured that other potential sellers would have difficulty putting together a quantity sufficient to become real competitors. Banding together in a cooperative effort allowed the individual ranchers to escape many of the disadvantages they would have faced in negotiating as individuals. The structure of this venture transformed bargaining positions to allow the sellers to negotiate from a much firmer footing than could be enjoyed by each individual separately. Structuring the sale in this fashion enabled the landowners to gain a more favorable price than they could have by bargaining as individuals. Thus, individual owners may find cooperation among potential sellers to be the most effective way to accomplish a mutually satisfactory sale of their water rights. ♣

Gilliland is a research economist with the Real Estate Center at Texas A&M University.

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