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Groundwater Conservation Districts: Opportunities for Reform

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Findings

- Groundwater Conservation Districts are the main source of groundwater regulation in Texas.
- The Texas Supreme Court has held that landowners own the groundwater beneath their property, and that regulation denying them access to that property can constitute a taking under the Texas Constitution.
- Current law surrounding Groundwater Conservation Districts makes legal disputes over groundwater needlessly burdensome and complicated.
- Texas must make sure that landowners are able to vindicate their rights in court when regulation of their property goes too far.

Introduction

As Texans continue to plan for the state's water challenges, focus is increasingly turning to groundwater as a source for meeting Texas' future water needs. Texas has abundant groundwater resources, and unlike surface water, groundwater in Texas is privately owned, which could facilitate development.

But while Texas groundwater is privately owned, it is not free from government regulation. In this paper, we look at Groundwater Conservation Districts (GCD), local entities that are the chief source of groundwater regulation. GCDs vary considerably, and while they play a significant role in groundwater regulation, restrictions imposed by GCDs have not always been in the best interests either of the state or of property owners In fact, as described below, in some cases regulation of groundwater has attempted to solve one problem only to create new problems that result in even more regulation.

The Rule of Capture

The 1917 Conservation Amendment (Article XVI) of the Texas Constitution created the state authority to regulate natural resources, including groundwater. Today, the authority to regulate groundwater is mainly exercised by local GCDs as authorized by Texas law. To understand the role of GCDs in Texas groundwater regulation, though, it is first necessary to describe how groundwater rights are treated at common law. Suppose that a landowner's well fails due to pumping on his neighbor's property. Can he sue?

For over 100 years, and with minor exceptions,* the answer in Texas is no. In *Houston and Texas Central Railway v. East*,[1] the Texas Supreme Court held that:

> The person who owns the surface may dig therein and apply all that is there found to his own purposes, at his free will and pleasure; and that if, in the exercise of such right, he intercepts or drains off the water collected from the underground springs in his neighbor's well, this inconvenience to his neighbor falls within the description of damnum absque injuria [loss without injury], which cannot become the ground of an action.[2]

This doctrine, known as the rule of capture, has long been controversial due to concerns that it encourages over-pumping. If a landowner can't be sure that the groundwater under his land won't be sucked away by his neighbor's pumping, his only recourse is to pump as much as he can now. And the same goes for the neighbor, who risks losing his water if he doesn't pump first. The result is a sort of pumping arms race, often described as a "tragedy of the commons" which in theory could lead to rapid depletion of groundwater resources.

In practice, such concerns may be exaggerated. A recent analysis by RW Harden and Associates found that despite over a century of pumping, groundwater storage remained above 90 percent of pre-industrial levels in all regions of the state, and were at 99 percent in most regions.[3]

* Texas does recognize exceptions to non-liability under the rule of capture in cases of waste, and subsidence due to pumping.

Nevertheless, GCDs are supposed to deal with this problem by imposing reasonable restrictions on pumping in order to protect landowner's correlative rights.*

A Brief History of Groundwater Conservation Districts

Groundwater Conservation Districts (GCDs) are local entities charged with developing a water management plan for the district. While technical support is provided by the Texas Commission on Environmental Quality (TCEQ), the Texas Water Development Board (TWDB), and other state agencies, GCDs are locally run entities.

GCDs were first authorized in statute in 1949, with the first district (High Plains UWCD) established in 1951. Localities were initially slow to establish GCDs, however, and by 1997 only 38 GCDs had been established. GCDs began to proliferate after the passage of major water legislation in 1997, as concern grew over Texas' long term water prospects. As of 2012, there were 99 local GCDs, which are recognized in law as the state's "preferred method of groundwater regulation."[4]

GCDs typically follow county boundaries rather than hydrological boundaries, so landowners from multiple GCDs could be drawing from the same aquifer. Concerns over this led to the creation of Groundwater Management Areas (GMAs) based on regionally shared aquifers.

In recent years, GCDs and GMAs have been granted vastly expanded regulatory authority, and have begun to be more aggressive about using that authority to restrict groundwater pumping. In 1995 the powers of GCDs were expanded to include pumping limits on wells and tract size. And in 2001, GCDs were granted authority to regulate for the purpose of preserving "historic uses" of groundwater.

Desired Future Conditions

Perhaps the most significant increase in regulatory authority occurred in 2005, when HB 1763 gave Regional Groundwater Districts authority to articulate "desired future conditions" and to permit groundwater withdrawals on the basis of "managed available groundwater" (MAGs) calculated by the TWDB, using specifications from the groundwater conservation districts.† Desired future conditions are the "desired, quantified condition of groundwater resources (such as water levels, water quality, spring flows, or volumes) for a specified aquifer within a management area at a specified time or times in the future."[5] In layman's terms, a DFC describes what the GMA wants water supplies to look like in the area at some point in the future.

DFCs must be "physically possible"[6] and, to be adopted, a statement of DFC must be approved by a two-thirds vote by at least two-thirds of the GCDs in the applicable GMA.[7] Some examples of DFCs might include:

> 1) water levels do not decline more than 100 feet in 50 years, (2) water quality is not degraded below 1,000 milligrams per liter of total dissolved solids for 50 years, (3) spring flow is not allowed to fall below 10 cubic feet per second in times during the drought of record for perpetuity, and (4) 50 percent of the water in storage will be available in 50 years.[8]

Yet while DFCs are described using hydrological language, they are ultimately based on political, rather than scientific judgment. Indeed, the word "desired" in "desired future conditions" suggests a normative rather than a strictly scientific judgment. Scientific data may be able to predict the effects that different DFCs will have, but cannot determine whether those effects are more significant that the differences in economic benefits that arise in the different scenarios.

GMAs can also design their DFCs to deliver particular conclusions about future permitting. One analysis "recommend[s] that districts not submit desired future conditions to the TWDB without first knowing what the answer—the managed available groundwater—will be."[9] In other words, instead of deciding what the desired future conditions are and then seeing how much additional pumping is compatible with those

* "Correlative rights" are a landowners right to not have his access to a common pool resource diminished by others with access to the same resource. Correlative rights in groundwater, ownership of groundwater in place, and the rule of capture have sometimes been seen as alternative ways of defining groundwater ownership, rather than as an integrated whole. As described below, both recent legislation and the Texas Supreme Court's *McDaniels* decision have clarified that neither the rule of capture nor the doctrine of correlative rights precludes ownership of groundwater in place.

† HB 1763 also gave TWDB the authority to mandate that GCDs formulate DFCs according to TWDB rule. Thus, the new law expanded both the regulatory authority of local entities and the oversight authority of the state.

conditions, a GMA can first determine how much groundwater is available and then formulate its DFC so as to ensure as little pumping as it wants.

Individuals or organizations with an interest in groundwater in a district can challenge a DFC on the grounds that it is not "reasonable." The process of challenging a DFC, however, is long and expensive. GCDs are not governed by the Administrative Procedures Act, and in many cases do not keep thorough records and documentation necessary for evaluating a DFC challenge. If the challenge is not successful, the challenging party is forced to pay not only his own legal fees, but also those of the district. And ultimately even if a challenge is successful, the DFC simply goes back to the district for revision, potentially starting the whole process anew.

All of this has resulted in substantial restrictions on the property rights in groundwater owned by landowners in some areas. Further, the extent of restrictions impedes the development of well-functioning markets in groundwater in Texas. As Kyle Frazier of the Texas Desalination Association recently noted, "if we regulated grapefruits the way we regulated groundwater, you'd be told how many you could produce, and then not be able to sell them beyond the county-line."

Groundwater as Property

Ironically, the increasing regulatory powers of GCDs have gone hand in hand with increasingly strong affirmations of property rights in groundwater under Texas law. The Texas Water Code affirms the landowner's property right: "The ownership and rights of the owners of the land and their lessees and assigns in groundwater are hereby recognized …"[10] During the 82nd Texas Legislature (2011), legislators passed SB 332, which clearly stated that "a landowner owns the groundwater below the surface of the landowner's land as real property."[11] A landowner's ownership of groundwater in place was also upheld by the Texas Supreme Court in *Edwards Aquifer Authority v. McDaniels*, which also found that regulations preventing a landowner from accessing the groundwater beneath his property could constitute a taking under the Texas Constitution, requiring compensation.[12]

Similarly, in *Edwards Aquifer Authority v. Bragg*,[13] the Texas Fourth Circuit Court of Appeals held that the decision of the Edwards Aquifer Authority to deny Glenn Bragg a well permit for a pecan orchard constituted a compensable taking. In drawing this conclusion, the court relied on a three factor test generally used in regulatory takings cases, first articulated by the U.S. Supreme Court in *Penn Central Transportation Co. v. New York City.*[14] Under this test, whether a regulation results in a taking of property depends on 1) the economic impact of the regulation, 2) whether the regulation interfered with investment-backed expectations of the owner; and 3) the character of the regulation (i.e., whether the regulation "merely affects property interests through 'some public program adjusting the benefits and burdens of economic life to promote the common good.'") While the Texas Supreme Court declined to review *Bragg*, chances are that they will have more opportunities in the near future, as more landowners sue claiming that burdensome GCD regulations are compensable takings.

Reforming GCDs

Given the tension between the increasing regulatory powers of groundwater conservation districts and the growing protection of property rights in groundwater, legal battles between landowners and districts are probably inevitable. But that doesn't mean there is nothing the state can do to help ensure that these cases proceed smoothly and that private property rights are adequately protected. As clarified in *McDaniel*, groundwater rights are constitutionally protected rights. The state should require GCDs to keep records necessary for review on appeal, and should remove the "loser pays" provision which unfairly tilts the scale against landowners in challenges.

The state also has an interest in ensuring that GCDs do not overstep their authority and impose regulations for political reasons. Ultimately, it is the landowner that owns groundwater, not the district. Attempts by GCDs to limit water export through special fees or restrictions should be prohibited, and the state should consider developing minimum scientific and procedural standards that DFCs must meet if they are to be considered "reasonable."

Conclusion

The Texas Legislature has a responsibility to ensure that landowners' property rights in groundwater are protected. Long experience shows that markets tend to do a better job of allocating resources to their highest and best use than do political and regulatory authorities. Secure and well defined property rights are a necessary pre-condition of a successful groundwater market. By protecting these rights, Texans will be able to harness their abundant groundwater resources to meet growing demand for decades to come. ★

Endnotes

[1] 81 S.W. 279 (1904).
[2] East, at 280.
[3] "Groundwater in Storage by Planning Region," RW Harden & Associates.
[4] TWC 36.0015.
[5] 31TAC§356.2(8).
[6] Ibid.
[7] TWC 36.108(d-1).
[8] Robert E. Mace, Rima Petrossian, Robert Bradley, William F. Mullican, III, and Lance Christian, *A Streetcar Named Desired Future Conditions: New Groundwater Availability for Texas*, presentation at State Bar of Texas, "The Changing Face of Water Rights in Texas" (8 May 2008) Bastrop, Texas.
[9] Ibid., 4.
[10] TWC 36.002.
[11] TWC 36.002(a).
[12] 55 Tex. Sup. J. 343 (2012).
[13] 421 S.W.3d (Tex. App. – San Antonio, 2013).
[14] 438 U.S. 104 (1978).

About the Author

Josiah Neeley joined the Foundation in October of 2011 as a Policy Analyst for the Center for Tenth Amendment Studies and the Armstrong Center on Energy & the Environment.

Prior to joining TPPF, Josiah worked as an Associate for the firm of Bopp, Coleson & Bostrom in Terre Haute, Indiana, specializing in Constitutional Litigation, and clerked for the Honorable Roger Vinson, a federal district court judge in Pensacola, Florida. He has a B.A. in Government and Philosophy from the University of Texas and a J.D. from the Notre Dame Law School.

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