

## Past, Present &amp; Future of Texas Groundwater Law

Since 1904, Texas groundwater law has evolved to address disputes over this valuable resource. Groundwater, commonly called percolating water, lies below the earth's surface in aquifers and underwater lakes. Since 60 percent of the water used in Texas is groundwater ("Measuring Groundwater"), how to regulate it is of the utmost importance; especially when Texas experiences a year like that of 2011-- the driest year on record. Because Texans must plan wisely to have sufficient water to supply current needs and economic growth in the future, it is important to understand the history of groundwater law in Texas and the controversial issues still to be resolved.

According to the Texas Water Development Board (TWDB), 79 percent of the groundwater in the state goes to irrigation purposes and 15 percent is used by municipalities ("Measuring Groundwater"). Groundwater in Texas is governed by a unique doctrine called the "rule of capture" which is based on English Common Law. Also called the "law of the biggest pump," it permits a landowner to drill a well on his own property and pump as much water as he chooses, with no concern for neighboring landowners (Dowell). The "rule of capture" was established in 1904 by the Texas Supreme Court in *Houston & Texas Central Railroad Co. v. East*. When the H&TC railroad company decided to drill a well on their newly purchased property to pump water for their steam-powered locomotives, their excessive water use caused W. A. East's well to go dry. East sued, but despite his efforts, the court instituted the rule of capture, a doctrine that would affect Texas water policy for decades to come (Porter, 114).

The rule of capture certainly isn't the only option for groundwater policy in the United States, and, in fact, Texas is now the only Western state that still adheres to it. There are at least

three other regulatory approaches that are common outside of Texas. Reasonable use, a method that was overturned in the 1904 *East* case, prohibits landowners from wasting groundwater or using it on land other than the land that lies above the aquifer (Holladay, 6). Prior appropriation gives preference to the landowner who first accesses a water resource over more junior water-rights holders. And under correlative rights, each landowner receives access to an amount of water in proportion to the size of their land (7). Despite these other options, the Texas Supreme Court has repeatedly reaffirmed the rule of capture, most recently in the 1999 case *Sipriano v. Great Springs Water of America*. Although the plaintiff argued that the Ozarka Natural Spring Water Co. had dried up their well due to “unreasonable” groundwater use, the court ruled in favor of Ozarka (3).

Since 1904, however, several modifications have been made to the groundwater regulatory policy in Texas. The first of these was the Conservation Amendment, added in 1917 to the Texas Constitution, which mandated that the conservation of water resources is a duty of the state and thus the Legislature must pass laws to ensure its preservation (Holladay, 2). Under this amendment, the Legislature is able to regulate groundwater even while following the rule of capture.

In the mid-century case of *City of Corpus Christi v. City of Pleasanton* (1955), the Texas Supreme Court made one exception to the established doctrine: a landowner is prohibited from pumping groundwater with a malicious intent to damage a neighboring landowner. This did little to disrupt the rule of capture. The court ruled that it was lawful for the Lower Nueces River Supply Company to pump groundwater and send it to the City of Corpus Christi via the Nueces River, even though between 63 and 74 percent of the water evaporated on the journey (Potter, 3).

The year 1975 came with further legislation that limited the freedom of the rule of capture in the case of *Friendswood Development Co. v. Smith-Southwest Industries, Inc.* Landowners sued the Friendswood Development Company, claiming the company's major groundwater pumping was causing their land to sink below sea level. The court ruled that landowners are not protected by the rule of capture if their negligent removal of groundwater results in subsidence in adjacent lands (Potter, 5). This exception and others to the rule of capture are described fully in the Texas Water Code Section 36 which states that landowners may drill for groundwater below their property but must do so "without causing waste or malicious drainage of other property or negligently causing subsidence" (Texas Water Code, Section 36.002).

The Texas Legislature first exercised their rights under the Conservation Amendment in 1949 by creating local groundwater conservation districts (GCDs). GCDs can be established either by the Legislature, petition by landowners, or by the Texas Commission on Environmental Quality (TCEQ) and are the "preferred means of regulating groundwater in the state" (Foster, 381). According to the Texas Water Code, a GCD may enact rules that limit the production of groundwater with the purpose of "conserving, preserving, protecting, and recharging of the groundwater or of a groundwater reservoir or its subdivisions in order to control subsidence, prevent degradation or water quality, or prevent waste of groundwater" (Section 36.101). As of March 2016, there are 100 existing GCDs in the state of Texas not including the Aransas County GCD that is currently pending confirmation (Texas Groundwater Conservation Districts, graphic). But even with the growing number of GCDs, portions of Texas are still "white zones"-- areas of the state that do not fall under a groundwater conservation district.

Each groundwater conservation district in Texas may adopt different regulations, but all are intended to put limits on the rule of capture, typically done through “traditional permitting, production limits, and well-spacing requirements” (Holladay, 4). The negative effects caused by over-pumping of groundwater--such as the aforementioned issue of subsidence--have emphasized the importance of GCDs. There are several more adverse consequences that GCDs attempt to mitigate; for example, “drawdown” can occur when large amounts of water are pumped from an aquifer and the water table lowers and “overdrafting” arises when more water is removed from an aquifer than is recharged. The Ogallala aquifer, the largest aquifer in North America which runs throughout West Texas, has experienced major overdrafting and is an aquifer that is slow to recharge.

Major court cases have arisen in recent years, and Texas groundwater law remains controversial. Austin, for instance, has experienced an increase in the number of private water wells; at least 150 have been drilled in the city since 2006. These private wells allow landowners to ignore city watering restrictions during a drought and receive unlimited access to water. However, this fad is causing some conservationists and groundwater managers to worry that “unregulated drilling into a virtually unprotected aquifer could undermine efforts to make Central Texas more frugal with water” (“More Austinites”). The rates of new well drilling in central Austin neighborhoods have recently slowed though, perhaps due to an October, 2012 City of Austin ordinance requiring registration of existing, new, or planned wells on properties that receive water or wastewater service from the city (Smith). As of yet, no restraints have been passed to regulate the amount of groundwater that landowners can pump from their private wells.

Texas should pay attention to a cautionary tale currently being played out in the Arizona desert. A Saudi Arabian company purchased acreage and is using huge amounts of groundwater from 15 wells on the property to grow water intensive alfalfa. The dairy company, Almarai, uses the alfalfa back home to feed its dairy cows, and in the process is possibly causing damage to the Arizona aquifers by depleting them. Many Arizona residents worry that Almarai could dry up the aquifer in their state just like the Saudis dried up an ancient aquifer in their own country (“Saudi Hay Farm”).

Texas is at risk for similar groundwater issues. For example, the Barton Springs/Edwards Aquifer Conservation District recently voted to expand the district’s territory to include an unregulated part of the Trinity Aquifer. This action was in response to complaints from residents in the Hays area who were concerned about the effects of Electro Purification, a company which estimates it will pump up to 1.8 billion gallons of water a year to supply growing municipalities. Excessive pumping like this could threaten to lower well levels and water supplies of landowners in the surrounding region (“Aquifer Board”).

The question of how to conserve groundwater in Texas is still far from answered. Though the “rule of capture” has prevailed for over 100 years, new issues like how to regulate brackish water in aquifers and whether companies like Electro Purification should be allowed to transport huge amounts of water to other regions need resolution to protect Texas’ groundwater. One thing is certain: Texas voters, GCDs, Water Management Districts, the Texas Water Development Board and the Legislature must work together to ensure that all water needs are met in the present and that we will have sufficient water in Texas for the future.

## Works Cited

App. 24

- "Aquifer Board: 'Annex the White Zone'" *The News-Dispatch*. The News-Dispatch, 11 Mar. 2015. Web. 15 Mar. 2016.  
<<http://www.newsdispatchnewspaper.com/content/aquifer-board-%E2%80%98annex-white-zone%E2%80%99>>.
- "Chapter 36: Groundwater Conservation Districts." *Water Code*. Texas State Legislature, n.d. Web. 15 Mar. 2016. <<http://www.statutes.legis.state.tx.us/Docs/WA/htm/WA.36.htm>>.
- Dowell, Tiffany. "Texas Water: Basics of Groundwater Law." *Texas Agriculture Law Blog*. Texas A&M, AgriLife Extension, 22 Oct. 2013. Web. 15 Mar. 2016.  
<<http://agrilife.org/texasaglaw/2013/10/22/texas-water-basics-of-groundwater-law/>>.
- Foster, J. R. "Do Texas Groundwater Conservation Districts Matter?" *Water Policy* 11.3 (2009): 379-99. *Austin Public Library*. Web. 15 Mar. 2016.
- Harmon, Dave. "More Austinites Drilling Private Wells to Water Lawns." *Statesman*. Austin-American Statesman, 2 June 2012. Web. 15 Mar. 2016.  
<<http://www.statesman.com/news/news/special-reports/more-austinites-drilling-private-wells-to-water--1/nRpDR/>>.
- "History." *Aquifer District: News*. Barton Springs/Edwards Aquifer Conservation District, n.d. Web. 15 Mar. 2016. <<http://www.bseacd.org/about-us/history/>>.
- Holladay, Tedd. "Groundwater Management Issues in Texas." *House Research Organization, Focus Report*. Texas House of Representatives, 6 June 2006. Web. 15 Mar. 2016.  
<<http://www.hro.house.state.tx.us/focus/groundwater79-14.pdf>>.
- "Measuring Groundwater in Texas." *Texas Water Development Board*. Texas Water Development Board, n.d. Web. 15 Mar. 2016.  
<<http://www.twdb.texas.gov/newsmedia/featured/stories/2015/03/index.asp>>.
- Porter, Charles R., Jr. "The History of W.A. East v. Houston & Texas Central Railway Company, 1904: Establishment of the Rule of Capture in Texas Water Law." *East Texas Historical Journal* 50.2 (2012): 107-19. *Austin Public Library*. Web. 15 Mar. 2016.

Potter, Harry Grant, III. "Chapter 1: History and Evolution of the Rule of Capture." *Texas Water Development Board*. Williams-Bailey Law Firm, L.L.P., n.d. Web. 15 Mar. 2016.  
<[https://www.twdb.texas.gov/publications/reports/numbered\\_reports/doc/R361/1%20CH%20Potter.pdf](https://www.twdb.texas.gov/publications/reports/numbered_reports/doc/R361/1%20CH%20Potter.pdf)>.

"Saudi Hay Farm In Arizona Tests State's Supply Of Groundwater." *The Salt*. NPR, 2 Nov. 2015. Web. 15 Mar. 2016.  
<<http://www.npr.org/sections/thesalt/2015/11/02/453885642/saudi-hay-farm-in-arizona-tests-states-supply-of-groundwater>>.

Smith, Amy. "Austin's Water Prospectors." *The Austin Chronicle*. Austin Chronicle Corp., 15 Nov. 2013. Web. 15 Mar. 2016.  
<<http://www.austinchronicle.com/news/2013-11-15/austins-water-prospectors/>>.

"Texas Groundwater Conservation Districts (March 2016)." *Texas Commission on Environmental Quality*. N.p., n.d. Web. 15 Mar. 2016.  
<<http://www.tceq.state.tx.us/assets/public/permitting/watersupply/groundwater/maps/gcdmap.pdf>>.