

Time for a Change in Texas: Groundwater Law and Its Shortcomings
Statement of Purpose

I am a graduating senior in high school in the process of choosing where I will attend college. While I have been awarded merit scholarships at each of the universities to which I've been accepted, it is still insufficient to meet my family's needs. This need motivated me to apply for this scholarship, in addition to my interest in groundwater resources and environmental conservation as a potential career path. I thank the Barton Springs /Edwards Aquifer Conservation District for offering this opportunity.

Time for a Change in Texas: Groundwater Law and Its Shortcomings

The lack of management of Texas groundwater is something that I have unintentionally experienced firsthand. Growing up on a small farm fueled by groundwater coming from a trusty old hand-dug well that didn't even dry up during the famous drought of the 1950s, water was something that we could count on. I knew water was important, but we had never had any problem with it. The relevance of water availability and accessibility in everyday life has always been evident to me, but never so thoroughly as when it began to run out. In 2008, when I was in fifth grade, the farm's wells began to run dry. I received a crash course I really didn't want: in natural resources, politics, and dry water faucets.

My parents' farm sits above an alluvial aquifer that, until Austin's development encroached into eastern Travis County, provided ample water for the farms and homeowners and, even the municipal water company's groundwater wells to pump as needed. Strain on the aquifer from increased demand for county parks, subdivisions, and toll road construction took their toll (no pun intended). Our farm's locally renowned 30-foot deep well, which had always kept the water table between nine and eleven feet, began to pump air. My father removed the cement lid, lowered in a ladder, and climbed down to investigate. Instead of water, he encountered raccoon carcasses, scorpions, and insect exoskeletons. The glory days were over.

I may have a sense of humor about this now, but at the time, it was grim. We had no water to wash our dishes, flush our toilet, or bathe ourselves, much less tend to the essentially more important job of watering our crops, which were, after all, the source of our physical and financial sustenance. At the time, being 12 years old, I never fully understood the technicalities and politics of water law that were the cause of the stress encompassing our lives. Since then, I've learned and been able to understand much more about groundwater law in Texas and am able to recognize the blatant issues built into the faulty system of groundwater management. The most evident issue is that Texas has no statewide groundwater regulations, despite it being one of the biggest users of groundwater of all the Western states. In my groundwater research, I came to learn the meaning and significance of a term I had heard many times while my parents were fighting in the County Court: Right of Capture. This aspect of Texas water law is what was at the base of my family's water struggles. While I experienced the negative impact of Right of Capture law personally, I also have become familiar with several other impactful cases of Right of Capture being harmful to society and know now that it serves only to uphold a faulty system, unique almost solely to the state of Texas, that allows the blaring lack of groundwater management to go untouched.

Not all areas of Texas come up so short in groundwater management; Groundwater Conservation Districts, or GCDs, are created and assigned to certain districts in attempt to regulate groundwater use. GCDs are the closest thing Texas has to the system used by most Western states, which is Reasonable Use. However, the fact remains that not all of Texas is a

part of one of these groundwater districts, as was (and remains to be) the case of our water problems. Tecolote Farm, which my parents started in 1993, sits in Eastern Travis County and has no oversight or regulatory district. Due to the fact that alluvial aquifers common to Eastern Travis County do not move near the amount of water of deeper aquifers, such as the Edwards, a Groundwater Conservation District has failed to emerge here. Therefore, when Travis County began to pump wells far larger than our own single farm well, in order to water sports fields and fill catch and release ponds at a new park, there was little that could be done to combat the drawdown effect that they caused on our water supply. As Mark Hemingway, the hydrogeologist representing our farm, said, "Our main task...needs to be to help the Commissioners understand that all the wells are drawing from the same small aquifer, and that their pumping to water soccer fields is depleting that very limited and localized resource."

The Right of Capture rule is blind to historic use of water, as well as to the purpose the water is being used for. In this sense, R.O.C. can be considered immoral law. In our personal case, our nearly twenty years of sustainable water use (drip irrigation, scheduled irrigation, consciously limited water use, etc.) was no match for the brand new fish ponds of the Metro Park, whose great surface areas are inefficient and inevitably evaporate at alarming rates. Unfortunately, in our case, my parents' three year long political battle with the county, which involved nearly a dozen hydrogeologists arguing the science, was reduced to the legal reality of the Rule of Capture.

In another case, Edwards Aquifer Authority vs. Bragg, the property rights of an individual outweighed the well-being of the population of the city of San Antonio. Bragg, a catfish owner outside of San Antonio, was pumping 43 million gallons of water per day ($\frac{1}{4}$ the total amount of what San Antonio uses in a day) and diminishing the city's wells. The 4th Court of Appeals (San Antonio, TX) ruled against the GCD, which had been calling for stricter regulation of Bragg's water usage, saying that Bragg's property rights had been violated by the call for regulation. This case shows that the Rule of Capture's place in groundwater law is not only some outdated rule that has simply not been addressed, but in fact an updated part of the system that is upheld to this day. In other words, what benefits some has been preserved to the detriment of the majority.

While my interest in groundwater use was born of my family's struggle with access to water and "the law of the biggest pump," it quickly developed into an awareness of our regional state, and global responsibilities to manage this resource. The need for conservation, suburban planning, and increased use of recycled gray water became evident in my family's situation. I realize that this story is one of hundreds and the time has never been better to reform Texas water law and retire the antiquated 1904 regulation adopted by our state in its infancy.

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