

1 of 1 DOCUMENT

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LENGTH: 15069 words**COMMENTARY:** THE **RULE OF CAPTURE** IN TEXAS: AN OUTDATED PRINCIPLE BEYOND ITS TIME**NAME:** ERIC OPIELA+**BIO:** + J.D. December 2002 University of Texas School of Law, B.A., 2000 University of Texas at Austin.**SUMMARY:**

... Early in our nation's history, virtually all states followed the English rule of capture - which allows landowners to pump as much water as needed from underneath their land, with no fear of reprisal from neighbors whose wells are drained. ... But, the Supreme Court of Ohio, just one year later, in the 1861 case of *Frazier v. Brown*, which was directly cited by the Texas Supreme Court in *East*, used *Acton*, in conjunction with the previously cited American cases interpreting it, to justify a holding denying property rights in subterranean water, and set forth the core of the modern rule of capture - that a landowner acquires a property right in subterranean waters only when those waters are diverted, retained, or abstracted. ... The weakness of this case is particularly important to Texas, as the above quotation found its way into the Texas Supreme Court's holding in *East*, and set the stage for the confusion faced by Texas courts today as they use two distinct definitions of the rule of capture: as a use of groundwater for which no cause of action in tort, and as a vested property right of absolute ownership. ... Using *East* as a rubric for discussion, the *Friendswood* court centered on the common law limitations inherent in the rule of capture: malicious intent and wanton waste. ... In contrast, under the rule of capture in Texas, landowners have a property right to absolute ownership in groundwater. ...

HIGHLIGHT: "When the well's dry, we know the worth of water."-Benjamin Franklin ⁿ¹**TEXT:**

[*88]

I. INTRODUCTION

Early in our nation's history, virtually all states followed the English rule of capture - which allows landowners to pump as much water as needed from underneath their land, with no fear of reprisal from neighbors whose wells are drained. ⁿ² However, over time distinct groundwater rules emerged. Western states embodied the Roman concept of acquiring water rights by government grant in groundwater law under the doctrine of prior appropriation, which offers vested property rights to a specific quantity of water based on priority of beneficial use - independent of the ownership of overlying land. ⁿ³ In the states adhering to common law doctrines of water use, four quasi-riparian allocations doctrines arose: (1) the English rule of capture; (2) the "American rule" of reasonable use; (3) the correlative rights doctrine, which promotes shared access; and (4) the doctrine proffered by the Restatement of the Law of Torts 2d section 858A, which allows unrestricted beneficial use of groundwater, unless the withdrawal causes unreasonable harm through the lowering of the water table, the reduction of confined pressures, or if the withdrawal has a substantial effect upon

surface water. ⁿ⁴

For more than one hundred years, Texans have taken water for granted as a resource; a resource that, while in reality finite, most thought to be infinitely abundant. Aside from the droughts of the 1930s and 1950s, Texas, an agricultural state dependent on water, had enough for everyone.

However, the landscape of Texas began to change dramatically from a largely rural, to a largely urban state during the second half of the twentieth century. Growing demands of urban metropolises such as San Antonio, Austin, El Paso and Juarez, Mexico strain both the state's surface and groundwater supplies. ⁿ⁵ As of 2000, the Rio Grande River, the massive body of water that forms the border between Texas and Mexico, never made it to the Gulf of Mexico. Due to excessive pumping on both sides of the border, and drought conditions, the river simply dried up more than 100 miles from its destination. San Antonio has depleted the Edwards Aquifer, home to multiple endangered species of aquatic life protected by the federal [*89] Endangered Species Act of 1972, ⁿ⁶ to the point of destroying endangered species habitat, by relying on the Aquifer as its only source of potable water. ⁿ⁷ Similarly, in El Paso, at present rates of pumping, the Hueco Bolson is in danger of exhausting all its available fresh water, the only source for the thriving metropolitan area, in less than twenty years. ⁿ⁸

In 1904, the Texas Supreme Court in *Houston & Texas Central Railway Co. v. East* adopted the English rule of capture to govern Texas groundwater law. ⁿ⁹ In the nearly one hundred years since its adoption, the rule of capture has evolved from a mere tort preclusion doctrine into a vested property right, with troubling consequences for Texas' ability to regulate groundwater use in an effort to preserve what is quickly becoming its most scarce resource. ⁿ¹⁰ In order to understand how Texas remains the only state that still follows this antiquated doctrine, first the evolution of the rule of capture must be examined from its beginnings in English law, to the outcomes it has supported in Texas courts. Next, this article will illustrate the confusion Texas courts have faced in trying to read principles of absolute groundwater [*90] ownership by surface owners into the tort preclusion foundation of capture doctrine. To see the scope by which capture doctrine has grown in Texas in the last century, this article will look at both the limitations of the rule of capture, and exceptions that Texas courts have drawn to the rule over the last century. This article will then evaluate the Texas Supreme Court's reluctance to turn away from the rule of capture, and what impact this reluctance has had on the development of Texas groundwater preservation policy. Finally, this article will look toward the future, and call upon the Texas courts and the Texas Legislature to take the single most important step toward guaranteeing the availability of water resources to all Texans: reforming the rule of capture.

A. *Acton v. Blundell*

The 1843 English case of *Acton v. Blundell* ⁿ¹¹ is the seminal foundation of capture doctrine, and the basis of present-day Texas groundwater law as formulated in *East*. ⁿ¹² In *Acton*, a mining company dug coal pits on its property and pumped so much water from them that a neighbor's wells, used to operate his cotton mill, ran dry. ⁿ¹³ The miller sued for damages, arguing that his property rights in the percolating groundwater that supplied his wells were entitled to the same protections as those afforded holders of riparian rights in surface streams. ⁿ¹⁴ The *Acton* court declined to extend the riparian rights system to percolating groundwater, and held that any injury to an adjacent landowner is "damnum absque injuri" ⁿ¹⁵ or "[a] loss ... which does not give rise to an action for damages." ⁿ¹⁶

In formulating its holding, the *Acton* court applied the English common law principle of property law, "cujus est solum, ejus est usque ad c<oe>lum et ad infernos" or "to whomever the soil belongs, he owns also to the sky and to the depths." ⁿ¹⁷ Initially, one might perceive that the *Acton* court held that the rule of capture recognizes a property right. ⁿ¹⁸ Indeed, some commentators have taken the holding to mean just that. ⁿ¹⁹ However, the justification the *Acton* court gives for the rule indicates that the court was voicing a tort preclusion principle rather than establishing a property right in groundwater. ⁿ²⁰ The core holding in *Acton* was "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 [*91] and pleasure[,] ... inconvenience to his neighbor falls within the description of damnum absque injuria, which cannot become the ground of an action." ⁿ²¹ The *Acton* court advanced a number of justifications for creating a new rule for groundwater instead of following the riparian rights

system suggested by the plaintiff.

Initially, the Acton court concluded that the rules governing riparian rights were inadequate for governing groundwater disputes.ⁿ²² Riparian rights systems rely on all knowing the origin and course of a flowing stream, as well as the uses to which each user puts his or her share of the stream's flow.ⁿ²³ It recognized that at the time of its holding, knowledge of the origin and flow of groundwater was not readily determinable, making the application of riparian principles difficult, if not impossible.ⁿ²⁴ Therefore, the court wrote, "there can be no ground for implying any mutual consent or agreement ... between the owners of the several lands" ⁿ²⁵ Thus, there was no basis for an action in tort, as there was no duty between competing landowners.

Secondly, the Acton court noted that imposing such a duty would impede commercial development, as once one user begins putting groundwater to a particular use, all other uses, even those more beneficial, would be precluded.ⁿ²⁶ The facts of the case likely led the court to this conclusion, as the newer use plaintiff complained of was seen as more beneficial to society, and would have to be abandoned if [*92] the court adopted riparian rights, rather than the rule of capture.ⁿ²⁷

Finally, the Acton court justified its holding by addressing the question of foreseeability. Since the flows of groundwater were unknown, the liability that might follow if a landowner used more than his share of the resource would be difficult to ascertain, and therefore the landowner would lack notice that his or her activities would be ruinous.ⁿ²⁸ By applying the tort principles of duty, breach, and foreseeability to reach its holding, the Acton court was clearly not recognizing a property right; rather it was merely addressing the impracticality of recognizing a cause of action for well interference.

While later courts and commentators have taken the Acton holding to mean the recognition of absolute ownership in groundwater, it is obvious that one cannot claim absolute ownership in something so fleeting as groundwater.ⁿ²⁹ First, the holding, by its nature, denies ownership in groundwater by not providing a remedy for its expropriation by others.ⁿ³⁰ Second, logically one does not have absolute ownership in property by virtue of the fact that he or she is not liable for any harm caused by its use.ⁿ³¹ The reverse is also true: one cannot escape liability by virtue of absolute ownership.ⁿ³² Stated differently, since landowners do not have a duty to prevent harm when pumping groundwater under the rule of capture, they can pump freely. This right, however, can be destroyed by other landowners' free pumping. Thus, the Acton ruling did not create a property right per se, and clearly not a principle of absolute ownership.

B. Acton in America - The English Rule Refined

Indeed, the first reported case citing Acton in America, *Roath v. Driscoll*, the Connecticut Supreme Court in 1850 relied not on Acton as [*93] establishing an absolute right of ownership, but rather, in a lengthy quotation from the Acton opinion, applied the Acton tort preclusion principles elucidated above.ⁿ³³ It was not until 1855, in *Chatfield v. Wilson*, that the Supreme Court of Vermont cited Acton to forward the concept of absolute ownership.ⁿ³⁴ Even so, the Chatfield court did not look to principles of property law, but rather the practical considerations faced in identifying tortfeasors when groundwaters were a "secret, changeable, and uncontrollable" part of the earth.ⁿ³⁵ Indeed, that same year the Pennsylvania Supreme Court, in *Wheatley v. Baugh*, cited Acton, to explicitly deny the concept of absolute ownership in water, recognizing:

Water, like air, is of such a nature that no one can have an exclusive right in it. In the process of evaporation and condensation, it is sent, in refreshing showers, all over the earth. In its descent to the ocean, it necessarily passes from one to the other, and is intended for the benefit of all. The right of each is more or less dependent upon that of his neighbour. In this description of property, it is, therefore, peculiarly necessary that each should be mindful of the necessities and rights of the others. The owner of land on which a spring issues from the earth, has a perfect right to it against all the world, except those through whose land it comes.ⁿ³⁶

Despite this, the Indiana Supreme Court in 1860 moved closer toward couching Acton solely in terms of absolute ownership in *New Albany and Salem R.R. Co. v. Peterson*.ⁿ³⁷ This was a railroad negligent drainage case with facts similar to those facing Texas in its first groundwater case nearly a half-century later, *East*.ⁿ³⁸ But, the Supreme Court of Ohio, just one year later, in the 1861 case of *Frazier v. Brown*, which was directly cited by the Texas Supreme Court in *East*,ⁿ³⁹ used Acton, in conjunction with the previously cited American cases interpreting it, to justify a holding denying property rights in subterranean water, and set forth the core of the modern rule of capture - that a landowner acquires a property right in subterranean [*94] waters only when those waters are diverted, retained, or abstracted.ⁿ⁴⁰

The Supreme Court of New Hampshire, in the 1862 case of *Bassett v. Salisbury Mfg. Co.*, first coined the term "absolute ownership" in relation to Acton, and rejected the entire concept, holding:

No land-owner has an absolute and unqualified right to the unaltered natural drainage or percolation to or from his neighbor's land. In general it would be impossible for a land-owner to avoid disturbing the natural percolation or drainage, without a practical abandonment of all improvement or beneficial enjoyment of his land. Any doctrine that would forbid all action of a land-owner, affecting the relations as to percolation or drainage between his own and his neighbors' lands, would in effect deprive him of his property; and so far from being an application of the maxim, "cujus est solum," would work a general denial of effect to it.ⁿ⁴¹

In 1866, New York's highest court addressed the issue of absolute ownership, referencing Acton and its progeny, and held, "[water] is the same as land, and cannot be distinguished in law from land. So the owner of the land is the absolute owner of the soil and of percolating water, which is a part of, and not different from, the soil."ⁿ⁴² However, the Pixley court followed this sweeping statement, not with examples of property cases, but rather by extracting various non-liability principles from Acton and its American descendants, *Roath* and *Chatfield*.ⁿ⁴³ The weakness of this case is particularly important to Texas, as the above quotation found its way into the Texas Supreme Court's holding in *East*, and set the stage for the confusion faced by Texas courts today as they use two distinct definitions of the rule of capture: as a use of groundwater for which no cause of action in tort, and as a vested property right of absolute ownership.

C. *Houston & Texas Central Railway Co. v. East*

The Texas Supreme Court in the 1904 *Houston & Texas Central Railway Co. v. East* decision adopted the Acton rule of capture and set the stage for Texas' current problems in the arena of effective groundwater management.ⁿ⁴⁴ As in Acton, the plaintiffs in *East* suffered [*95] from well interference due to excessive pumping.ⁿ⁴⁵

The defendant railroad drilled wells on land adjacent to the plaintiff's property and transported the water off for use elsewhere, causing his well to run dry.ⁿ⁴⁶ Refusing to follow Acton, the court of civil appeals reversed the trial court's judgment for the railway company and held that a landowner's right to percolating groundwater is qualified, not absolute, and limited by the concept of reasonable use.ⁿ⁴⁷ On further appeal, the Texas Supreme Court reversed, adopting the Acton holding due to the public policy concerns expressed in the English court decision:

(1) Because the existence, origin, movement, and course of such waters, and the causes which govern and direct their movements, are so secret, occult, and concealed that an attempt to administer any set of legal rules in respect to them would be involved in hopeless uncertainty, and would be, therefore, practically impossible. (2) Because any such recognition of correlative rights would interfere ... with drainage and agriculture, mining, the construction of highways and railroads ... and the general progress of improvement in works of embellishment and utility.ⁿ⁴⁸

The *East* court did not merely recant the rationale of Acton. It clearly discussed the case at bar in terms of a claim in

tort.ⁿ⁴⁹ Only briefly did the court in East even mention the concept of property in its decision. Citing the above mentioned Pixley case, the East court recognized a property interest at stake, but did not state that it adopted the New York opinion as its own: "so the owner of land is the absolute owner of the soil and of percolating water, which is a part of, and not different from, the soil. No action lies against the owner for interfering with or destroying percolating or circulating water under the earth's surface."ⁿ⁵⁰ Perhaps due to this quote from the New York courts in justifying its holding, Texas courts have ever since been confused regarding the application of the rule of capture as a tort preclusion doctrine or a principle of absolute ownership. Unfortunately, the rule of capture, post-East, has evolved in a different direction than the East court clearly intended.

[*96]

D. The Rule of Capture in Texas After East

Initially, Texas courts saw the East decision in light of its grounding in tort, and applied it to similar well interference cases. As early as 1923, courts used East to negate a nuisance claim of well interference.ⁿ⁵¹ In *Farb v. Theis*, the San Antonio Court of Civil Appeals reversed a district court order enjoining the placement of a cemetery proximate to water wells that were used for drinking.ⁿ⁵² Plaintiffs alleged that rainwater percolating through soil containing human graves polluted their groundwater.ⁿ⁵³ Citing East, the court stated, "it is now settled in this state ... that owners of the soil have no rights in subsurface waters not running in well-defined channels, as against neighbors who may withdraw them by wells or other excavations, even though this withdrawal by the one results in the destruction of the other's water supply."ⁿ⁵⁴ The *Farb* court went on to quote the Supreme Court of Michigan in extending East to well corruption:

If withdrawing the water from one's well by an excavation on adjoining lands will give no right of action, it is difficult to understand how corrupting its waters by a proper use of the adjoining premises can be actionable, when there is no actual intent to injure, and no negligence. The one act destroys the well, and the other does no more; the injury is the same in kind and degree in the two cases.ⁿ⁵⁵

It is not until 1927 that we see the first reported case in Texas interpreting East in light of property, rather than tort law.ⁿ⁵⁶ In *Texas Co. v. Burkett*, the Texas Company had a contract to use spring waters on Burkett's property.ⁿ⁵⁷ Burkett sued to recover upon the contract and Texas Company claimed that the waters were not Burkett's property and were therefore not his to sell.ⁿ⁵⁸ The Texas Supreme Court ruled in favor of Burkett, and while not directly referencing East, stated that percolating groundwater was "the exclusive property of [the landowner], who had all the rights incident to them that one might have as to any other species of property."ⁿ⁵⁹ This statement, combined with the previously mentioned cite to the New York Pixley [*97] decision in East itself, has led Texas courts astray from the tort preclusion core of East's holding ever since.ⁿ⁶⁰

In *Pecos County Water Control and Improvement District No. 1 v. Williams*, the court would not enjoin or assess damages against former Texas gubernatorial candidate and millionaire, Clayton Williams, even though his groundwater pumping obviously interfered with the flow of a surface stream and caused harm to perfected surface water right holders.ⁿ⁶¹ The Plaintiffs alleged Williams extracted so much groundwater for his ranch's irrigation operation that nearby Comanche Springs ceased to flow at all.ⁿ⁶² Nevertheless, the Pecos court held in Williams' favor, stating, "it seems clear to us that percolating or diffused and percolating waters belong to the landowner, and may be used by him at his will."ⁿ⁶³ The court went on to state that prior cases "seem to hold that the landowner owns the percolating water under his land and that he can make a non-wasteful use thereof, and such is based on a concept of property ownership."ⁿ⁶⁴

E. Legislative Recognition of Absolute Ownership

With Texas courts after Burkett continually restating East as embodying the absolute ownership principle, the Texas

Legislature jumped on the merry bandwagon and recognized ownership in groundwater explicitly through statute.ⁿ⁶⁵ The Texas Underground Water Conservation Act of 1949 was the first such statute.ⁿ⁶⁶ It stated:

The ownership and rights of the owner of the land, his lessees and assigns, in underground water are hereby recognized, and nothing in this Section 3c shall be construed as depriving or divesting such owner, his assigns or lessees, of such ownership or rights, subject, however to the rules and regulations promulgated pursuant to this Section 3c.ⁿ⁶⁷

[*98] With minor amendment, this section, recodified at section 36.002 of the Texas Water Code, is still in effect today, and serves as yet another ground upon which Texas courts have solidified the hold absolute ownership has on the rule of capture in Texas.ⁿ⁶⁸

F. Friendswood Development Company v. Smith-Southwest Industries, Inc.

Second only perhaps in importance to the most recent cases interpreting East, Friendswood Development Co. v. Smith-Southwest Industries, Inc. is illustrative in showing how Texas courts have been confounded as to how the rule of capture should be applied - as a principle of property law or as a tort preclusion doctrine.ⁿ⁶⁹ Friendswood is distinguishable from the majority of Texas cases interpreting the rule of capture in that the Friendswood plaintiffs did not complain of well interference.ⁿ⁷⁰ Instead, the plaintiffs brought nuisance and negligence actions, alleging that the defendants' pumping caused subsidence and withdrawal of subjacent support, and as such interfered with the enjoyment and use of their property.ⁿ⁷¹ Between 1964 and 1971, Friendswood Development Company and Exxon Corporation developed a number of wells in the Bayport, Texas area, from which they pumped large quantities of water for sale to other industrial users.ⁿ⁷² Wells, completed in the area, caused a decrease in the water table of over 325 feet, and led to land subsidence in the Baytown area of approximately five feet.ⁿ⁷³

In many ways, Friendswood was the perfect test case to force the Texas Supreme Court to resolve the tort/property capture conundrum. The harm claimed was not merely a negligent withdrawal or contamination well interference case; it presented a novel issue in tort - whether the preclusion doctrine embodied in the East decision could be used in a case involving negligent withdrawal of subjacent support.ⁿ⁷⁴ On the other hand, it presented an important property question: whether absolute ownership of groundwater can be truly absolute if it can be visibly withdrawn, to the unfortunate end of the destruction of the real property overlying it, with no cause of action or [*99] remedy for such taking.ⁿ⁷⁵ The Friendswood case also created a competition between the laws of property and the laws of tort; can an absolute right of property - the right to subjacent support - be disregarded in favor of a doctrine of non-liability? Can this be done ironically in the name of preserving a different property right - absolute ownership in groundwater? Unfortunately, the Texas Supreme Court in Friendswood proved not up to the challenge and answered both of the foregoing questions in the affirmative.ⁿ⁷⁶ In doing so it took the open window of opportunity for clarification of the East rule and shut it in favor of rigid adherence to its misguided precedent, muddying the waters of capture doctrine even more.

Initially, the Friendswood court acknowledged that the East rule appeared to quickly resolve the issues at bar: any harm caused by groundwater withdrawal is not actionable.ⁿ⁷⁷ This punt to non-liability ignores the property concerns inherent in a loss of subjacent support action - this was a case involving a noxious use of property, "not a case involving conflicting claims to the ownership or nontortious use of water" ⁿ⁷⁸

Using East as a rubric for discussion, the Friendswood court centered on the common law limitations inherent in the rule of capture: malicious intent and wanton waste.ⁿ⁷⁹ After quoting City of Corpus Christi to state that the foregoing were the "only such limitations" adopted by the East court, the Friendswood court referred to a 1969 English subsidence case, Langbrook Properties, Ltd. v. Surrey County Council.ⁿ⁸⁰ Following the narrow common-law limitations on capture doctrine, the Langbrook court stated, "in such circumstances the principle of sic utere tuo ut alienum non laedas [use your property so as not to injure the property of another] does not operate ... "Is there any room for the law of nuisance or negligence to operate? In my judgment there is not."ⁿ⁸¹ With Langbrook as its justification,

the Friendswood majority proclaimed that since, under the rule of capture the defendants had no duty to prevent harm caused by groundwater withdrawals, the subsidence did not constitute an "unlawful invasion of the right of another" or "breach of a legal duty." ⁿ⁸² While at the same time denying a duty or breach of that duty on the part of the defendants, the Friendswood court crafted a "new" duty and cause of action out of the [*100] Texas legislature's regulatory powers over subsidence, and announced that "after the date this opinion becomes final," if a landowner negligently withdraws groundwater, leading to subsidence, "he will be liable for the consequences of his conduct." ⁿ⁸³

While dismissing a claim in tort, the Friendswood court complicated its holding by including language that ventured into the realm of property law. It referred to the rule of capture as a rule of property law, not tort, stating, "our decision results from what we conceive to be our duty to apply a rule of property law," ⁿ⁸⁴ and later that "most ... critics [of the rule of capture] ... recognize that it has become an established rule of property law in this State" ⁿ⁸⁵ At the same time, the Friendswood court made clear that its holding was based solely on East's tort preclusion doctrine: "we follow the English rule and Restatement of Torts 818 (1939) in holding that defendants are not liable on plaintiff's allegations of nuisance and negligence." ⁿ⁸⁶

Justice Pope, in his dissent, pointed out the absurdity of the majority's claim that it was deciding a question of property law:

The court has decided this cause upon the mistaken belief that the case is governed by the ownership of ground water. Plaintiffs assert no ownerships to the percolating waters pumped and extracted from the ground by defendants. They make no complaint that their own wells have been or will be pumped dry. They seek no damages for the defendants' sale of the water. Plaintiffs' action calls for no change in nor even a review of the English rule of "absolute ownership" of ground water, the American rule of "reasonable use" of ground water, nor the Texas rule of "nonwasteful" use of ground water. They claim no correlative rights in the water. The Texas law of percolating waters is not put in issue by this suit, and there is no occasion to overrule that law either now or prospectively. ⁿ⁸⁷

Justice Pope recognized the Friendswood majority's mistake in continuing to muddle the property and tort aspects of the rule of capture.

G. Sipriano - The Ozarka Spring Water Case

Despite the confusing holding in Friendswood, the Texas Supreme Court has come full circle and returned to evaluating the rule of capture as a tort preclusion doctrine in Sipriano v. Great Spring Waters of America, Inc. ⁿ⁸⁸ The facts of Sipriano were similar to those of East and Acton; the plaintiffs alleged well interference due to negligent over-pumping. ⁿ⁸⁹ The defendants, who bottled Ozarka brand spring water, [*101] began pumping approximately 90,000 gallons of groundwater per day, seven days a week from land adjoining the plaintiffs. ⁿ⁹⁰ As could be predicted, the Sipriano court relied on East, and stated that no action would lie for the harm claimed. ⁿ⁹¹ Couching its decision solely in terms of tort law and not property, the court characterized the rule of capture as "answering the question of what remedies, if any, a neighbor has against a landowner based on the landowner's use of the water under the landowner's land." ⁿ⁹² The answer, presupposed in light of East and its progeny, is that no remedies are available.

The reluctance of Texas courts to address, once and for all, the nature of the holding in East is an impediment to effective groundwater management. While many have argued for the wholesale abandonment of capture doctrine, East, and its confused offspring, ⁿ⁹³ this is but one option to consider as Texas struggles to address its growing groundwater shortage. The rule of capture is still viable, in part due to its exceptions.

II. LIMITATIONS ON THE RULE OF CAPTURE

A. Malice and Waste

As previously mentioned, under the common law, a landowner was liable for his groundwater withdrawals only if he acted with intentional malice or if he practiced wanton waste.ⁿ⁹⁴ While ideal in the abstract, both of these exceptions are ineffectual in practice, but for differing reasons. The essential element of malice, intent, is notoriously hard to prove and has never come into play in a reported Texas groundwater case.ⁿ⁹⁵

The waste exception, on the other hand, has been the subject of considerable debate. From early on, Texas courts refused to apply the [*102] rule of capture in the face of waste.ⁿ⁹⁶ However, after the Texas Supreme Court's decision in *City of Corpus Christi v. City of Pleasanton*, waste was eviscerated of much of its meaning.ⁿ⁹⁷ The case centered around an agreement by which Corpus Christi extracted groundwater at the rate of approximately ten million gallons per day and then transported the water 118 miles down the bed of the Nueces River to Corpus.ⁿ⁹⁸ Corpus Christi's methods for obtaining sufficient quantities of water for its burgeoning municipal needs have long driven a rift between the city and rural farmers and ranchers along the Nueces and its tributaries, the Frio and Atascosa Rivers. The court opened a loophole as large as Texas when it held that the common law waste prohibition referred to waste in use and not in transport.ⁿ⁹⁹ As a result, the loss of sixty-three to seventy-four percent, averaging seven million gallons per day, of groundwater in transportation did not amount to waste under the definition of the court.ⁿ¹⁰⁰ The majority in *City of Corpus Christi* ignored the argument propounded by dissenting Justice Wilson that even if waste is defined solely as waste in use, the water lost during transportation is not used at all and is therefore waste as well.ⁿ¹⁰¹

As happens so many times, the Texas Supreme Court has again come full circle, this time using a broad definition of waste to limit the rule of capture. In February 2002, the Texas Supreme Court issued an opinion in *Bragg v. Edwards Aquifer Authority*, which has the potential to transform the common law capture doctrine into a more effective conservation tool than it heretofore had potential to become.ⁿ¹⁰² While [*103] more closely watched due to its regulatory takings implications, the Bragg decision has important ramifications for the common law waste exception to the rule of capture, despite the fact that the opinion does not reference the capture rule.

Glenn and JoLynn Bragg applied to the Edwards Aquifer Authority ("Authority") for permits to withdraw groundwater from two wells to irrigate their commercial pecan orchards.ⁿ¹⁰³ Pursuant to Authority rules, its general manager recommended that the permit for one of the wells be denied because the Braggs showed no beneficial use within the rules' specified historical time period.ⁿ¹⁰⁴ The general manager also recommended that the Braggs' permit for the other well be limited to two acre-feet of water for each acre historically irrigated, which according to the Braggs, was an insufficient amount to sustain their orchard.ⁿ¹⁰⁵ The Braggs did not immediately assert a takings claim since the Authority had not yet taken a final administrative action.ⁿ¹⁰⁶ The Braggs instead argued that under the Texas Private Real Property Rights Preservation Act, the Authority was required to prepare a takings impact assessment ("TIA").ⁿ¹⁰⁷ The court held that no TIA was necessary because groundwater permit rulemaking falls under the "statutory authority to prevent waste or to protect the rights of owners of interest in groundwater"ⁿ¹⁰⁸ exception of the Property Rights Preservation Act. Furthermore, the court broadened the scope of the waste exception by holding that the authority to prevent waste "refers ... to the broader concept of preventing waste by conserving, protecting, and preserving the aquifer though the Legislature's designated permit system."ⁿ¹⁰⁹ For the first time, the Texas Supreme Court bridged the gap between Texas' groundwater and oil and gas laws; both being governed by the rule of capture, however, were radically different due to the Texas Railroad Commission's ability to regulate oil and gas withdrawals based on principles of conservation and prevention of waste.ⁿ¹¹⁰

Bragg opened the door for future Texas legislatures to finally empower locally elected groundwater conservation districts with the [*104] powers necessary to regulate groundwater withdrawals without running afoul of the rule of capture. While the Bragg decision is of concern due to its property rights implications, it shows a willingness on the part of the Texas Supreme Court to work within the existing framework to judicially promote groundwater conservation.

B. Underground Streams

In addition to the common law exceptions of malice and waste, Texas courts have held that the rule of capture does not

apply to underground waters running in defined channels.ⁿ¹¹¹ Underground streams, like surface streams, are considered to be public property, held in trust by the state, and therefore, not subject to the rule of capture.ⁿ¹¹² However, underground waters are presumed to be percolating and for the exception to apply, a prospective plaintiff must prove that the alleged subterranean water course has all of the characteristics of a surface stream: bed, banks forming a channel, and current of water.ⁿ¹¹³ In *Burkett*, the court seemed to intimate that this presumption could be rebutted if underground waters were "of sufficient magnitude to be of any value to riparian proprietors, or added perceptibly to the general volume of water in the bed of the stream" ⁿ¹¹⁴ However, the court ignored this statement in *Pecos County Water Control & Improvement District No. 1 v. Williams*, where excessive groundwater withdrawals caused Comanche Springs to cease flowing, in turn depriving surface water users of their state-granted perfected surface water rights.ⁿ¹¹⁵ The Pecos plaintiffs claimed the groundwater flowed in a defined channel, but the court, while failing to specify what evidence would be sufficient to establish a well-defined channel,ⁿ¹¹⁶ held that "plaintiff's allegations that because the pumping of defendants' wells materially reduced and/or dried up Comanche Springs [does not alone] prove the existence of a well defined underground channel."ⁿ¹¹⁷

C. Surface Stream Interference

As seen in Pecos, Texas courts have also denied protection against interference with surface water rights by groundwater pumping. Groundwater deposits are often hydrologically connected to surface waters. As a result, excessive pumping can diminish stream flows and, in some cases, cause a hydrologically connected surface stream to [*105] cease flowing altogether. However, under the rule of capture, surface water users do not have a cause of action against groundwater pumpers.ⁿ¹¹⁸ For example, in *Denis v. Kickapoo Land Co.*, the court held that landowners were not liable to downstream riparian right holders for withdrawing groundwater that contributed to the stream's flow.ⁿ¹¹⁹ In *Denis*, the defendant landowner captured spring waters on his property, measured the amount captured, discharged the water into Kickapoo Creek, and then withdrew the same amount one mile downstream.ⁿ¹²⁰ The landowner's springs, however, naturally created the principle source flow for Kickapoo Creek, and, without his "diversion," which really only consisted of controlling the flow and measuring it through a well and piping apparatus, would have fed into the creek.ⁿ¹²¹

The *Denis* court referred to the rule of capture as a rule of propertyⁿ¹²² and held that because the landowner captured the waters before they surfaced, he gained ownership of the waters.ⁿ¹²³ *Burkett's* stream volume exceptionⁿ¹²⁴ was dismissed by the *Denis* court as inconsistent with the rule of capture under *East*.ⁿ¹²⁵

D. Negligent Subsidence

In *Friendswood*, the Texas Supreme Court crafted another exception to the rule of capture, by imposing future liability for negligently causing subsidence.ⁿ¹²⁶ This exception has allowed for the creation of local subsidence districtsⁿ¹²⁷ with power to regulate pumping in an effort to prevent subsidence. Regulatory actions by these districts that cabin the rule of capture, such as fees based on pumping volume and well permitting within their jurisdictions, have been upheld by Texas courts.ⁿ¹²⁸

[*106]

III. JUDICIAL RELUCTANCE TO MODIFY THE RULE OF CAPTURE

While the rule of capture has been soundly denounced by critics and Texas courts alike, little change has been made to the doctrine by either the judiciary or the legislature since *East*.ⁿ¹²⁹ The justifications provided by the court in *East* no longer exist.ⁿ¹³⁰ The appeal of the doctrine has waned greatly as science and progress have allowed us to better understand how underground waters flow. In light of capture doctrine's roots in tort, the only true justification for its continued existence is gone. If not for the lone holdout, Texas, the doctrine would be gone as well.ⁿ¹³¹

A. Reliance on the Rule

Initially, Texas courts adhered to the rule of capture by proffering reliance as a justification.ⁿ¹³² As Texas moves into an era of ever increasing water management problems, reliance becomes a faint rationale for maintaining an antiquated doctrine. While a landowner may rely on the rule to absolve him of liability for pumping his neighbor's well dry, the rule will also fail to protect him if his well should be pumped dry by his neighbor. Some of capture's most ardent supporters, including some of those who have built their livelihoods in reliance on the rule, such as farmers, ranchers, and industry, faced with the unquenchable thirst of neighboring municipalities, are now its most vocal opponents.ⁿ¹³³

B. Legislative Deference

Most recently, Texas courts have offered legislative deference as a rationale for maintaining the status quo. The Texas Constitution tasks the legislature with passing laws to protect and conserve the state's [*107] natural resources.ⁿ¹³⁴ Texas courts have understandably been cautious to upset the framework established close to a century ago.ⁿ¹³⁵ In the 1999 Sipriano case, the Texas Supreme Court explicitly punted to the legislature stating, "it would be improper for courts to intercede at this time by changing the common-law framework within which the Legislature has attempted to craft regulations to meet this state's groundwater-conservation needs."ⁿ¹³⁶ Since Sipriano came "on the heels of Senate Bill 1" in which the Texas Legislature granted local groundwater conservation districts increased authority to regulate groundwater, the court thought it "more prudent to wait and see" rather than upset the new framework before it had time to develop.ⁿ¹³⁷

Unfortunately, while the Texas Supreme Court has restrained itself from judicial activism, lower Texas courts have not done the same. In the 2001 South Plains Lamesa Railroad, Ltd. v. High Plains Underground Water Conservation District No.1 case, the groundwater conservation district revoked one permit issued under the Senate Bill 1 framework and denied another because the amount pumped by the landowner was disproportionate to his tract size.ⁿ¹³⁸ The court of appeals held the district's action invalid because the legislature had not specifically authorized groundwater conservation districts to conduct rulemaking regarding the size of the tract to be drained by a well, even though section 36.101 of the Texas Water Code allowed the district to make rules to prevent waste.ⁿ¹³⁹

Texas courts have made it clear that the legislature is the preferred choice for any modification of the rule of capture. Yet, at the same time they have impeded efforts at legislative change.ⁿ¹⁴⁰ While the [*108] Texas Supreme Court early in the twentieth century created the problem posed by a property law-based interpretation of the rule of capture, the legislature compounded the problem soon after by writing this flawed interpretation of the East decision into positive law.ⁿ¹⁴¹ Nearly a century of caselaw and even statutory recognition of groundwater as property poses another legal obstacle for those wishing to modify the rule of capture - the possibility of a takings claim against the state for destruction of the property right in groundwater ownership.

IV. TAKINGS JURISPRUDENCE AND PROPERTY RIGHTS IN GROUNDWATER UNDER CAPTURE

The Fifth Amendment to the United States Constitution provides that "nor shall private property be taken for public use, without just compensation."ⁿ¹⁴² The right to own and enjoy one's property is one of the fundamental rights on which our system of law and government rests. When the state takes private property for public use, the owner of that property has the right to be compensated for such taking and to be paid damages as just compensation for the taking. The Just Compensation Clause of the Fifth Amendment, made applicable to the states through the Fourteenth Amendment, provides a direct cause of action for its violation, and in fact, is the only express money damages remedy in the Constitution.ⁿ¹⁴³

In *Hage v. United States*, the U.S. Court of Federal Claims held that the Fifth Amendment protected water rights.ⁿ¹⁴⁴ *Hage* involved a claim for just compensation for the taking of water rights in a surface stream that ran through an area under United States Forest Service jurisdiction.ⁿ¹⁴⁵ In that case, the court soundly rejected the position put forward by the government that water rights were not protected against uncompensated taking by the Fifth Amendment, stating instead that:

Amici provides no reason within our constitutional tradition why water rights, which are as vital as land rights, should receive less protection... . This court holds that water rights are not "lesser" or "diminished" property rights unprotected by the Fifth Amendment. Water rights, like other property rights, are entitled to the full protection of the Constitution.
n146

[*109] Regulation of surface waters in Texas, however, has withstood takings challenges because, in Texas, the state is the de facto owner of surface waters. n147 To have a right to surface waters, and only a usufructuary one at that, one must apply for and obtain a permit. In contrast, under the rule of capture in Texas, landowners have a property right to absolute ownership in groundwater. n148 Where any state permitting or regulatory system grants rights with respect to surface waters that do not previously exist, any regulation on groundwater would limit rights supposedly vested to the landowner, making a takings challenge much more viable. n149

A. Is the Right to Groundwater a Property Right?

Todd H. Votteler, in his article on the Edwards Aquifer and property rights, argues that under the rule of capture, a right to underground water lacks the defining characteristics of a property right: universality, exclusivity, transferability, and enforceability. n150 Ironically, the regime so many have advocated as protecting private property rights in groundwater, when allowed to run its natural course, leads to the downfall of usable free-market property rights in groundwater. In addition, the statutory language enacted by the Texas Legislature that explicitly recognizes ownership in groundwater also includes a proviso that the state can limit and alter this ownership and **[*110]** the rights associated with it. n151 This analysis begs the question, what practical interest in groundwater is exactly "owned" by a landowner?

B. Bragg v. Edwards Aquifer Authority

The success of a takings challenge to groundwater regulation remains uncertain. Just this Spring, in *Bragg v. Edwards Aquifer Authority*, the Texas Supreme Court punted the issue by holding that a statutory exception for waste under the Texas Private Real Property Rights Preservation Act made it unnecessary for the Authority to perform a mandatory Takings Impact Assessment (TIA) required under the Act. n152 However, a takings challenge under the Act will likely be unsuccessful for the same reasons that a TIA was not required in *Bragg*. A groundwater conservation district, as a political subdivision of the state, can promulgate regulations restricting the use of groundwater under its "authority to prevent waste" n153 both in statute and under the common law capture doctrine. Texas' rule of capture only recognizes a right to groundwater that is put to non-wasteful uses; with no right to the groundwater that is regulated, one cannot claim a regulatory taking. Despite the waste loophole to a regulatory taking based on the rule of capture recognized in *Bragg*, the sun has not set on the viability of a takings claim over groundwater regulation in Texas. The critical question still left unanswered by Texas courts is the degree of rights and ownership in groundwater under the rule of capture, in any truly exists.

While a complete examination of regulatory takings jurisprudence as it relates to groundwater in Texas is beyond the scope of this discussion, it is important to note that Texas courts' perversion of the East principle into a property right has opened the door to costly regulatory takings claims the moment any state agency chooses to enforce any regulation limiting the use of groundwater. n154 Any legislative modification of the rule of capture is also not likely to escape takings scrutiny.

[*111]

V. RECOMMENDATIONS FOR CHANGE

As stated earlier, Texas follows the capture doctrine for groundwater, yet follows the western doctrine of prior appropriation for surface water. n155 Unfortunately, the rules of capture and prior appropriation encourage incompatible

behaviors by water users, depending on the source from which one draws water.ⁿ¹⁵⁶ This contributes to the deleterious effects of droughts by treating surface and groundwater as separate legal entities while ignoring the fundamental hydrologic connection between them. The existing legal framework in Texas serves as a disincentive to efficient conjunctive use, and is a complicating factor for those tasked with managing Texas' surface and groundwater resources.ⁿ¹⁵⁷ The following discusses three ways in which Texas can respond to these problems.

A. Tort Reform: Recognize and Eliminate the Rule of Capture as a Tort Defense

Texas courts should recognize that the rule of capture has its roots in tort law rationales that no longer exist, and eliminate it as a defense to well interference claims. This would have the effect of implementing a reasonable use system in Texas, as it would force landowners to answer to their neighbors when they begin to mine aquifers rather than engage in sustainable use practices. The legislature's preferred method of groundwater management, local groundwater conservation districts, would work hand-in-hand with a judicial abrogation of capture in identifying the carrying capacity of aquifers and setting reasonable use pumping limits.

The Texas Supreme Court clearly has the ability to modify the rule of capture. First, the rule was brought to Texas judicially in *East*.ⁿ¹⁵⁸ In addition, the court has modified the rule before and intimated that it would, when necessary, in the future.ⁿ¹⁵⁹ The court's statement in *Sipriano* is particularly apt: "we do not shy away from change when it is appropriate. We continue to believe that "the genius of the common law rests in its ability to change, to recognize when a timeworn rule no longer serves the needs of society, and to modify the rule [*112] accordingly."ⁿ¹⁶⁰

By judicially reforming Texas' tort doctrine, the court would not be acting within the province of the legislature. The Texas Legislature would still be free to enact conservation measures to fulfill its constitutional mandate. However, conservation legislation can only go so far in preventing harm due to over-pumping and providing remedies for those harmed by overdrafts. In fact, without judicial modification of the capture doctrine, most, if not all, use limitations passed by the legislature or local groundwater conservation districts would be subject to regulatory takings claims.

A judicial reinterpretation of the *East* decision, and the English Rule upon which it is based, would also preclude potential takings claims, as one could not claim a property right in groundwater if one was not recognized in the common law of Texas.ⁿ¹⁶¹ Justice Scalia, in *Lucas v. South Carolina Coastal Council*, indicated that no compensation may be required if the regulation in question would have the same effect as limitations on use due to state or common law nuisance doctrine, even if the regulation deprived the landowner of all economically viable use of his property.ⁿ¹⁶² If the Texas Supreme Court abrogated the rule of capture altogether and imposed liability for harm to other groundwater users, it could enjoin or limit groundwater pumping that constituted a nuisance. After such an abrogation, regulations limiting pumping or even prohibiting it altogether would have the same effect as a judicial recognition that the prohibited pumping was a nuisance and would, therefore, not constitute a regulatory taking.

B. Broaden the Exceptions to the Rule of Capture

Realizing the politically charged nature of any discussion over eliminating the rule of capture altogether, the Texas Legislature or the Texas Supreme Court might find it more practical to improve the rule by broadening its exceptions. As noted earlier, the rule of capture does not absolve a groundwater user of liability if he acts maliciously, commits waste, negligently causes subsidence, or pumps from a well-defined underground stream. Adding to this laundry list of exceptions might allow for targeted solutions to specific problems in groundwater management as they arise, without upsetting the relied-upon framework currently in place.

The Texas Supreme Court has already begun to move in this direction with the *Bragg* decision, in which it held that the Legislature's duty to prevent waste was broader than denying specific [*113] wasteful uses, but also included the "broader concept of preventing waste by conserving, protecting, and preserving the aquifer."ⁿ¹⁶³ It could easily be inferred from this statement that any use, not explicitly permitted under the comprehensive groundwater management scheme recently adopted by the legislature, is presumptively prohibited as against the conservation, protection, and

preservation of an aquifer.

An additional exception in need of expansion is the well-defined stream exception. Science has advanced to the point that we now know that groundwater and surface waters are often part of the same hydrologic system. The narrow current nature of the exception creates a right to groundwater that is superior to surface water rights. In order to level the playing field, surface water right holders who are harmed should be able to either enjoin or obtain damages from groundwater users in the event of excessive pumping, if they prove that the groundwater negligently withdrawn is hydrologically connected to the surface water body from which they draw.

These are just some examples of potential expansions to the rule of capture's exceptions that would improve Texas' ability to better manage its groundwater resources.

C. Abandon the Rule of Capture and Embrace Reasonable Use

The most drastic change Texas could make would be to abandon the rule of capture altogether and follow the lead of Arizona in establishing reasonable use doctrine for groundwater management.ⁿ¹⁶⁴ In 1980, Arizona radically reformed its groundwater regulation system by assuming state control over regulation.ⁿ¹⁶⁵ At the same time, it protected the rights of existing water users.ⁿ¹⁶⁶ Under the Arizona system, municipalities can withdraw enough water to meet the demand in their extant service areas, but cannot extend service into additional areas without agency approval.ⁿ¹⁶⁷

A principal advantage to adopting the reasonable use doctrine lies in the fact that it sidesteps the takings issue by continuing to recognize a right of ownership in the groundwater underneath a landowner's property, and merely limits the amount of water one can withdraw to what is reasonably necessary for the beneficial use of the surface estate. In addition, the reasonable use doctrine is justifiable under the state's police power, especially in comparison to other alternatives, such as California's correlative rights doctrine.ⁿ¹⁶⁸ Texans' natural aversion toward centralized state control would necessitate vesting the powers [*114] of determining what are, and what are not, reasonable uses in the hands of the extensive network of locally elected groundwater conservation districts established under Senate Bill 1.

Texas has experience with rules and regulations similar to those of reasonable use in the arena of oil and gas regulation. Mineral interest owners in Texas have absolute ownership of the oil and gas underneath their land.ⁿ¹⁶⁹ However, the Texas Railroad Commission can enforce well spacing rules, field production limits, and other measures designed to maximize beneficial use and protect the correlative rights of neighbors.ⁿ¹⁷⁰ Texas courts, the Legislature, and the public are familiar with these concepts, and these concepts are easily transferable to the groundwater context. Legislative adoption of reasonable use would also foster the establishment of groundwater conservation districts in those areas that have been lax at creating them since Senate Bill 1's passage.ⁿ¹⁷¹ Formal adoption of reasonable use as the law of the land in Texas would also provide the opportunity to strengthen the powers already granted to districts that discourage out-of-district transfers and excessive pumping, as well as encourage districts to work together to develop aquifer-wide, consistent schemes of management.ⁿ¹⁷² The beauty of reasonable use is that it protects rural interests while allowing for responsible smart growth on the part [*115] of water-hungry municipalities.ⁿ¹⁷³

The rule of capture has grown from a simple tort preclusion doctrine into a two-headed Hydra that also purports to recognize a property right in groundwater. This flawed interpretation of the capture doctrine stemming from East, threatens to disrupt Texans' best attempts at ensuring that enough groundwater exists for their beneficial use. Texas courts and the Texas Legislature must slay the absolute ownership head of the Capture Hydra once and for all. To not do so will guarantee that Texas will continue to face shortages and misallocation of its newest most precious resource - its groundwater.

Legal Topics:

For related research and practice materials, see the following legal topics:

Energy & Utilities Law Exploration, Discovery & Recovery Rule of Capture Real Property Law Torts General
Overview Real Property Law Water Rights General Overview

FOOTNOTES:

n1. Benjamin Franklin, quoted in Sandra Postel, *Last Oasis: Facing Water Scarcity* 166 (1992).

n2. The so-called English Rule is named as such since it is believed by most to have originated in the famous 1843 English case of *Acton v. Blundell*, 152 Eng. Rep. 1223 (Ex. Ch. 1843). It is less well known, however, that the principles of the English Rule were first set forth in an American case, *Greenleaf v. Francis*, 35 Mass. 117 (1836). Often cited by early American groundwater opinions, in the twentieth century its fame has fallen in favor of the internationally better-known *Acton* case.

n3. Am. Soc'y of Civil Eng'rs, *Water Res. Planning & Mgm't Div., The Regulated Riparian Model Water Code: Final Report of the Water Laws Committee*, at v. (Joseph W. Dellapenna ed., 1997).

n4. Fletcher G. Driscoll, *Groundwater and Wells* 672-73 (2d ed. 1986).

n5. See generally Ronald Kaiser & Frank F. Skillern, *Deep Trouble: Options for Managing the Hidden Threat of Aquifer Depletion in Texas*, 32 *Tex. Tech. L. Rev.* 249, 250-54 (2001).

n6. 16 U.S.C. 1531-44 (2000).

n7. For a discussion of San Antonio's unique problems and the fight over the Edwards Aquifer, see Matthew Carson Cottingham Miles, *Water Wars: A Discussion of the Edwards Aquifer Water Crisis*, 6 *S.C. Envtl. L.J.* 213 (1997).

n8. See Kaiser & Skillern, *supra* note 5, at 300.

n9. 81 S.W. 279, 280 (Tex. 1904). It is important to note that while the rule of capture governs Texas groundwater, the doctrine of prior appropriation governs surface water in Texas, much like western states. Under this doctrine, surface water is held in trust by the state for the benefit of all, subject to a state-granted right to use. Ronald A. Kaiser, *Handbook of Texas Water Law: Problems and Needs* 19 (1987). Those first-in-time are first-in-right to divert surface water, provided they apply it to a beneficial use, apply for, and are granted a state-issued permit. *Id.* at 22. Ostensibly, these surface water right grants are subject to cancellation if unused, but in practice, this has rarely come into play. *Id.* For an extensive discussion of the development of Texas surface water rights, see Ronald A. Kaiser, *Texas Water Marketing in the Next Millennium: A Conceptual and Legal Analysis*, 27 *Tex. Tech L. Rev.* 181, 229-55 (1996) [hereinafter *Water Marketing*]. In addition to these two major classifications, Texas also has separate rules governing diffused surface water and underground streams. Diffused surface water is that which does not flow in any defined watercourse or surface body of water. *Lewis v. Tex. Util. Elec. Co.*, 825 S.W.2d 722, 724 (Tex. App. 1992). Diffused surface waters are the property of the landowner until they enter a natural watercourse, and become natural surface waters, discussed above. *Id.* Underground streams are a final classification of water, distinct from percolating groundwater, the subject of this article. While only distinguished from groundwater in dicta, the door has been opened for Texas courts to consider subterranean streams as waters held in trust by the state, much like natural surface waters. *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235, 236 (Tex. App. 1989) (noting that if "water supplying the spring flows to the outlet of the spring in a well-defined ... subterranean channel," it is treated as surface water). In order to meet this definition, the aquifer containing the water has to have well-defined banks and beds. *Id.* at 236-37.

n10. While Texas' water use decreased by nearly a million acre feet yearly since 1974, it is projected to grow by nearly two million acre-feet yearly by 2050. Mary Sanger & Cyrus Reed, *Texas Environmental Almanac* 9 (2d ed. 2000). Texas' main sources of ground water, its aquifers, are increasingly being mined, that is, pumped at a rate not sustainable for continual use. *Id.* at 9-10. For example, the Ogallala aquifer, our nation's largest, was mined at the rate of 6.22 million acre-feet in 1995, while only 0.30 million acre-feet were returned through recharge. *Id.* at 10-11.

n11. 152 Eng. Rep. 1223 (Ex. Ch. 1843).

n12. *Houston & Tex. Cent. Ry. Co. v. East*, 81 S.W. 279 (Tex. 1904).

n13. *Acton*, 152 Eng. Rep. at 1232 (emphasis added).

n14. *Id.* at 1232-33.

n15. *Id.* at 1235.

n16. Black's Law Dictionary 393 (6th ed. 1990).

n17. *Id.* at 378.

n18. Acton, 152 Eng. Rep. at 1235 ("We think the present case ... falls within that principle, which gives to the owner of the soil all that lies beneath his surface").

n19. See Kaiser & Skillern, *supra* note 5, at 263.

n20. Acton, 152 Eng. Rep. at 1233-35.

n21. *Id.* at 1235 (emphasis added).

n22. *Id.* at 1233.

n23. See, e.g.,

The ground and origin of the law which governs streams running in their natural course would seem to be this, that the right enjoyed by the several proprietors of the lands over which they flow, is, and always has been, public and notorious; that the enjoyment has been long continued, ... indeed, time out of mind - and uninterrupted; each man knowing what he receives and what has always been received, ... and what he transmits and what has always been transmitted to the lower. The rule, therefore, either assumes for its foundation the implied assent and agreement of the proprietors of the different lands from all ages; or perhaps it may be considered as a rule of positive law, the origin of which is lost by the progress of time; or it may not be unfitly treated, as laid down by Mr. Justice Story, ... "as an incident to the land;" and that whoever seeks to found an exclusive use must establish a rightful appropriation in some manner known and admitted by the law.

Id.

n24. See, e.g.,

But in the case of a well sunk by a proprietor in his own land, the water which feeds it from a neighbouring soil, does not flow openly in the sight of the neighbouring proprietor but through the hidden veins of the earth, beneath its surface; no man can tell what changes these underground sources have undergone, in the progress of time; it may well be, that it is only of yesterday's date, that they first took the course and direction which enabled them to supply the well: again, no proprietor knows what portion of water is taken from beneath his own soil; how much he gives originally, or how much he transmits only, or how much he receives: on the contrary, until the well is sunk, and the water collected by draining into it, there cannot properly be said, with reference to the well, to be any flow of water at all.

Id.

n25. Acton, 152 Eng. Rep. at 1233.

n26. See id. at 1234.

n27. Id. ("The well may be sunk to supply a cottage, or a drinking-place for cattle; whilst the owner of the adjoining land may be prevented from winning metals and minerals of inestimable value").

n28. See id. at 1234-35.

n29. Ronald A. Kaiser gives a particularly apt clarification of the groundwater doctrine:

While Texas groundwater law is characterized as an absolute right for the landowner, this is somewhat of a misnomer. A landowner does not have an absolute right to the water beneath his land, but only has an absolute right to capture it. The results of this rule can be illustrated with the following example. Suppose landowner A's property overlies the source of percolating groundwater that would normally flow under landowner B's property. Under the absolute ownership rule, landowner A can capture all of the percolating groundwater under his property, thereby depriving landowner B of any water and B is without any legal remedy.

Water Marketing, *supra* note 9, at 258 n.433 (citations omitted).

n30. See Corwin W. Johnson, *The Continuing Voids in Texas Groundwater Law: Are Concepts and Terminology to Blame?*, 17 *St. Mary's L.J.* 1281, 1288-89 (1986).

n31. *Id.* at 1289.

n32. *Id.* at 1295 ("If we were to say 'ownership of property gives the right to do with it as the owner please,' and reason from there, we would reach all sorts of absurd results.") (quoting Frank J. Trelease, *Government Ownership & Trusteeship of Water*, 45 *Cal. L. Rev.* 638 (1957)).

n33. *Roath v. Driscoll*, 20 *Conn.* 533, 542-43 (1850) (citing *Acton v. Blundell*, 152 *Eng. Rep.* 1223, 1233-35 (Ex. Ch. 1843)).

n34. *Chatfield v. Wilson*, 28 *Vt.* 49, 54-55 (1855) (denying correlative rights in groundwater) ("We think the practical uncertainties which must ever attend subterranean waters is reason enough why it should not be attempted to subject them to certain and fixed rules of law, and that it is better to leave them to be enjoyed absolutely by the owner of the land, as one of its natural advantages, and in the eye of the law a part of it, and we think we are warranted in this view by well-considered cases.").

n35. *Id.* at 54 ("The secret, changeable, and uncontrollable character of underground water in its operations, is so diverse and uncertain that we cannot well subject it to the regulations of law, nor build upon it a system of rules, as is done in the case of surface streams.").

n36. 25 *Pa.* 528, 533 (1855).

n37. 14 *Ind.* 90, 91-93 (1860).

n38. *Houston & Tex. Cent. Ry. Co. v. East*, 81 *S.W.* 279 (Tex. 1904).

n39. *Id.* at 280-81.

n40. *Frazier v. Brown*, 12 Ohio St. 294, 304-310 (1861) ("The question then is, whether - in the absence of all rights derived either from contract or legislation - a land owner can have any legal claims in respect to subsurface waters which, without any distinct and definite channel, ooze, filter, and percolate from adjoining lands into his own, when such waters are diverted, retained, or abstracted by the owner of such adjoining lands in the use of his property, for any object of either taste or profit ... ?

Whatever points of casuistry may arise out of this question, cognizable in the court of individual conscience, under the perfect law of Christian morals, we are of opinion that the law of the land can recognize no such claims").

n41. 43 N.H. 569, 573 (1862). The court adds, "we are not aware that any of the cases have followed this doctrine of absolute ownership rigidly to its logical conclusion" *Id.* at 575.

n42. *Pixley v. Clark*, 35 N.Y. 520, 526 (1866).

n43. *Id.* at 526-32.

n44. 81 S.W. 279, 280 (Tex. 1904).

n45. *Id.*

n46. *Id.* Indeed the trial court held "that the use to which defendant puts its well was not a reasonable use of their property" *Id.*

n47. *East v. Houston & Tex. Cent. Ry. Co.*, 77 S.W. 646, 647-48 (Tex. Civ. App. 1903), rev'd, 81 S.W. 279 (1904).

n48. East, 81 S.W. at 281 (quoting *Frazier v. Brown*, 12 Ohio St. 294, 311 (1861)).

n49. Id. at 281-82 ("Exhaustion resulting from excavating and pumping for mining purposes has been considered in several cases to give rise to no liability The defendant here is making a reasonable and legitimate use of the water which it takes from its own land, which use is not, in quality, different from, or in its consequences to plaintiff more injurious than, many upheld in the decisions. There is no claim of malice or wanton conduct of any character").

n50. Id. at 281 (quoting *Pixley v. Clark*, 35 N.Y. 520, 526 (1866)).

n51. See *Farb v. Theis*, 250 S.W. 290, 292 (Tex. Civ. App. 1923) (contemplating well interference due to placement of cemetery near wells for drinking water). The court cited East in one reported case prior to 1923, *Texas Co. v. Giddings*, 148 S.W. 1142, 1144 (Tex. Civ. App. 1912). This case, too, only referred to East as standing for non-liability, however, distinguished it as only applying to subsurface interference, and not the surface pollution complained of to hold defendant negligent for well interference.

n52. *Farb*, 250 S.W. at 293.

n53. Id. at 292.

n54. Id. (citing East, 81 S.W. at 279).

n55. Id. (quoting *Upjohn v. Bd. of Health*, 9 N.W. 845, 848 (Mich. 1881)). The *Farb* opinion incorrectly references the quote as coming from the Supreme Court of Indiana.

n56. See *Texas Co. v. Burkett*, 296 S.W. 273, 278 (Tex. 1927).

n57. *Id.* at 275.

n58. *Id.* at 276.

n59. *Id.* at 278.

n60. See, e.g., *Friendswood Dev. Co. v. Smith-Southwest Indus., Inc.*, 576 S.W.2d 21, 25 (Tex. 1978) (stating that Burkett applied the principle of "absolute ownership"); see also *Bartley v. Sone*, 527 S.W.2d 754, 760 (Tex. Civ. App. 1974) (recognizing the embodiment of groundwater ownership in (now repealed) section 52.002 of the Texas Water Code); *City of Pleasanton v. Lower Nueces River Supply Dist.*, 263 S.W.2d 797, 800 (Tex. Civ. App. 1953) (first reported case implicating East as declaring a "theory of ownership of percolating waters.").

n61. 271 S.W.2d 503, 507 (Tex. Civ. App. 1954). At the time of the court's decision, Williams had not yet run for governor.

n62. *Id.* at 504-05.

n63. *Id.* at 505.

n64. *Id.*

n65. Tex. Water Code Ann. 52.002 (Vernon 2000) (recodified at 36.002 (Vernon Supp. 2002)); Texas Water Code Amendments of 1985, ch. 133, 5.01, 1985 Tex. Gen. Laws 639; Texas Water Code, ch. 58, 1, 1971 Tex. Gen. Laws 110; Texas Water Code Act Amending Chapter 25, ch. 306, 1, 1949 Tex. Gen. Laws 559.

n66. Texas Water Code Act Amending Chapter 25, ch. 306, 1, 1949 Tex. Gen. Laws 559.

n67. *Id.* 1, 3c(D).

n68. Tex. Water Code Ann. 36.002 (Vernon 2002) reads:

The ownership and rights of the owners of the land and their lessees and assigns in groundwater are hereby recognized, and nothing in this code shall be construed as depriving or divesting the owners or their lessees and assigns of the ownership or rights, except as those rights may be limited or altered by rules promulgated by a district. (Emphasis added).

See also *Bartley v. Sone*, 527 S.W.2d 750, 760 (Tex. Civ. App. 1974) (citing then-section 52.002 of the Texas Water Code).

n69. 576 S.W.2d 21 (Tex. 1978).

n70. *Id.* at 21-22.

n71. *Id.*

n72. *Id.* at 22.

n73. *Id.* at 23.

n74. *Friendswood Dev. Co.*, 576 S.W.2d at 24.

n75. *Id.* at 25-27.

n76. *Id.* at 29, 30.

n77. *Id.* at 24-25.

n78. *Id.* at 24. The Friendswood court seems to recognize this momentarily, but quickly confuses the issue by couching it in terms of "reasonable use," a doctrine dismissed in *East*. *Id.* at 24-25.

n79. *Friendswood Dev. Co.*, 576 S.W.2d at 26 (citing *City of Corpus Christi v. City of Pleasanton*, 276 S.W.2d 798, 801 (Tex. 1955)).

n80. *Id.* at 26, 28 (considering *Langbrook Properties, Ltd. v. Surrey County Council*, 3 ALL E.R. 1424 (Ch. 1969)).

n81. *Id.* at 28 (quoting *Langbrook Properties, Ltd.*, 3 ALL E.R. at 1440).

n82. *Id.* (quoting *Gotcher v. City of Farmersville*, 151 S.W.2d 565, 566 (Tex. 1941) & *State v. Brewer*, 169 S.W.2d 468, 471 (Tex. 1943)).

n83. *Id.* at 30.

n84. *Friendswood Dev. Co.*, 576 S.W.2d at 22.

n85. *Id.* at 29.

n86. *Id.* at 29.

n87. *Id.* at 31 (Pope, J., dissenting).

n88. 1 S.W.3d 75 (Tex. 1999).

n89. *Id.* at 75-76.

n90. *Id.*

n91. *Id.*

n92. *Id.* at 76.

n93. For a compelling synopsis of the many arguments against the rule of capture, see Justice Hecht's concurring opinion in *Sipriano*, 1 S.W.3d at 81-83 (Hecht, J., concurring); Lana Shannon Shadwick puts Texas groundwater law under capture bluntly:

Present Texas groundwater law relegates groundwater resources to mere incidents of private property. As such, it is subject only to ineffectual token limitations and is thus rendered virtually unregulated. Restated, "if a person drills a well, and sucks his neighbor's dry, well that's fair game" A rule asserting that the "first man there, wins," is a loser environmentally. Worse, from a jurisprudential standpoint, the law being grounded on early English common law is, of itself, nothing more than a default position rooted in ignorance.

Lana Shannon Shadwick, Note, *Obsolescence, Environmental Endangerment and Possible Federal Intervention Compel Reformation of Texas Groundwater Law*, 32 S. Tex. L. Rev. 641, 665 (1991) (citation omitted).

n94. Friendswood Dev. Co., 576 S.W.2d at 21-22; City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 801 (Tex. 1955).

n95. See Kevin Smith, Comment, Texas Municipalities' Thirst for Water: Acquisition Methods for Water Planning, 45 Baylor L. Rev. 685, 709 (1993).

n96. See Cantwell v. Zinser, 208 S.W.2d 577, 579 (Tex. Civ. App. 1948) (stating that while East did not pass upon the question of waste, "waste ... is against the public policy of this State," and "such right does not exist.").

n97. City of Corpus Christi, 276 S.W.2d at 799-800.

n98. Id. at 799-800.

n99. Id. at 802.

n100. Id. at 800, 803.

n101. Id. at 806 (Wilson, J., dissenting).

n102. 71 S.W.3d 729 (Tex. 2002). The Edwards Aquifer area is the only part of Texas where the rule of capture has been superceded - only through the impetus of federal legal action under the Endangered Species Act ("ESA"). Todd H. Votteler, The Little Fish That Roared: the Endangered Species Act, State Groundwater Law, and Private Property Rights Collide Over the Texas Edwards Aquifer, 28 Envtl. L. 845, 851 (1998). Depletion of the Edwards Aquifer has caused flows to decline in the Comal and San Marcos springs feeding the Guadalupe River. Id. These springs are the habitat of eight federally-listed endangered or threatened species. Id. The Sierra Club filed a lawsuit under the ESA and as a result, the Texas Legislature passed the Edwards Aquifer Act. Id. at 856, 860. The new law set up the Edwards Aquifer

Authority for the purpose of regulating groundwater withdrawals from the Aquifer, and to account for their impacts on surface waters. *Id.* at 860. However, in 1996 the Act was declared unconstitutional, *Id.* at 858, but the legislature refined the act through substantial amendment in 1995. *Id.* at 866. When challenged again, the amended Act was upheld. *Barshop v. Medina County Underground Water Conservation Dist.*, 925 S.W.2d 618, 623, 638 (Tex. 1996). While the Act was in litigation, the Sierra Club sued again, and the federal district court enjoined groundwater withdrawals. *Votteler*, *supra* note 102, at 869. The Fifth Circuit vacated the injunction. *Sierra Club v. City of San Antonio*, 112 F.3d 789, 798 (5th Cir. 1997). In response to the new litigation, the Texas legislature mandated that the Texas Natural Resources Conservation Commission (now the Texas Council on Environmental Quality) consider the effects of proposed applications for new surface water rights on groundwater and groundwater recharge. Tex. Water Code Ann. 11.151 (Vernon 2000). However this new scheme still leaves gaps in conjunctive management: It does not address pre-existing surface use, nor the effects of groundwater uses on surface uses.

n103. *Bragg*, 71 S.W.3d at 732.

n104. *Id.*

n105. *Id.*

n106. *Id.*

n107. *Id.* at 732-33.

n108. *Bragg*, 71 S.W.3d at 738; Tex Gov't Code 2007.003(b)(11)(C) (Vernon 2000).

n109. *Bragg*, 71 S.W.3d at 736.

n110. *Id.* ("This is similar to the concept of governmental action taken to prevent waste of oil and gas and to protect the correlative rights of owners of interests in oil and gas ...") (citing *R.R. Comm'n v. Lone Star Gas Co.*, 844 S.W.2d 679, 688-89 (Tex. 1992) (holding that Railroad Commission could promulgate rules to prevent waste and promote conservation, and was not required to determine questions of waste by contested-case proceeding)).

n111. See e.g., *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235, 236-37 (Tex. App. 1989).

n112. Tex. Water Code Ann. 11.021 (Vernon 2000).

n113. *Tex. Co. v. Burkett*, 296 S.W. 273, 278 (Tex. 1927); *Denis*, 771 S.W.2d at 236-37; *Pecos County Water Control & Improvement Dist. No. 1 v. Williams*, 271 S.W.2d 503, 506 (Tex. Civ. App. 1954).

n114. *Burkett*, 296 S.W. at 278.

n115. *Pecos County Water Control & Improvement Dist. No. 1*, 271 S.W.2d at 503.

n116. *Id.* at 507 ("We do not attempt here to lay down a rule for pleading such a fact ...").

n117. *Id.*

n118. See *id.*

n119. 771 S.W.2d 235, 239 (Tex. App. 1989).

n120. *Id.* at 236.

n121. *Id.*

n122. *Id.* ("groundwater percolating beneath the soil is the property of the owner of the surface who may, in the absence of malice, appropriate such water while on his premises and make whatever use of it as he pleases.").

n123. *Id.* at 239.

n124. See text accompanying notes 102-04.

n125. *Denis*, 771 S.W.2d at 238.

n126. *Friendswood Dev. Co. v. Smith-Southwest Indus., Inc.*, 576 S.W.2d 21 (Tex. 1978).

n127. See, e.g., Act Creating the Harris-Galveston Coastal Subsidence Dist., ch. 284, 1, 1975 Tex. Laws 672.

n128. See *Beckendorff v. Harris-Galveston Coastal Subsidence Dist.*, 558 S.W.2d 75 (Ct. Civ. App. 1978), *aff'd*, 563 S.W.2d 239 (Tex. 1978).

n129. See, e.g., *Friendswood Dev. Co.*, 576 S.W.2d at 28-29 ("We agree that some aspects of the English or common law rule as to underground waters are harsh and outmoded, and the rule has been severely criticized since its reaffirmation by this Court in 1955."); see also Joe R. Greenhill & Thomas Gibbs Gee, *Ownership of Ground Water in Texas; The East Case Reconsidered*, 33 Tex. L. Rev. 620, 630 (1955) (Texas groundwater law after East "invites considerable strengthening and improvement.").

n130. *Houston & Tex. Cent. Ry. Co. v. East*, 81 S.W. 279, 280-81 (1904).

n131. See *Sipriano v. Great Spring Waters of America, Inc.*, 1 S.W.3d 75, 81-82 (Tex. 1999) (Justice Hecht in his concurrence stated, "Thirty five years [after Texas adopted the rule of capture] 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.") (citation omitted).

n132. *Friendswood Dev. Co.*, 576 S.W.2d at 29 ("the rule has been relied on by thousands of farmers, industries, and municipalities ...").

n133. " Since the advent of the ESA, some of the most vocal opponents of government intervention have become ardent supporters of regulation because such an approach may eventually provide certainty through the creation of firm water rights." Ralph K.M. Haurwitz, Maurice Rimkus: Coming Around on Water Reform, *Austin American Statesman*, Dec. 28, 1997, at A15, cited in Votteler, *supra* note 102, at 876.

n134. Tex. Const. art. XVI, 59(a) ("The conservation and development of all of the natural resources of this State ... and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.").

n135. It is important to note, however, that prior to Senate Bill 1, the Texas Legislature had only made two exceptions to the rule of capture. In 1975, the Legislature created the Harris-Galveston Coastal Subsidence District to limit withdrawals from the Gulf Coast Aquifer, after excessive pumping caused serious property damage through subsidence by as much as ten feet. Rick Callaway, *Harris-Galveston Coastal Subsidence District: A Report on its Creation, Powers, Limitations of Powers and Progress 1* (1986), cited in Todd H. Votteler, *Raiders of the Lost Aquifer? Or, The Beginning of the End to Fifty Years of Conflict Over the Texas Edwards Aquifer*, 15 *Tul. Envtl. L.J.* 257, 270 (2002). The constitutionality of the District was upheld in *Beckendorff v. Harris-Galveston Coastal Subsidence Dist.*, 558 S.W.2d 75, 77 (Tex. Civ. App. 1977). The second exception was the creation of the Edwards Aquifer Authority, see *supra* text within note 102.

n136. *Sipriano*, 1 S.W.3d at 80.

n137. *Id.* at 79-80.

n138. *South Plains Lamesa R.R., Ltd. v. High Plains Underground Water Conservation Dist. No. 1*, 52 S.W.3d 770, 774 (Tex. App. 2001).

n139. *Id.* at 778-79.

n140. *Sipriano*, 1 S.W.3d at 83 (Hecht, J., concurring) ("Does the Court intrude on the Legislature's constitutional responsibility and duty by maintaining the rule of capture or by abandoning it? It is hard to see how maintaining the rule of capture can be justified as deference to the Legislature's constitutional province when the rule is contrary to the local regulation that is the Legislature's "preferred method of groundwater management."").

n141. *Tex. Water Code Ann.* 36.002 (Vernon 2000 & Supp. 2002).

n142. U.S. Const. amend. V.

n143. For an informed discussion of property rights and takings jurisprudence, see Nancie G. Marzulla & Roger J. Marzulla, *Property Rights: Understanding Government Takings and Environmental Regulation* (1997).

n144. 35 Fed. Cl. 147, 172 (1996).

n145. *Id.* at 150.

n146. *Id.* at 172 (emphasis added).

n147. Tex. Water Code Ann. 11.021 (Vernon 2000); see also *In re Adjudication of the Water Rights of the Upper Guadalupe Segment of the Guadalupe River Basin*, 642 S.W.2d 438, 444 (Tex. 1982) (holding that termination of surface water rights was not an unconstitutional taking).

n148. Despite numerous statements to this effect in both caselaw and statute, the Texas Supreme Court in *Barshop v. Medina County Underground Water Conservation Dist.*, 925 S.W.2d 618, 630-31 (Tex. 1996), "assumed without deciding" that landowners have a property right in groundwater, and went on to state that in order to succeed at a takings challenge, a prospective plaintiff would have to first establish that he had a property right in groundwater.

n149. For a specific discussion of the takings problem in regard to state appropriation, see Stephen E. Snyder, Comment, *Ground Water Management: A Proposal for Texas*, 51 Tex. L. Rev. 289, 314 (1973) (noting that state appropriation of groundwater might be an unconstitutional taking). In order to establish a state-wide permitting system for groundwater, it would have to go the costly route of exercising eminent domain, an unlikely path. See Roger Tyler, *Underground Water Regulation in Texas*, 39 Tex. B.J. 532, 538 (1976).

n150. See Votteler, *supra* note 102, at 875:

In the Edwards Aquifer, none of these characteristics have been present under the rule of capture. There was no universality because entitlements could not be specified under a system where a pumper's use of water was vulnerable to extraction by a neighbor. Exclusivity did not exist. During periods when pumping was not needed, well owners did not have the option of leasing or selling the water to which they had access. Similarly, transferability did not exist. Even if a well owner was paid not to pump water, nothing prevented another landowner from drilling a new well into the Aquifer to begin pumping. Thus a transfer would be rendered meaningless because the purchaser was not protected from excessive pumping by other users. Finally, there could be no enforceability of a property right for all of the reasons stated above. There was no effective way to prevent one pumper from encroaching on another individual's property right.

n151. Tex. Water Code Ann. 36.0015 (Vernon 2000 & Supp. 2002); see also Kaiser & Skillern, *supra* note 5, at 250-51 ("The notion of private property rights in groundwater is so entrenched in both landowner and legislative psyche that any attempt to regulate the pumping of groundwater provokes significant political and legal opposition.") (citation omitted).

n152. 71 S.W.3d 729, 738 (Tex. 2002).

n153. Tex Gov't Code 2007.003(b)(11)(C) (Vernon 2000 & Supp. 2002).

n154. For a more complete discussion of regulatory takings and groundwater rights under Texas' rule of capture, see generally Stephanie E. Hayes Lusk, Comment, Texas Groundwater: Reconciling the Rule of Capture with Environmental and Community Demands, 30 St. Mary's L.J. 305 (1998).

n155. See supra note 9 and accompanying text.

n156. I do not argue for the institution of prior appropriation in Texas groundwater. Lessons learned in the western states militate against establishing prior appropriation across the board in Texas. For an informed discussion of the problems faced when applying priority to groundwater resources, see A. Dan Tarlock, Prior Appropriation: Rule, Principle, or Rhetoric?, 76 N.D.L. Rev. 881, 900-07 (2000), compare Lana Shannon Shadwick, supra note 93, at 702-03 (advocating the establishment of prior appropriation in Texas).

n157. See David H. Getches, The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?, 20 Stan. Envtl. L.J. 3, 28-29 (2001).

n158. *Sipriano v. Great Springs Waters of Am., Inc.*, 1 S.W.3d 75, 83 (Tex. 1999) (Hecht, J., concurring).

n159. E.g., *Friendswood Dev. Co. v. Smith-Southwest Indus., Inc.*, 576 S.W.2d 21, 30 (Tex. 1978).

n160. *Sipriano*, 1 S.W.3d at 80 (quoting *Guitierrez v. Collins*, 583 S.W.2d 312, 317 (Tex. 1979)).

n161. This assumes that the legislature would work in concert with the courts and not create a property right in groundwater through statute. At the very minimum, the legislature should amend Tex. Water Code 36.002 to conform with the interpretation of East as establishing a tort and not a property principle.

n162. *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1029 (1992).

n163. *Bragg v. Edwards Aquifer Auth.*, 71 S.W.3d 729, 736 (Tex. 2002).

n164. 1980 Groundwater Management Code, ch. 1, 35, 86, 1980 Ariz. Legis. Serv. A-607, -637 to -638 (West 1980).

n165. Philip R. Higdon & Terence W. Thompson, *The 1980 Arizona Groundwater Management Code*, 1980 Ariz. St. L.J. 621, 634-35 (1980).

n166. *Id.* at 650 (discussing grandfathered rights for irrigation and other uses).

n167. Ariz. Rev. Stat. 45-493 (2001).

n168. See *Johnson*, *supra* note 30, at 1290-91.

n169. *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625, 632 (Tex. 2000).

n170. *Id.* at 633.

n171. See *Snyder*, *supra* note 150, at 314. "the legislature created a mechanism for regulating groundwater ... but gave all the power to those who use groundwater. While the people given the power have hesitated to regulate themselves, the state's water problems have been growing." *Id.* at 289. In addition to the problems associated with creation, funding problems have plagued some districts. One commentator explains the problem, "it has not been uncommon for the voters to elect to participate in a district, but refuse to tax themselves to provide for such services; and there is no way provided by the law to reduce a district's responsibilities to its financial capacity to support such services."

Shadwick, *supra* note 93, at 675 (quoting J. Chalmers, *Southwestern Groundwater Law: A Textual and Bibliographic Interpretation* 90 (U. of Ariz. Office of Arid Land Studies, Resource Information Paper No. 4, 1974)). One district (Goliad County UWCD) that failed to approve an ad valorem tax has not even had the funding to conduct a preliminary study of the carrying capacity of the shallow aquifer underlying its jurisdiction.

n172. Particularly troublesome is the current provision in the Texas Water Code that restricts districts from having the power to regulate wells that are outside their district, even though such wells draw from and deplete groundwater resources shared between multiple districts. Johnson, *supra* note 30, at 1283. This allows neighboring districts with conflicting interests to "race to the bottom" and allow as much pumping as possible without regard to effects on its neighbor district. An example of this type of battle is currently being fought out between San Antonio and the groundwater conservation district just to its south, the Evergreen Underground Water Conservation District ("UWCD"). An outcropping of the Carrizo Aquifer lies in Bexar County, just outside the city limits of San Antonio, and outside the boundaries of the Evergreen UWCD. San Antonio currently derives its water solely from the Edwards Aquifer, which is federally protected. Desperate for another source of groundwater, the Bexar Metropolitan Water Authority bought the land overlying the outcropping and is sinking a well field for Carrizo augmentation of their water supply during droughts. San Antonio successfully fought back an Evergreen annexation election for the area in Spring 2002 and Atascosa and Wilson County farmers who depend on the Carrizo's water are powerless to do anything about it.

n173. For articles advocating this view, see Robert A. McCleskey, Comment, *Maybe Oil and Water Should Mix - At Least in Texas Law: An Analysis of Current Problems with Texas Ground Water Law and How Established Oil and Gas Law Could Provide Appropriate Solutions*, 1 *Tex. Wesleyan L. Rev.* 207 (1994); Wendy M. Block & Frederick S. Richardson, *A Case of the Blues: The Inequity of Groundwater Regulation in Texas*, 7 *Plan. F.* 42 (2001).