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World’s Worst Game of Telephone: Attempting to Understand the Conversation Between Texas’s Legislature and Courts on Groundwater

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WORLD'S WORST GAME OF TELEPHONE: ATTEMPTING TO UNDERSTAND THE CONVERSATION BETWEEN TEXAS’S LEGISLATURE AND COURTS ON GROUNDWATER

By Amy Hardberger

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I. INTRODUCTION

Oil may have put Texas on the map, but water is what it needs to stay there. While other states struggled economically in recent years, Texas flourished. Since 1995, the number of jobs in Texas increased 31.5% as compared to the national average of just 12%. The majority of the job growth occurred in Texas cities. In fact, four of 2013’s ten fastest growing cities are located in Texas. Although many industries expanded, the mining and logging sector, which includes the oil and natural gas industries, was notably strong. Population projections reflect the same growth trend. Texas’s population is forecasted to increase 82% in the next fifty years. This growth is predicated on access to water resources. The future of Texas is not definite; however, it is certain that none of this growth can continue without water.

Groundwater is a critical component of Texas water resources. According to the most recent statistics, groundwater accounts for 60% of all water withdrawn in the state. Historically, the largest groundwater user was the agricultural sector; however, Texas cities are also increasingly reliant on these water sources. State water demands are projected to increase 22% in the next fifty years. Many of these demands will be in the groundwater sector. In addition to increasing demand, periodic and sometimes severe droughts challenge an already stressed system. Texas’s ability to provide sufficient resources depends in large part on their effective management.

The laws governing Texas groundwater have followed a long and complicated path consisting of case law and legislation. The common law of groundwater allocation was first established by the Texas Supreme Court in 1904, which held that Texas should...
follow the English common law right of capture.\textsuperscript{14} Under right of capture, one landowner can drain the water from under his neighbor’s property without liability with few exceptions.\textsuperscript{15} The Court reasoned that this rule was preferable because of the scientific complications associated with trying to regulate groundwater and the impacts regulation may have on commerce.\textsuperscript{16}

Rule of capture has been upheld by subsequent cases; however, on several occasions the Court has been critical of this allocation scheme and indicated that this rule should be changed by the legislature.\textsuperscript{17} Those opinions recognized the need for greater management based on changing circumstances in the state.\textsuperscript{18} Most notably, in \textit{Sipriano v. Great Spring Waters of America, Inc.}, the Court went so far as to indicate that if the legislature did not change the law, the Court would.\textsuperscript{19}

A state constitutional amendment vested the authority to manage and conserve natural resources with the legislature.\textsuperscript{20} Pursuant to this authority, the state created Groundwater Conservation Districts (GCDs) instead of forming a statewide regulatory agency.\textsuperscript{21} The state preferred districts because they provided a regional, bottom-up approach to planning that is more suitable for managing individual aquifers.\textsuperscript{22} These legislatively created districts have the authority to permit groundwater wells based on well spacing to minimize interference between wells and set production limits based on tract size or production capacity.\textsuperscript{23} There are currently one hundred GCDs, but there are still areas of the state outside district authority.\textsuperscript{24} In these areas, rule of capture continues unfettered.\textsuperscript{25}

Another significant regulatory initiative was the creation and expansion of the regional planning process. Through two omnibus state water bills and other supporting legislation, state lawmakers created a statewide water-planning program.\textsuperscript{26} As part of this initiative, the state was divided into sixteen groundwater management areas.

\begin{thebibliography}{26}
\bibitem{14} Houston \& T. C. Ry. Co. v. East, 81 S.W. 279, 280–82 (Tex. 1904).
\bibitem{15} Id.
\bibitem{16} Id. at 281.
\bibitem{17} See, e.g., Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 78–80 (Tex. 1999) (discussing at length the courts’ continuing refusal to abandon the common law rule of capture, though some aspects were considered “harsh and outmoded,” and the recognition that water regulation in Texas is a legislative prerogative).
\bibitem{18} Id.
\bibitem{19} See id. at 80.
\bibitem{20} \textsc{Tex. Const.} art. XVI, § 59(a).
\bibitem{21} \textsc{Tex. Water Code Ann.} § 36.0015 (West 2012).
\bibitem{22} See \textit{Sipriano}, 1 S.W.3d at 80.
\bibitem{23} \textsc{Tex. Water Code Ann.} § 36.116 (West 2012).
\bibitem{24} \textit{Groundwater Conservation District (GCD) FAQs, Tex. Water Development Board, http://www.twdb.state.tx.us/groundwater/faq/} (last visited April 14, 2013) (follow “GCD map” hyperlink to see areas of the state outside district authority).
\bibitem{26} See infra Part IV.A–B.
\end{thebibliography}
(GMAs), which roughly parallel aquifer boundaries. These areas were then tasked with selecting desired future conditions for the aquifer, which is essentially a decision regarding the preferred aquifer conditions in fifty years. Based on that decision, individual GCDs within a GMA were tasked with permitting water withdrawals mindful of that goal.29 Implementation of permitting rules to attain these future targets heralded a level of regulation that had never before occurred.

Over the years, as capture was maintained by the courts and additional regulations were promulgated, questions arose regarding the specifics of the property right created by the common law rule.30 Although the Court stated on multiple occasions that capture was the law, neither the court nor lawmakers ever specified if ownership in that water vested in place or upon capture.31 While the answer to this question did not have a significant impact when there was enough water for all users, the need for an answer increased as water supplies became scarcer. The specific question of ownership was finally brought before the Court in Edwards Aquifer Authority v. Day. In its ruling, the Court stated unequivocally that ownership rights vest in place. Defining the right in place limits the extent to which districts can regulate groundwater before it becomes a regulatory taking. Unfortunately for regulators, the Court did not define where that limit is.

The Day ruling was extremely controversial and led to many conversations about how much regulation was acceptable, but the ruling was compelling for another reason. The Day opinion denoted a departure from previous groundwater cases.32 While previous cases criticized capture and deferred to legislative initiatives to regulate, often encouraging more limits, this decision did not.33 Instead, the opinion focused on oil and gas law and private property rights.34 This article seeks to explain this shift by evaluating the historic conversation between the Texas Supreme Court and the Texas Legislature on groundwater.

This paper evaluates the Day decision through the lens of past court decisions and legislation in an effort to understand the Court's ruling. Part II introduces Texas's groundwater resources, current uses of that water, and present concerns regarding sustainability.35 Part III chronicles the line of cases that established capture as the common law rule in Texas.36 Part IV traces the history of groundwater legislation after courts

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29 TEX. WATER CODE ANN. § 36.1132.
30 See infra Part VI.A–B.
31 See infra Part VI.A–B.
32 See infra Part VII.
34 Id.
35 See infra Part II.
36 See infra Part III.A–B.
established rule of capture.\textsuperscript{37} This legislation created a regulatory overlay on the common law rule of capture through localized groundwater conservation districts and the statewide planning process.\textsuperscript{38} Part V describes the process through which the Edwards Aquifer Authority came into existence and how its pumping cap immediately raised property rights concerns.\textsuperscript{39} Part VI explains how groundwater litigation shifted from right of capture limitations to questions of when ownership vests.\textsuperscript{40} This change was a product of increased pressure on groundwater resources caused by additional regulations and growing population demands.\textsuperscript{41}

Finally, Part VII presents three hypotheses regarding why the Court came to its decision in the Day case, despite the case law history.\textsuperscript{42} The first theory is that delineation of property interests is an issue reserved for courts' authority.\textsuperscript{43} Another alternative is that the holding in Day was a result of a statewide shift towards the protection of private property rights above other concerns.\textsuperscript{44} The final proposed alternative is that the Day holding was actually an effort to define the property right in such a way as to encourage more regulation, or at least limit takings claims, through the extension of correlative rights to groundwater.\textsuperscript{45}

\section*{II. Texas Groundwater}

Texans have a long-standing dependence on groundwater.\textsuperscript{46} Its usage has steadily increased throughout the state's history.\textsuperscript{47} From early in the state's history, farmers required groundwater for their livelihoods. In the 1930s, groundwater was an essential tool in stopping the seemingly endless Dust Bowl in the Texas Panhandle and returning the

\textsuperscript{37} See infra Part IV.A–B.
\textsuperscript{38} See infra Part IV.A–B.
\textsuperscript{39} See infra Part V.A–C.
\textsuperscript{40} See infra Part VI.A–C.
\textsuperscript{41} See infra Part VI.A–C.
\textsuperscript{42} See infra Part VII.A–C.
\textsuperscript{43} See infra Part VII.A.
\textsuperscript{44} See infra Part VII.B.
\textsuperscript{45} See infra Part VII.C.
\textsuperscript{46} Groundwater is defined by the Texas Water Code as “water percolating below the surface of the earth.” TEX. WATER CODE ANN. § 36.001(5) (West 2012). This definition can be misleading, as underflow of a stream is actually considered surface water and therefore under state control. Id. § 11.021(a). Implementing regulations of Texas water rights supply additional details to the definition. Groundwater is “[w]ater under the surface of the ground other than underflow of a stream and underground streams, whatever may be the geologic structure in which it is standing or moving.” 30 TEX. ADMIN. CODE § 297.1(21) (2012). Once groundwater leaves the ground in the form of springs or discharges into a river, its legal character changes and it becomes surface water. Denis v. Kickapoo Land Co., 771 S.W.2d 235, 236 (Tex. App.—Austin 1989, writ denied).
area from a wasteland to a thriving agricultural economy.\footnote{Jon Mark Beilue, \textit{Methods Prevent Another Dust Bowl}, \textsc{Amarillo Globe-News}, Apr. 11, 2010, http://amarillo.com/stories/041110/new_news7.shtml.} The majority of rivers that start in Central Texas and flow across the state to the bays and estuaries find their headwaters in groundwater-fed springs, without which the state could not provide sufficient surface water for many users.\footnote{See generally \textsc{George et al., supra note 47} (providing summaries of all major and minor Texas aquifers, including the springs associated with each aquifer).} In addition, the seventh largest city in the United States, San Antonio, relies almost entirely on the Edwards Aquifer for its survival.\footnote{\textsc{Texas: San Antonio, San Antonio Protects Edwards Aquifer}, \textsc{U.S. Envtl. Protection Agency} (Jan. 2010), http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/casestudies/upload/Source-Water-Case-Study-TX-SanAntonio.pdf.}

Texas has nine major aquifers and twenty-one minor aquifers.\footnote{\textsc{George et al., supra note 47, at 3.}} In 2008, groundwater provided nearly 60\% of the water used throughout the state.\footnote{2012 \textsc{State Water Plan}, supra note 7, at 163.} This amounted to 9.66 million acre-feet per year.\footnote{An acre-foot is equal to 325,851 gallons of water.} The vast majority, 80\%, of this water was used for irrigation.\footnote{2012 \textsc{State Water Plan}, supra note 7, at 163.} 35\% of municipal demands are met by groundwater, although this percentage may increase in the future, as surface water is increasingly unavailable.\footnote{\textit{Id.} at 163-64. Municipal uses accounted for fifteen percent of total groundwater withdrawals. \textit{Id.} at 163.} State water demands are projected to increase 22\% in the next fifty years.\footnote{\textit{Id.} at 3, 136.} Even with a projected decrease in irrigation demand, the demand for groundwater will continue to increase.\footnote{\textit{Id.} at 3.} This ever-growing, intensifying dependence on groundwater coupled with legal questions regarding regulation threatens the viability of many of these resources.\footnote{\textit{Id.} at 164-65.} Some of these impacts are already visible.

While droughts are not new to Texas, additional stressors can turn a temporary inconvenience into a sustainability threat.\footnote{\textsc{Silverstein, supra note 12, at 101}; Chris Tomlinson, \textit{Water Percolates Up Texas Legislature's Agenda}, \textsc{Lubbock Avalanche-J.}, Dec. 9, 2012, http://lubbockonline.com/filed-online/2012-12-09/water-percolates-texas-legislatures-agenda#.UMdiFJK313t.} The state's population is predicted to increase 82\% between 2010 and 2060.\footnote{2012 \textsc{State Water Plan}, supra note 7, at 1.} The vast majority of these citizens will live in urban areas, stressing cities' current water supplies.\footnote{See \textit{id.} at 3 (stating that demand for municipal water will increase from 4.9 million acre-feet in 2010 to 8.4 million acre-feet in 2060).} New water supply plans for municipal areas often include desalination of brackish aquifers or pumping and long-haul transport of groundwater from one region of the state to another.\footnote{\textsc{Galbraith, \textit{Industrial Evolution}}, \textsc{Tex. Monthly} 130 (July 2012) [hereinafter \textit{Galbraith, \textit{Industrial Evolution}}]; \textsc{Kate Galbraith, \textsc{Texas' Water Woes Spark Interest in Desalination}}, \textsc{Tex. Trib.} (June 10, 2012), http://www.texastribune.org/texas-environmental-news/water-supply/texas-water-woes-spark-interest-desalination/ [hereinafter \textit{Galbraith, \textit{Water Woes}}]; 2012 \textsc{State Water Plan}, supra note 7, at 193-95. There are currently forty-four brackish water
and over-allocation have reduced surface water resources, some citizens have started drilling personal groundwater wells.\textsuperscript{63} Unfortunately, in regions where the groundwater is hydrologically connected to nearby surface water sources, withdrawal of the groundwater reduces the available surface water.\textsuperscript{64} These realities, viewed in light of climate change predictions for the region, paint a bleak picture and raise questions about how the state's aquifers will survive.\textsuperscript{65}

The same region of Texas that suffered from the Dust Bowl is again under threat.\textsuperscript{66} The Ogallala Aquifer located in the Texas Panhandle recently experienced the largest one-year decline in twenty-five years.\textsuperscript{67} In 2011, Texas suffered a drought that exceeded the dryness experienced in any single year during the severe drought of the fifties.\textsuperscript{68} The 2011 drought greatly depleted surface and groundwater resources and wildfires raged throughout the state.\textsuperscript{69} Even before the 2011 drought, the Ogallala Aquifer was declining at an average of \( \frac{3}{4} \) of a foot per year.\textsuperscript{70} Because the Ogallala is a non-recharging

\begin{itemize}
\item desalination plants in Texas used for public water supplies, and ten additional units have been approved for construction. Galbraith, \textit{Water Woes}, supra.
\item Kate Galbraith, \textit{Texas Drought Sparks Water Well Drilling Frenzy}, \textit{Tex. Trib.} (Feb. 17, 2012), http://www.texastribune.org/2012/02/17/texas-drought-sparks-water-well-drilling-frenzy/.
\item Galbraith, \textit{Industrial Evolution}, supra note 62, at 132.
\end{itemize}
aquifer, these declines will eventually force a permanent shift in the High Plains economy unless considerable changes are implemented.71

The Ogallala is not alone. Recent monitoring of wells in aquifers across the state revealed significant water level declines ranging in severity from fifty feet to more than one thousand feet.72 Dewatering is not the only reason to limit pumping. For example, access to water in the Gulf Coast Aquifer is restricted despite sufficient water availability because extraction created problematic subsidence.73 In the next fifty years, available groundwater supplies are projected to decrease 30%, primarily due to the depletion of the Ogallala Aquifer and reduced supply from the Gulf Coast Aquifer as a result of mandatory subsidence reductions.74

Despite these prognostics, many landowners remain opposed to increased groundwater regulation, seeing it as an invasion of private property rights.75 To understand this seemingly illogical viewpoint, it is important to understand the evolution of groundwater rights in Texas—any discussion of which must begin with the rule of capture established by the Texas Supreme Court in Houston & T. C. Railway Co. v. East.76

III. Establishing the Right of Capture

The legal road to groundwater in Texas is paved by a series of legal and legislative decisions made somewhat in tandem with, or at least in recognition of, one another. When considered this way—viewing each court and legislative decision as one in a series—the progression in groundwater regulation becomes clearer. Sometimes there appears to be a direct concert between the legislature and the judiciary, each one respecting and deferring to the other. Other times, legislative deference is replaced with the subtleties of persuasion that courts often provide to legislators.77 While the common law clearly established the rule of capture, several subsequent decisions and a series of legislative efforts added asterisks to the Court’s East decision and modified it.

A. Starting with East

Any discussion of groundwater law in Texas must begin with the Texas Supreme Court’s 1904 ruling in East.78 This case established the rule of capture as the law for Texas groundwater.79

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71 Id.
72 GEORGE ET AL., supra note 47, at 8; 2012 STATE WATER PLAN, supra note 7, at 8.
73 2012 STATE WATER PLAN, supra note 7, at 165.
74 Id. at 164.
75 See e.g., Galbraith, Texas Farmers Battle, supra note 70 (describing farmers’ resentment towards the new rules promulgated by High Plains Underground Water Conservation District).
76 See Houston & T. C. Ry. Co. v. East, 81 S.W. 279 (Tex. 1904).
77 See GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES 164 (1982).
78 See East, 81 S.W. at 279.
79 Id. at 280–82.
In *East*, the Houston Railroad Company had several lots upon which it built a large groundwater well and attached it to a steam pump.\(^{80}\) The pump withdrew 25,000 gallons of water each day, which caused East's much smaller, neighboring residential well to go dry.\(^{81}\) Despite East's injury, the Court held that Houston Railroad Company's use was reasonable and not actionable.\(^{82}\) The Court explained that the landowner has equal ownership of the soil and the water held therein.\(^{83}\) The Court reached this conclusion for two reasons: first, the Court stated that groundwater was too complicated to govern any other way; and second, requiring correlative rights would interfere with economic development.\(^{84}\) The only exception to this rule appeared to be that groundwater use must be absent evidence of malice or willful waste.\(^{85}\)

*East* was a case of first impression for the Court and Texas had no laws governing groundwater at the time of its disposition. Without other guidance, the Court relied on the experiences of other jurisdictions and English common law to reach its conclusion.\(^{86}\) In particular, the Court cited *Acton v. Lundell*, a case from 1843.\(^{87}\) Despite its reliance on common law, the Court posited that legislation would have guided its decision had the legislature previously created any regulations for groundwater.\(^{88}\)

Since 1904, many things in Texas have changed, including increased water demand and scarcity. Some argued that the need for water created a conflict between the right of capture as outlined in *East* and lasting groundwater sustainability. These concerns have resurfaced many times since the *East* decision. In the years after the *East* decision, several cases involving groundwater trickled into Texas courts. Although allocation regulatory regimes were not the primary question, the Texas Supreme Court confirmed that rule of capture was still the law.

*Texas Company v. Burkett* involved a contract for the sale and transport of water from several sources, including groundwater.\(^{89}\) The focus of the opinion was on the validity of the contract; however, the Court made clear that any percolating water would

\(^{80}\) *Id.* at 280.

\(^{81}\) *Id.*

\(^{82}\) *Id.* at 280–81.

\(^{83}\) *Id.* ("That the person who owns the surface may dig therein and apply all that is there found to his own purposes ... and that if, in the exercise of such right, he intercepts or drains off the water collected from the underground springs in his neighbor's well, this ... falls within the description of damnum absque injuria, which cannot become the ground of an action." (quoting *Acton v. Blundell*, 12 Mees. & W. 324, 152 Eng. Rep. 1233 (1843))).

\(^{84}\) *East*, 81 S.W. at 281. Correlative rights limit a landowner's right to a resource, such as groundwater, to his or her reasonable share. *Restatement (Second) of Torts* § 858 (1979). This share is often based on the amount of land owned by each on the surface. *Id.* The El Paso Court of Appeals specifically stated that correlative rights were not a part of Texas law and that the current rule of capture actually precludes its application. *Pecos Co. Water Control & Imp. Dist. No. 1 v. Williams*, 271 S.W.2d 503, 505–06 (Tex. Civ. App.—El Paso 1954, writ ref'd n.r.e.).

\(^{85}\) *East*, 81 S.W. at 281–82.

\(^{86}\) *Id.*

\(^{87}\) *Id.* at 280–82 (citing *Acton*, 12 Mees. & W. 324, 152 Eng. Rep. 1233)).

\(^{88}\) *Id.* at 280 (citing Frazier v. Brown, 12 Ohio St. 294 (1861)).

\(^{89}\) *Texas Co. v. Burkett*, 296 S.W. 273, 273–74 (Tex. 1927).
be the "exclusive property of the owner of the surface of the soil." The Court distinguished this property right from that created in surface water, which was only a right of use. The transport of water was again the principal topic in City of Corpus Christi v. City of Pleasanton. This case concerned an effort to enjoin the Lower Nueces River Supply District and Corpus Christi from routing flow from an artesian well into a riverbed and transporting it over 118 miles to Corpus Christi. Plaintiff's issue was the large amount of waste that occurred along the journey through evaporation, transpiration, and seepage. Citing Acton and East, the Court stated the surface owner has absolute ownership of the water held within, encumbered only by the common law limitations of waste and malicious intent. The Court did not, however, endorse waste. It simply stated that the determination of what constitutes waste was within the jurisdiction of the legislature. In its more recent opinion in Friendswood Development Co. v. Smith-Southwest Industries, Inc., the Court again upheld the right of capture, but added subsidence caused by negligent groundwater removal as a limitation on permissible capture.

Although these cases indirectly confirmed the rule of capture, Texas courts did not directly address the question of whether the rule of capture should remain the law for groundwater for almost one hundred years after East. Meanwhile, the state was growing along with its water needs, which continued to raise questions and concerns about the wisdom of this common law doctrine.

B. Capturing Sipriano

In 1999, the Texas Supreme Court had its first modern opportunity to directly confront the question of whether the rule of capture remained the appropriate method of groundwater allocation for Texas. In Sipriano v. Great Spring Waters of America, the defendant, Ozarka Natural Spring Water, began pumping nearly 90,000 gallons of groundwater every day for bottling and sale. The pumping quickly depleted Sipriano's nearby wells. Among other requests, Sipriano asked the Court to abandon the rule of capture and replace it with the rule of reasonable use. The court refused to do so. Deferring to its ruling in East, the Court maintained the rule of capture as the law in Texas.

90 Id. at 278.
91 Id.
92 City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 799 (Tex. 1955).
93 Id. at 799–800.
94 Id. Evidence showed that 63 to 74% of the water placed into the river for transport was lost through evaporation, transpiration, and seepage. Id. at 800.
95 Id. at 800–01.
96 Id.
97 Id.
100 Id. at 75–76.
101 Id. at 76.
102 Id.
103 Id.
104 Id. at 79.
Although the Court upheld East, its opinion indicated that capture may not be appropriate in the future or even at the time of the opinion.\textsuperscript{105} The Court relied heavily on legislative deference to avoid deviation from the common law.\textsuperscript{106} Citing several legislative initiatives pertaining to groundwater, the Court made it clear that the capitol should be the source of any changes to allocation principles.\textsuperscript{107} Specifically, the Court deferred heavily to the recently passed Senate Bill 1's (SB 1) initiative to increase the authority of groundwater districts.\textsuperscript{108} The ruling did not endorse the wisdom of the rule of capture. Instead, the Court stated such a decision was not yet within its authority.\textsuperscript{109}

Throughout the opinion, the Court qualified its ruling by stating that, while it was not appropriate for the court to take action on right of capture “at this time,” it was not outside the court’s bounds to do so at a later date, should the circumstances necessitate it.\textsuperscript{110}

Courts often change the rule of law in response to changed circumstances.\textsuperscript{111} In Sipriano, the Court acknowledged this practice, stating, “We do not shy away from change when it is appropriate.”\textsuperscript{112} The Court recognized that one of the primary conditions upon which it relied in East was no longer present.\textsuperscript{113} In particular, the Court rejected East’s characterization of groundwater as “occult” and thus unable to be regulated.\textsuperscript{114} Moreover, the Court specifically stated that facts such as those presented in Sipriano provided compelling reasons to regulate groundwater.\textsuperscript{115} Still, no change was made.\textsuperscript{116}

Some of the strongest language against the wisdom of maintaining capture came from Justice Hecht’s concurrence. Justice Hecht stated that, “[w]hat really hampers groundwater management is the established alternative, the common law rule of capture,

\textsuperscript{105} Id. at 79. Other states faced with the same question decided to overrule capture. See e.g., Lawrence J. Wolfe & Jennifer G. Hager, Wyoming’s Groundwater Laws: Quantity and Quality Regulation, 24 LAND & WATER L. REV. 39, 42–45 (1989). In Wyoming, like in Texas, the state supreme court first adopted rule of capture near the turn of the century when pumping was minimal. Hunt v. City of Laramie, 181 P. 137 (Wyo. 1919). However, within a couple of decades, rapidly increasing groundwater use for irrigation raised questions regarding the wisdom of capture. Wolfe & Hager, supra, at 43. In the early 1940s, the state engineer urged the legislature to replace capture with prior appropriation, which the state did for the first time in 1947, adding more details in 1957. Wolfe & Hager, supra, at 43–45.

\textsuperscript{106} Sipriano, 1 S.W.3d at 76–83.

\textsuperscript{107} Id. at 79–80; see discussion infra Part IV.A. The court also cited the 1917 constitutional amendment tasking the legislature with the responsibility of resource management. Sipriano, 1 S.W.3d at 79–80.

\textsuperscript{108} Sipriano, 1 S.W.3d at 79–80.

\textsuperscript{109} Id.

\textsuperscript{110} Id. at 75, 80–81.

\textsuperscript{111} See CALABRESI, supra note 77, at 166 (“[T]he judicial common law would attach to statutory rules that are out of phase just as much as to common law precedents or doctrines.”).

\textsuperscript{112} Sipriano, 1 S.W.3d at 80.

\textsuperscript{113} Id. at 77 (citing City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 801 (Tex. 1955)).

\textsuperscript{114} Sipriano, 1 S.W.3d at 80.

\textsuperscript{115} Id.

\textsuperscript{116} Id.
which entitles a landowner to withdraw an unlimited amount of groundwater." He further noted that all of the western states cited in East that followed the rule of capture replaced the rule with other regimes. He pointed to oil and gas law to debunk the concept that underground materials cannot be effectively regulated, and went on to say that it is "not regulation that threatens progress, but the lack of it."

Justice Hecht noted the parties' failure to put forth any effective reason to maintain capture as the preferred method of management. Simply arguing that capture has been the rule for many years, or that change would be disruptive, was not an acceptable rationale. Reviewing the Second Restatement of Torts, Justice Hecht explained that, "while neither [the Restatement] nor any other common law rule of water regulation is preferable to almost any legislative solution, absent a solution, [the Restatement] is preferable to the rule of capture." Despite this strong language, Justice Hecht remained with the majority in maintaining East "for now" to provide SB 1, and its efforts to empower district regulations, time to play out. As the case law pertaining to the common law rule of capture continued to develop, so did legislative regulations.

IV. THE LEGISLATURE SPEAKS

While Texas courts consistently upheld the rule of capture, the legislature was simultaneously limiting groundwater rights through regulation. This began just six years after the Texas Supreme Court's decision in East, when the droughts of 1910 and 1917 motivated the legislature to amend the state constitution to explicitly extend the legislature's obligations to include the duty to protect the state's natural resources. This amendment was not self-enacting, but, through its passage, the duty to implement public policy relating to groundwater was placed squarely with the legislature.

Unlike surface water, groundwater was not enumerated as a natural resource in the article, but the article did contain a general reference to water under which groundwater would likely be included. Courts have cited this amendment to support the argument that the judiciary is not the appropriate authority to implement laws limiting groundwater production. However, because the amendment passed after East, the Court had already established a common law regulation. A common law rule of capture evolving

117 Id. at 81 (Hecht, J., concurring).
118 Id. at 81-82.
119 Sipriano, 1 S.W.3d at 82.
120 Id.
121 Id.
122 Id. at 83.
123 Id. at 83; see discussion infra Part IV.A.
124 Sipriano, 1 S.W.3d at 77; see 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.").
125 See TEX. CONST. art. XVI, § 59(a).
126 Id.
127 See e.g., Sipriano, 1 S.W.3d at 79-80.
contemporaneously with a regulatory structure seeking to regulate groundwater rights created a bifurcated system that continues to create confusion regarding how far the legislature can go in limiting the common law right.

Potential conflicts aside, the legislature took on the responsibility of governing groundwater primarily through Groundwater Conservation Districts (GCDs). A GCD's purpose is "to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater, and of groundwater reservoirs or their subdivisions, and to control subsidence caused by withdrawal of water from those groundwater reservoirs or their subdivisions, consistent with the objectives of Section 59, Article XVI, [of the] Texas Constitution." 128 Texas's legislature first provided for GCDs in 1949 pursuant to the constitutional authority it received through the conservation amendment. 129

Districts are Texas's preferred method of groundwater management because they authorize local control by those most familiar with the resource and most affected by any regulation. 130 Subsequent regulations have increased the authority of GCDs and strengthened the state's regional planning process. 131 This has led to increased pumping limits in some areas. 132 In other special circumstances, such as in the Edwards Aquifer, a firm pumping cap was established. 133

A. THE GROWTH OF DISTRICTS

The Article 59 constitutional amendment authorized the creation of GCDs in 1917; however, by 1996, only thirty-four districts had been created. 134 Although water issues would commonly surface after dry years, the state had enough resources to meet most needs, which avoided the demand for additional districts or statewide regulation. The lack of districts changed in 1997 with Texas's first historic omnibus water bill: SB 1. 135 SB 1 marked the first attempt to shift from water development to statewide regional

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129 Sipriano, 1 S.W.3d at 79; Tex. Const. art. XVI, § 59(b) ("There may be created within the State of Texas, or the State may be divided into, such number of conservation and reclamation districts as may be determined to be essential to the accomplishment of the purposes of this amendment to the constitution, which districts shall be governmental agencies and bodies politic and corporate with such powers of government and with the authority to exercise such rights, privileges and functions concerning the subject matter of this amendment as may be conferred by law.").
131 See discussion infra Part IV.A.
132 See discussion infra Part IV.B.
133 See discussion infra Part IV.C.2.
planning. As with most water legislation in Texas, SB 1 came on the heels of a three-year drought. That harsh reality, coupled with Texas's growth rate projections and a realization that the state water plan was not being properly implemented, created a leadership moment in Texas water history in which the legislature sought to invigorate the planning process and provide more effective management.

Although SB 1 dealt with a host of water issues, it had profound consequences on groundwater. Prior to its passage, groundwater management did not exist in many areas of the state except for the few locations where GCDs existed. SB 1 sought to change this and explicitly stated that “[g]roundwater conservation districts . . . are the state’s preferred method of groundwater management.” GCDs “embody a central premise of this legislation—local control—and represent the idea that those closest to the resource are those most capable of managing it.” After SB 1, the number of groundwater districts grew quickly.

In addition to its goal of expanding the regulatory power of individual districts, SB 1 sought to treat the state as a whole and set up a system of regional planning groups, which looked at both surface and groundwater resources. The bill directed these areas to examine water resources, needs, and projections. Each regional planning group was required to consider all of the included GCDs' management plans. Additionally, SB 1 provided for data collection to close data gaps, which had previously made planning difficult, if not impossible. The bill also provided for the creation of Priority Ground-

137 State planning, as defined by SB 1, included dividing the state into sixteen regional planning groups, separate and apart from the groundwater management areas, for the purposes of forecasting and management of both surface water and groundwater resources for inclusion in the State Water Plan. TEX. WATER DEV. BD., Water for Texas: Regional Water Planning in Texas (2013), http://www.twdb.texas.gov/publications/shells/RegionalWaterPlanning.pdf (This article focuses solely on the groundwater portion of the planning process).
139 Id. at 55–56. SB 1 passed just two years before the Texas Supreme Court’s decision in Sipriano, and is the primary recipient of legislative deference in the court’s opinion. See discussion supra Part III.B.
141 Hubert & Bullock, supra note 137, at 66.
143 Id.
144 Id.
145 Id. § 1.05, 1997 Tex. Gen. Laws 3610, 3617 (amending TEX. WATER CODE ANN. § 15.404).
water Management Areas (PGMAs). PGMAs are areas identified as potentially hav-

ing significant problems within twenty-five years of the bill passing.

SB 1 consolidated the laws governing GCDs into Chapter 36 of the Texas Water 
Code. This chapter provides for the creation of GCDs, means of governance, powers, 
and duties. In addition to emphasizing a preference for GCDs, the bill increased their 
statutory authority to manage withdrawals. The bill also provided extensive guidance 
for the creation of management plans. Perhaps most importantly, the bill required 
landowners to obtain permits for any newly drilled water wells. Permit applications 
required users to report their use and submit statements of purpose when applying for 
well permits. Districts could also issue or deny permits for out-of-basin water trans-
fers. Overall, the purpose of SB 1 was to implement groundwater management where 
previously absent, but the bill did not attempt to change the common law regarding 
statewide groundwater allocation.

Although SB 1 did not change the rule of capture, commentary suggests it did not 
endorse it either. A law review, coauthored by the bill’s champion, Lt. Governor Bob 
Bullock, stated:

Early in the process, the sponsors of the bill decided that the timing was not 
right for considering such provisions and that groundwater districts were the 
appropriate entity to manage the resource. However, as urban and industrial 
water demand continues to grow, these users will be looking for alternate sources 
of water to satisfy their needs. When this happens, and property owners are 
faced with the prospect of a large water pumper depleting their groundwater 
supplies, property owners may begin considering additional ways to protect their 
right to use the groundwater.

§ 35.007(a)).
147 Id.
148 Russell Johnson, Groundwater Law and Regulation, in Essentials of Texas Water 
Resources 4-12 (2nd ed. 2012).
149 See Tex. Water Code Ann. §§ 36.001–36.419 (West 2012). Although districts can be 
formed several ways, the most common is through legislative action. Johnson, supra note 
148, at 114.
various sections of Tex. Water Code Ann.).
§ 36.1071).
§ 36.113). Districts were given permission to exempt certain types of wells from obtaining 
Ann. § 36.117) (These included domestic and livestock wells and wells used for hydrocar-
bon production, among others).
§ 36.1071(c)(3)).
§ 36.112).
155 Hubert & Bullock, supra note 137, at 66.
This sentiment is particularly striking considering groundwater's precarious status seventeen years later, coupled with the continued presence of capture.

The legislature did not replace the rule of capture, but groundwater legislation limiting its reach continued to evolve. SB 1 was followed by another omnibus water bill in 2001: Senate Bill 2 (SB 2).\textsuperscript{156} SB 2 was intended to update and fortify the initiatives commenced in SB 1.\textsuperscript{157} "The legislation also reflected a continuation of disputes that arose in the 1999 session about the establishment of single-county groundwater districts and a growing interest in the issue of transporting groundwater outside district boundaries to provide water for thirsty cities."\textsuperscript{158} As with many water issues, SB 2 was contentious and required extensive negotiations to gain passage.\textsuperscript{159}

The bill enhanced the regulatory powers of GCDs by expanding their permitting and enforcement powers.\textsuperscript{160} Most importantly, the bill provided for increased regulation of well spacing to minimize interference between wells.\textsuperscript{161} Districts were also allowed to set production limits based on tract size or production capacity by dictating acre-feet per acre or gallons per minute.\textsuperscript{162} These terms were a direct response to the Seventh Court of Appeals's decision in \textit{South Plains LaMesa Railroad, Ltd. v. High Plains Underground Water Conservation District No. 1}, in which the court held that Chapter 36 did not give districts the authority to deny a permit based on tract size.\textsuperscript{163}

While allowing increased regulations in many ways, SB 2 also did the opposite by prohibiting a district from rejecting a proposed permit specifically for export of groundwater out of the district.\textsuperscript{164} In exchange, the district received the ability to levy an export fee on that water.\textsuperscript{165} The bill also streamlined the process for designation of GMAs and PGMAs, which were originally described in SB 1, and set deadlines for their designations.\textsuperscript{166} Although districts are generally restricted from purchasing groundwater rights, they could do so for conservation purposes if the rights were permanently held in trust.\textsuperscript{167}

\begin{thebibliography}{99}
\bibitem{157} Lehman, supra note 136, at 110.
\bibitem{162} Id.
\bibitem{163} See South Plains LaMesa R.R., Ltd. v. High Plains Underground Water Conservation Dist. 1, 52 S.W.3d 770, 778–79 (Tex. App.—Amarillo 2001, no pet. h.).
\bibitem{167} Id. § 2.54, 2001 Tex. Gen. Laws 1991, 2020 (amending Tex. Water Code Ann. § 36.206). One of the enforcement mechanisms that was added was the ability to levy civil
One existing issue that was compounded after SB 1 was continued proliferation of single-county GCDs, which increased the number of districts overlaying the same aquifer.168 This created a potential source of conflict and confusion because each district could create conflicting management plans for essentially the same water. SB 2 sought to remedy this by establishing procedures for joint management of the shared aquifer by groundwater districts.169

Perhaps foreseeing future conflicts between the established common law created by the courts and the increasing power given to groundwater districts by the legislature, SB 2 attempted to clarify the relationship. The bill amended the statute codifying groundwater ownership and added that ownership rights "may be limited or altered by" district rules.170 Like the inclusion of tract-specific considerations for permitting, this modification was a response to the South Plains case.171 In its South Plains opinion, the court stated that district permitting rules could contravene the common law rule of capture.172 The legislature wanted to clarify that the rule of capture could be limited by district rules. Unfortunately, the language added by SB 2 drafters was not sufficient to circumvent future conflict between property owners and regulatory management. This became particularly apparent with the continued development of the groundwater planning process.

B. GCDs and the Groundwater Planning Process

The number of districts grew quickly after the passage of SB 1.173 Currently, there are ninety-seven confirmed districts and three additional districts pending.174 "Over half of the total land areas of Texas is within a groundwater conservation district . . . [and] almost ninety percent of groundwater produced in Texas comes from counties with such a district."175

SB 1 and SB 2 gave GCDs broad regulatory authority. As mentioned, a GCD can create a permitting system or promulgate other rules to limit[ ] groundwater production based on tract size or the spacing of wells, to provide for conserving, preserving, protecting, and recharging the ground-

168 Compare Aquifers of the Gulf Coast of Texas, supra note 130, at 301, with George et al., supra note 47, at 27.
171 Ellis & Houston, supra note 159, at 56; see South Plains LaMesa R.R., Ltd. v. High Plains Underground Water Conservation Dist. 1, 52 S.W.3d 770 (Tex. App.—Amarillo 2001, no pet. h.).
172 See South Plains LaMesa R.R., 52 S.W.3d at 779.
173 Lehman, supra note 136, at 104.
174 Groundwater Conservation Districts, supra note 134.
water or of a groundwater reservoir or its subdivisions in order to control subsidence, prevent degradation of water quality, or prevent waste of groundwater.176 Unless it falls into a recognized exemption, a well located in a GCD cannot be drilled or completed without a permit.177 Examples of rules that individual GCDs have passed include requiring the installation of well meters and mandatory reporting of pumping quantities.178

Even with the proliferation of GCDs after SB 1 and their increased permitting authority imparted by SB 2, there was little immediate conflict between regulators and users regarding a perceived invasion of property rights. This tension began to increase, however, when the regional planning process brought harbingers of greater regulation, which could affect an unfettered property right in water. This regulatory process, combined with a steady increase in demand, created the perfect storm between owners and regulators.

The regional planning process as it stands today evolved through a series of legislative efforts, each subsequently responding to deficiencies or challenges that arose. GCDs were first required to create comprehensive management plans in 1989; however, there was no interface with other districts or the region as a whole.179 SB 1 was the first effort to evaluate statewide water supply needs and consider how those needs could be met by introducing regional planning.180 In addition to creating the process, the bill required certain information be included in all groundwater management plans to ensure uniformity.181 Currently, all plans must specify objectives and performance standards, and must include detailed procedures that demonstrate how the goals of the plan will be achieved.182

In addition to GCDs, GMAs have existed since the 1950s.183 A GMA is defined as an area suitable for the management of groundwater resources.184 Although they now play a large role in statewide planning, before 2001, their primary purpose was to enable the creation of GCDs by petition.185 SB 2 repurposed GMAs as planning tools. The bill required the Texas Water Development Board (TWDB) to designate GMAs to include all major and minor aquifers within two years of the bill’s effective date of September, 2001.186 The TWDB was directed to use aquifer boundaries or subdivisions of aquifer

177 Id. §§ 36.113, 36.1131. Although exempt wells do not require a permit, a GCD can require landowner to register an exempt well with the district. Id. § 36.117(h)(1), (2).
179 Mace et al., supra note 28, at 1.
180 Hubert & Bullock, supra note 137, at 54, 57–58.
181 Id. at 57–58.
183 Mace et al., supra note 28, at 1. The name “groundwater management area” has changed over the years, but will be referred to throughout with this current moniker. See id.
boundaries to establish GMA boundaries.\footnote{187} This is very different than the construct of most GCDs, which usually follow political boundaries such as county borders.\footnote{188} The purpose of GMAs was to create administrative boundaries. Planning within a GMA is done by the GCDs.

There are currently sixteen GMAs in Texas.\footnote{189} The number of GCDs within each GMA varies.\footnote{190} SB 2 commenced the process of linking a GCD's planning with all other GCDs in a GMA.\footnote{191} Recognizing the potential for conflict among GCDs regarding the appropriate management of groundwater, the bill directed GCDs within the same GMA to share their groundwater management plans with each other.\footnote{192} A GCD's management plan to preserve historical or existing use must be consistent with its comprehensive management plan.\footnote{193} A district in the area could also call for joint planning; however, it was not required.\footnote{194}

Policymakers have also attempted to link regional and district planning with the statewide plan. For example, SB 2 created additional consideration requirements in the regional water plans, including impacts of the plan on unique river or stream segments on water quality.\footnote{195} Also, the TWDB would approve regional water plans only if the plans included water conservation practices and drought management measures and were consistent with the long-term protection of the state's water, agricultural, and natural resources embodied in the guidance principles for the state plan.\footnote{196}

Although SB 1 and SB 2 contemplated an integrated planning process, they did not require it. It was not until 2005 that the planning process really took shape with the passage of House Bill 1763 (HB 1763).\footnote{197} HB 1763 made three major changes to the planning process. First, it regionalized decisions on groundwater availability.\footnote{198} Second, it required statewide regional planning groups to use availability numbers generated from

to the Texas Commission on Environmental Quality (formerly Texas Natural Resource Conservation Commission).

\footnote{187} Id.

\footnote{188} See Groundwater Conservation Districts, supra note 134.

\footnote{189} Groundwater Management Areas, supra note 27. By 2001, predecessor agencies had designated nineteen groundwater management areas, which were dissolved when TWDB adopted the current scheme of management areas covering the whole state. Mace et al., supra note 28, at n.9.

\footnote{190} See Groundwater Conservation Districts, supra note 134.


\footnote{192} Id.

\footnote{193} TEX. WATER CODE ANN. § 36.116(b) (West 2012). Protection of existing wells must be tied to amount and purpose of prior use. See discussion infra Part V.A.


\footnote{198} Id. § 8, 2005 Tex. Gen. Laws 3247, 3254–56 (amending TEX. WATER CODE ANN. § 36.108).
the GMA process in their statewide water forecasting. Lastly, the bill seemed to authorize, but did not explicitly require, a cap on groundwater permitting.

Before 2005, GCDs and GMAs were permitted to plan jointly, but HB 1763 required that the GCDs with each GMA actually coordinate. This was a tall order considering there are numerous GCDs in each GMA—many with different theories of management and sustainability. GCDs had previously been allowed to define their own groundwater availability for their individual management plans, which made little sense geologically because many of the GCDs' plans applied to the same water source. HB 1763 sought to remedy this through joint planning intended to generate desired future conditions (DFCs) for an entire management area. DFCs were then used to calculate managed available groundwater (MAG), which was estimated to be the amount of water available for removal while still maintaining the DFC. Districts could use MAGs to structure pumping limits and other regulatory measures to be implemented to ensure that the DFC is met. Planning was meant to maintain the bottom-up procedures created by past legislatures while also creating a big picture for Texas groundwater sustainability.

The first step in the new planning process was for the GCDs within each GMA to determine their DFCs for the water resource. A DFC is a way to determine what the region wants the resource to look like in the future. The districts were required to use scientific data including TWDB's groundwater availability models to create their DFCs. If a GMA covered more than one aquifer or geographic area, individual DFCs could be established for each.

Once a DFC was established, the TWDB prepared final models to translate that goal into a quantity of water, or MAG, that could be extracted annually and over a fifty-year period and still meet the DFC. Then, "[a] district, to the extent possible, shall issue permits up to the point that the total volume of groundwater permitted equals the man-

199 Id.
201 Id. § 8, 2005 Tex. Gen. Laws 3247, 3254–56 (amending Tex. Water Code Ann. § 36.108(c)).
202 Mace et al., supra note 28, at 2.
203 Id.
204 Id. at 3.
205 Id.
206 Id.
208 Mace et al., supra note 28, at 3.
aged available groundwater.” A possible cap on permitting bestowed significant regulatory power that was previously unauthorized except in certain special districts.

The most recent changes to the planning process came in 2011 with Senate Bill 660 (SB 660). Like the others before it, this legislation attempted to clarify outstanding issues. For example, although the term DFC had been used for years, the legislation had never defined it. SB 660 defined it to mean “a quantitative description . . . of the desired condition of the groundwater resources in a management area at one or more specified future times.” To provide additional guidance, the bill also explains that DFCs “must provide a balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste or groundwater and control of subsidence in the management area.”

In addition to clarifying the definition of DFC, the bill changed the term “Managed Available Groundwater” to “Modeled Available Groundwater.” The legislature made this modification to more accurately reflect the term’s meaning and demonstrate that the numbers were based on the best data available and subject to data changes. Finally, the bill added nine new factors that GCDs must consider when renewing or establishing DFCs and required that management plan goals and objectives be consistent with achieving applicable DFCs.

The continued development of the regional planning process and the apparent authorization of pumping caps to meet MAGs allowed districts to control withdrawals in a way that created legal conflicts between limitations on pumping and the common law rule of capture. While this friction was new to most GCDs, special districts were already managing these conflicts.

V. THE EDWARDS AQUIFER: A SPECIAL CASE

While districts grappled with the ever-changing planning process and how and whether to implement a cap on pumping, the Edwards Aquifer Authority (EAA) was already very familiar with this concept. The EAA is a legislatively-created special district formed in response to a federal court ruling on a federal Endangered Species Act (ESA) claim brought by the Sierra Club. Because the court found that excessive pumping of the Edwards Aquifer was threatening several endangered species, the state was obligated to create a firm pumping cap in this region long before it was a statewide discussion.

214 Mace et al., supra note 28, at 3.
A. **Sierra Club v. Lujan**

The Edwards Aquifer is a karst aquifer located in Central Texas covering approximately 3,600 square miles.\(^{221}\) The majority of water enters the aquifer along surface streams in an area referred to as the "recharge zone."\(^{222}\) The aquifer discharges naturally into several springs including Comal and San Marcos Springs.\(^{223}\) These springs are headwater tributaries for the Guadalupe River, which flows from Central Texas to the Gulf of Mexico.\(^{224}\) Water is withdrawn from the aquifer primarily through groundwater wells.\(^{225}\) Many interests depend on the aquifer, but the largest user is the City of San Antonio, which depends on the aquifer as its primary water source.\(^{226}\)

Several endangered species also depend on the flow of these headwater springs for their own survival. Among them are the Texas Blind Salamander and the Fountain Darter.\(^{227}\) These and others threatened species were at the heart of the Sierra Club lawsuit.\(^{228}\) During the 1950s drought of record, Comal Springs completely dried up, which would not have happened without the additional depletion created by pumping.\(^{229}\) Although San Marcos Springs did not totally dry up during the same time period, its flow was considerably diminished due to pumping.\(^{230}\)

Data presented at trial showed that, but for human withdrawals, the springs' natural discharge would be stable.\(^{231}\) Evidence showed that continued pumping would result in extended no-flow periods for the springs in drought conditions.\(^{232}\) These dry periods would threaten the survival of the species that live there.\(^{233}\) Despite these known connections between the aquifers and the springs, neither the state nor the GCDs had established pumping limits at the time of the litigation.

Section nine of ESA makes it illegal to "take" an endangered species.\(^{234}\) "Take" is broadly defined and includes anything that kills, harms, or harasses even a single individual animal designated as an endangered species, including harm or harassment of the endangered species' habitat.\(^{235}\) Section 4 of the ESA creates a nondiscretionary duty for federal agencies to develop and implement a recovery plan for each endangered species.

\(^{221}\) Karst is a geologic landscape created by the dissolution of soluble rocks including limestone, dolomite and gypsum characterized by sinkholes, caves, and underground drainage systems.


\(^{223}\) Id.


\(^{227}\) Sierra Club, 1993 WL 151353, at *9-10.

\(^{228}\) Id.

\(^{229}\) Id. at *6.

\(^{230}\) Id. at *6.

\(^{231}\) Id.

\(^{232}\) Sierra Club, 1993 WL 151353, at *9-10.

\(^{233}\) Id. at *6.

\(^{234}\) 16 U.S.C § 1538(a) (2012).

\(^{235}\) 16 U.S.C § 1532(19).
unless it is found that it would not promote the conservation of the species.236 Sierra Club brought a lawsuit against the Department of the Interior and Fish and Wildlife Service, one of the federal agencies tasked with species protection under the ESA, to compel the Fish and Wildlife Service to take action based on its statutory obligation to complete a recovery plan.237 The judge agreed that the federal government failed to implement the recovery plans or identify the springflow requirements for the survival of the species.238

As a result, the judge ordered Fish and Wildlife Service to determine the minimum springflow for each of the springs needed to protect listed species.239 More importantly, Judge Bunton directed the Texas Legislature to provide the appropriate management of the aquifer in such a way that the springflow would be maintained to protect the species. "If the State of Texas fails or refuse[d] to regulate withdrawals from the Edwards Aquifer," his court would implement management.240 This threat paved the way for the Edwards Aquifer Authority Act (EAAA), enrolled just four months after the Sierra Club judgment was rendered.241

B. Creating the EAA

At the time of the Sierra Club lawsuit, two existing groundwater districts managed Edwards Aquifer water.242 These were the Edwards Underground Water District and the Medina County Underground Water District.243 These districts had all the requirements and authorities as other GCDs described above, which was minimal because they preceded SB 1 and its progeny. Pumping from the Edwards Aquifer had increased from 30,000 acre-feet per year at the turn of the century to 500,000 acre-feet per year at the time of litigation.244

In response to the court's decision in Sierra Club, the Texas Legislature passed the EAAA, which created the EAA as a special district.245 While authorized by the same constitutional amendment as other districts, this GCD was granted additional authority and regulations that others did not.246 Although the primary concern of the Sierra Club ruling was species protection in the springs, the EAA does not have the authority to regulate springflow because surface water is within the jurisdiction of the state.247 However, the EAA is required to manage the aquifer in such a way that springflow is protected.248

236 Sierra Club, 1993 WL 151353, at *10–11.
237 Id. at *11.
238 Id. at *10.
239 Id. at *33.
240 Id. at *34 (emphasis omitted).
243 Id.
244 Id. at *6.
246 Id. §§ 1.02, 1.14, 1993 Tex. Gen. Laws 2350, 2351, 2360.
247 Id. § 1.08(b), 1993 Tex. Gen. Laws 2350, 2356.
The biggest difference between the EAA and other districts was the establishment of a firm total pumping limit on the Edwards Aquifer.\textsuperscript{249} The enabling legislation instructed the EAA to permit withdrawals not to exceed 450,000 acre-feet for each calendar year until December 31, 2007.\textsuperscript{250} For the period beginning January 1, 2008, permitted withdrawals cannot exceed 400,000 acre-feet per year.\textsuperscript{251} This number was later increased to the current amount of 572,000 acre-feet per year.\textsuperscript{252} Texas state law mandates an exemption from permitting requirements for livestock or domestic wells across the state.\textsuperscript{253} The EAAA provided a similar exemption but required that all such wells be registered.\textsuperscript{254} Neither Chapter 36 nor the EAAA specifically restricts the district from limiting withdrawals from such wells.

The legislation also created a rubric for how permits were to be allocated. Permits were primarily issued to those who could show they had used Edwards Aquifer water in a beneficial way during the historic period.\textsuperscript{255} If an irrigator used unmetered Edwards Aquifer water, a permit would be issued for two acre-feet a year per acre irrigated during one year of the historic period, assuming all other permit requirements were met.\textsuperscript{256} Historic permit applications had to be received by March 1, 1994.\textsuperscript{257} Other than the stated exceptions, it is illegal to pump water from the Edwards Aquifer without an EAA permit.

The EAAA recognized the potential conflict between the EAA permitting scheme and common law concepts of groundwater ownership. It stated,

\begin{quote}
[A]ction taken pursuant to this Act may not be construed as depriving or divest- ing the owner or the land, or these ownership rights or as impairing the contract rights of any person who purchases water . . . . The legislature intends that just compensation be paid if implementation of this article causes a taking of private property . . . .\textsuperscript{258}
\end{quote}

The drafters seemed to acknowledge that there was a limit on how much a regulatory authority could restrain property rights, but the EAAA explicitly stated that this permitting initiative did not exceed that limit. Some were not convinced.

\begin{footnotes}
\item[249] See id.
\item[250] Id. \textsuperscript{\textsection} 1.14(b), 1993 Tex. Gen. Laws 2350, 2360.
\item[251] Id. \textsuperscript{\textsection} 1.14(c), 1993 Tex. Gen. Laws 2350, 2360.
\item[252] Act of May 28, 2007, 80th Leg., R.S., ch. 1430, \textsection 12.02, 2007 Tex. Gen. Laws 5848, 5901-02 (amending \textsection 1.11, Chapter 626, Acts of the 73d Legislature, Regular Session, 1993). At the time SB 3 was passed, the law still required the 400,000 acre-feet per year provision; however, based on the rules in the EAAA, the EAA was required to permit 571,6000 acre-feet per year. Frownfelter, supra note 226, at 17-43. This change was an effort to match the legislation to actual permits issued. Id.
\item[253] TEX. WATER CODE ANN. \textsection 36.117(b) (West 2012). A domestic and livestock well is allowed to produce up to 25,000 gallons of water a day. Id.
\item[255] Id. \textsuperscript{\textsection} 1.16, 1993 Tex. Gen. Laws 2350, 2361 ("An existing user may apply for an initial regular permit by filing a declaration of use of underground water withdrawn from the aquifer during the historical period from June 1, 1972, through May 31, 1993.")
\item[256] Id. \textsuperscript{\textsection} 1.16(e), 1993 Tex. Gen. Laws 2350, 2361.
\item[257] Id. \textsuperscript{\textsection} 1.16(b), 1993 Tex. Gen. Laws 2350, 2361.
\item[258] Id. \textsuperscript{\textsection} 1.07, 1993 Tex. Gen. Laws 2350, 2356.
\end{footnotes}
C. **Barshop v. Medina County Underground Water Conservation District**

The EAA has generated conflict since its inception. One of the first of these conflicts appeared in the Barshop case.\(^{259}\) In *Barshop v. Medina County Underground Water Conservation District*, plaintiffs argued that the permitting system created by the EAA and implemented by the EAA violated their vested property right to withdraw water.\(^{260}\) The plaintiffs complained "that the Act violates the takings clause in two ways."\(^{261}\) First, they asserted that certain provisions of the EAA would operate automatically upon its effective date amounting to a taking.\(^{262}\) Second, they claimed the EAA's application of the EAA was unconstitutional.\(^{263}\)

As written, the EAA was to become effective September 1, 1993.\(^{264}\) Declarations of historic use, which were required to receive a historic use permit, were due six months later on March 1, 1994.\(^{265}\) However, a voting rights challenge delayed the effective date of the EAA beyond the historic use declaration deadline.\(^{266}\) Plaintiffs argued that all existing users would be forced to immediately cease water withdrawals because the deadline for them to apply for a permit based on past use had passed.\(^{267}\)

The Texas Supreme Court held that the legislation creating the EAA was not a facially unconstitutional infringement or taking of landowner's groundwater property rights.\(^{268}\) It reasoned that the legislative intent behind the date was for the historic application deadline to be six months after the EAA's enactment date.\(^{269}\) Because the enactment delay was unforeseen, the historic use deadline should also be postponed.\(^{270}\) Regarding when property rights vest, the court recognized the dichotomy between the case law and the state's constitutional obligation to regulate groundwater withdrawals.\(^{271}\) Recognizing the future challenge, the court stated, "the issue of when a particular regulation becomes an invasion of property rights in underground water is complex and multi-faceted,"\(^{272}\) however, Texas had to wait another sixteen years before the state supreme court ruled on that issue.

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260 Id. at 625.
261 Id. at 628.
262 Id.
263 Id.
265 Id.
266 Barshop, 925 S.W.2d at 625, 629.
267 Id. at 629.
268 Id. at 623.
269 Id. at 629.
270 Id. at 629–30.
271 Barshop, 925 S.W. at 626.
272 Id. at 626.
VI. MOVING FROM CAPTURE TO OWNERSHIP

Although capture had been maintained in Texas for over 100 years, the addition of regulations and increased demand for water created many questions about the property interest capture created. One of the issues that persisted was determining when ownership actually began. Did rule of capture only give a landowner the right to use with ownership commencing at the point of capture, or did a landowner have an ownership interest in the water prior to production? As the court stated in Barshop, "parties fundamentally disagree on the nature of the property rights." The answer to this question became critical in defining regulatory opportunities and constitutional limitations.

Although a few cases danced around the issue, the Texas Supreme Court took the issue up directly in Edwards Aquifer Authority v. Day. The Day case framed the question of ownership; however, an understanding of the cases that came before this landmark opinion is necessary to fully grasp how the courts previously discussed capture in light of ownership.

A. GUITAR HOLDING CO. v. HUDSPETH COUNTY UNDERGROUND WATER CONSERVATION DISTRICT

As groundwater regulation increased, so did questions regarding the authority of GCDs to regulate in light of the common law right of capture. The question of property rights and regulatory limitations reached the Texas Supreme Court in Guitar Holding Co. v. Hudspeth County Underground Water Conservation District. The case involved a large landowner's challenge to a permitting scheme promulgated by a GCD. The Hudspeth County Underground Water Conservation District No. 1, which was established in the 1950s, adopted a new management plan in 2002 in an attempt to sustain the Bone Springs–Victorio Peak Aquifer at historically-optimal levels through regulation of groundwater withdrawals.

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273 Johnson, supra note 148 at 4-8.
274 Barshop, 925 S.W.2d at 625.
275 See Marvin W. Jones & Andrew Little, The Ownership of Groundwater in Texas: A Contrived Battle for State Control of Groundwater, 61 BAYLOR L. REV. 578, 579–80, 592 (2009) ("[B]ecause ownership of the water in place is not clear, it would occur to me that in the future, there is a lot of opportunity for central control of that water." (Sen. Robert Duncan)).
277 See id.
279 Id. at 910.
280 This groundwater district is located in far West Texas, less than 100 miles east of El Paso. This area is extremely dry with very little precipitation to provide surface watering or recharge opportunities. Despite annual rainfall of only eight to ten inches, this region had a historic agricultural economy made possible by groundwater irrigation. Id. at 913.
281 Id. at 913–14. In 2000, prior to these new rules, the state auditor questioned whether the district was appropriately managing the aquifer. Id. at 913.
This plan included a permitting program “recogniz[ing] three types of permits: 1) validation permits, 2) operating permits, and 3) transfer permits.”\textsuperscript{282} Existing wells that produced water during a defined period were entitled to validation permits.\textsuperscript{283} The system relied on historic use to allocated water permits.\textsuperscript{284} The user was obligated to show usage during the requisite time period.\textsuperscript{285} Irrigating landowners were entitled to a validation permit of four acre-feet of water per acre irrigated, subject to a district reduction to three acre-feet.\textsuperscript{286} Non-irrigating owners were entitled to a validation permit equal to “the maximum amount of water beneficially used in any one year during the [historic] period.”\textsuperscript{287} With this system, the district issued permits based on past types of use without consideration of the landowner’s intent as to future use.\textsuperscript{288} Therefore, an irrigator could gain a permit based on historic irrigation even if her future intent was sale and transport of the water out of the district.\textsuperscript{289}

Unfortunately, this system pitted different types of users against one another because the ability to obtain and then transfer water was predicated on past use.\textsuperscript{290} For transfer permits, those applying for completely new permits received fewer transfer rights than those holding validation permits.\textsuperscript{291} Guitar Holding Company, a large landowner, only irrigated a small portion of land during the historic period and was therefore eligible for fewer water permits than a group of permitted irrigators.\textsuperscript{292} Guitar Holding Company brought suit challenging the validity of the permitting rules.\textsuperscript{293}

The Texas Supreme Court ruled that the protection of historic use authorized by Chapter 36 was “tied both to the amount and purpose of the prior use.”\textsuperscript{294} If either of those changed, the permit holder had to be treated like any other new applicant.\textsuperscript{295} Since no one had ever transferred water out of the basin, all transfers should be treated as new uses and not attached to prior use validation permits.\textsuperscript{296} In reaching this conclusion, the court took issue with the Texas Water Code’s definition of “use” and applied

\textsuperscript{282} Id. at 914. Operating permits, although authorized, had limited value because they could not be used unless water rose above pre-irrigation levels.
\textsuperscript{283} Guitar Holding Co. 263 S.W. 3d at 914.
\textsuperscript{284} Id. at 914.
\textsuperscript{285} Id.
\textsuperscript{286} Id.
\textsuperscript{287} Id.
\textsuperscript{288} Guitar Holding Co. 263 S.W. 3d at 912.
\textsuperscript{289} Id. To obtain a transfer permit, a landowner must first have a validation permit. Id. at 914.
\textsuperscript{290} See id. at 914 (recognizing the “substantially greater” transfer rights that are granted to some landowners through the rules of allocation that are based upon historic use).
\textsuperscript{291} Id. at 914–15.
\textsuperscript{292} Id.
\textsuperscript{293} Guitar Holding Co. 263 S.W. 3d at 915.
\textsuperscript{294} Id. at 916. Historic use is a statutorily allowable factor for a district to consider in limiting groundwater production within the district. See TEX. WATER CODE ANN. § 36.116(b) (West 2008).
\textsuperscript{295} Id. at 916.
\textsuperscript{296} Id. at 917.
this to the district rules. Some commentators criticized that this application may have constituted legislating from the bench.

While this case may not, on its surface, involve ownership, it does directly relate to the potential property right created by law. If a large landowner, such as Guitar Holding Company, is only eligible to pump a very small portion of water from underneath its land, does such restriction violate the right created by East and subsequent cases? It is hard to imagine that this issue did not play into the court's analysis, even if it was not the precise question before it. In fact, the opinion mentioned potential disparity between land ownership and water rights. The ability to have water for sale and transfer is a potential economic boon for the rights holder. Ultimately, it was perceived unfairness in the loss of this income through lost transfer earnings that may have driven the decision.

This case may have been the first hint of a lack of deference to the regulatory bodies created by the legislature. The heavy emphasis on the constitutional amendment in many of the previous cases, which gives all the power to regulate to the legislature, was not even mentioned. The Guitar opinion may also provide a window into the court's thoughts on the role of private property rights as they relate to state regulatory authority. While the Court recognized that the Texas Water Code delegated management of groundwater to the GCDs and vested them with broad regulatory powers, some view the Court's action as a willingness to involve itself in the details of management. Conflicts between property rights and regulatory authority continued to arise as regulation increased, eventually forcing courts to face the dispute directly.

B. Del Rio and Bragg

As groundwater litigation continued, the question of ownership was destined to reappear. In City of Del Rio v. Clayton Sam Colt Hamilton Trust (City of Del Rio), litigants asked the court to resolve the nature of groundwater ownership. Unlike other cases, this case did not involve a groundwater district—it was actually a contract claim.

Clayton Sam Colt Hamilton Trust (Trust) sold the City of Del Rio (Del Rio) a 15-acre plot of land located within its 3,200-acre tract. The conveyance deed reserved "all water rights associated with said tract," but did not reserve a right of entry to produce the water. Later, Del Rio installed a pumping well and began withdrawing groundwater. The Trust brought suit against the city claiming Del Rio violated the

297 See id. at 918.
299 See Guitar Holding Co., 263 S.W.3d at 914.
300 See id. at 918.
301 See White, supra note 298, at 335-38.
303 See id. at 614-15.
304 Id. at 614.
305 Id. at 615.
306 Id.
deed and that the Trust owned the groundwater.307 Del Rio argued that the Trust could not legally retain ownership of the water when it deeded the property because the surface owner did not have absolute ownership.308

San Antonio’s Fourth Court of Appeals held that the rule of capture was a corollary to absolute ownership.309 The Trust argued that, if ownership could only be perfected by capture, an owner’s water rights would be limited by the size of her “bucket.”310 The court agreed with the Trust that the water could be reserved before it was captured and that to rule otherwise would essentially bring all water rights conveyances to a halt.311 Water, once produced, could be transferred. Since reservation of the groundwater was possible, the Trust had the legal right to bifurcate the water from the surface and exempt it from the transfer, which was evidenced in the language of the deed.312

Another ownership case that is still moving through the courts is Bragg v. Edwards Aquifer Authority.313 Unlike Del Rio, this case is a more typical case of a permit applicant suing a permitting authority. The Braggs requested groundwater permits from the EAA for two pecan farms, totaling about 625 acre-feet per year.314 The EAA denied one permit because there had been no pumping within the statutory historical use period.315 For the other property, the EAA limited the permit to 120 acre-feet per year, based on the two acre-feet per year standard provided in its rules.316

Using the severe economic impact test set out by Penn Central Transportation Co. v. New York City, the Medina County district court held EAA’s failure to issue the requested permits was a takings and that the Braggs were entitled to compensation of $732,493.317 San Antonio’s Fourth Court of Appeals affirmed the trial court. Citing the recently Day case regarding ownership, which was released while Bragg was pending, the Fourth Court agreed that the requested permit denials were unconstitutional.318 Although the appellate court agreed with the trial court regarding the Penn Central analy-

307 City of Del Rio, 269 S.W. 3d at 615.
308 Id. at 615–16.
309 Id.
310 Id. at 617.
311 Id.
312 City of Del Rio, 269 S.W. 3d at 618.
314 Id. The Braggs also filed a federal civil rights suit against the EAA. Bragg v. Edwards Aquifer Auth., 342 F. App’x 43, 45 (5th Cir. 2009).
sis, they differed on the methodology for calculating damages.\textsuperscript{319} The case will likely be appealed to the state supreme court so, although the final outcome of this case is still unknown, it immediately highlights the importance of the \textit{Day} decision and its intrinsic regulatory limitations.

\textbf{C. The Day Departure}

It took over 100 years, but the Texas Supreme Court finally faced the question of when ownership in groundwater begins and what, if any, are the constitutional limitations of GCD regulations. Although \textit{Day} was heard in February of 2010, the Court's written opinion took another two years.\textsuperscript{320} In anticipation of the Court's decision, and perhaps in an effort to circumvent it, the Texas Legislature passed Senate Bill 332 (SB 332), which attempted to clarify the relationship between districts and ownership rights before the Court ruled.\textsuperscript{321} Although SB 332 was freshly promulgated when the Court issued its decision, the ruling went beyond the language in the bill with regard to defining a groundwater right. Despite the fact that the Court had been critical of right of capture in its past rulings, the \textit{Day} decision made little mention of the wisdom of the system as it proceeded to create a vested right in groundwater in place.

\textbf{1. SB 332}

When the 2011 legislative session commenced, the Court had been contemplating the \textit{Day} case for a year. As the state awaited a ruling, there were growing concerns on both sides regarding the possible outcome. With SB 322, the legislature attempted to settle the question pending before the Court in advance of the ruling by amending the Texas Water Code groundwater ownership section.\textsuperscript{322} The first draft of the bill, submitted by Senator Fraser, proposed to modify the existing language by adding the phrase "a landowner, or the landowner's lessee or assign, has a vested ownership interest."\textsuperscript{323} The bill went on to provide that nothing in the code could "be construed as granting the authority to deprive or divest a landowner" of that interest except through reasonable rules promulgated by a district.\textsuperscript{324}

\begin{itemize}
\item \textsuperscript{319} Bragg v. Edwards Aquifer Auth., 2013 WL 4535935, at *21-22 (Tex. App.—San Antonio 2013). Interestingly, despite the fact that the legislature strictly dictated the terms by which the EAA could issue permits, the court held that the agency, not the state, was responsible for any compensatory resulting in a constitutional infringement. \textit{Id.} at *3-8.
\item \textsuperscript{320} Edwards Aquifer Auth. v. Day, 369 S.W.3d 814 (Tex. 2012).
\item \textsuperscript{321} \textit{See} Act of May 27, 2011, 82nd Leg., R.S., ch. 1207, 2011 Tex. Gen. Laws 3224. The Texas Legislature meets on odd numbered years for 140 days.
\item \textsuperscript{322} Senate Comm. on Natural Resources, Bill Analysis, Tex. S.B. 332, 82d Leg., R.S. (2011).
\item Before the change, the code read, "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 . . . of the ownership or rights, except as those rights may be limited or altered by rules promulgated by a district." \textit{Tex. Water Code Ann.} § 36.002(a) (West 2010).
\item \textsuperscript{323} Senate Comm. on Natural Resources, Bill Analysis, Tex. S.B. 332, 82d Leg., R.S. (2011).
\item \textsuperscript{324} \textit{Id.}.
\end{itemize}
Throughout session, the bill was negotiated and ultimately the final version was stripped of the word “vested.”\textsuperscript{325} Although private property interest groups heavily promoted the explicit inclusion of “vested,” the pertinent part of the final bill read: “the legislature recognizes that the landowner owns the groundwater below the surface of the landowner’s land as real property.”\textsuperscript{326} This interest does not provide an owner the right to capture a specific amount of groundwater below the surface of that landowner’s land.\textsuperscript{327}

Unlike the Fraser original, which provided little recognition of the districts’ authority, the final version amended Texas Water Code section 36.002, giving it considerably more detail. The final version of the bill stated that an owner’s ability to drill and pump water does not “affect the ability of a district to regulate groundwater production as authorized under Section 36.113, 36.116, or 36.112 or otherwise” under Chapter 36.\textsuperscript{328} The newly amended statute also recognized the ability of districts to limit drilling based on well spacing or tract size as adopted by the district, echoing the Chapter 36 additions in response to the \textit{South Plains} case.\textsuperscript{329} These terms explicitly clarified that this bill did not change the districts’ authority created by SB 2.\textsuperscript{330}

Finally, the bill specified that districts are not required to adopt a rule that “allocate[s] a proportionate share of available groundwater for production from the aquifer based on the number of acres owned by the landowner.”\textsuperscript{331} Districts are instructed to consider ownership and rights during their creation and enforcement of rules.\textsuperscript{332} The bill also contained a special provision for the EAA and other special districts, stating that the “ownership” of groundwater as described in the first part of the bill “does not affect the ability [of the EAA] to regulate” as authorized by the legislature.\textsuperscript{333}

The enrolled bill attempted to codify the complicated history of both common law and legislative initiatives to regulate groundwater. It did not seek to limit districts’ authority and the efforts made over the years to empower them. Although the bill analysis for the original version reflected that the bill’s purpose was to define the owner’s vested right in groundwater, the word “vested” did not appear in the bill as promulgated. Further, it is telling that the final version provided considerably more recognition of groundwater districts’ authority than its predecessor.\textsuperscript{334} It seemed as though the issue

\begin{itemize}
\item \textsuperscript{325} See Act of May 27, 2011, 82nd Leg., R.S., ch. 1207, § 1, 2011 Tex. Gen. Laws 3224, 3224 (amending \textit{Tex. Water Code Ann.} § 36.002(a)).
\item \textsuperscript{326} Id.
\item \textsuperscript{327} Id. (amending \textit{Tex. Water Code Ann.} § 36.002(d)(3)).
\item \textsuperscript{328} Id. (amending \textit{Tex. Water Code Ann.} § 36.002(d)(2)).
\item \textsuperscript{329} Id. (amending \textit{Tex. Water Code Ann.} § 36.002(d)(1)).
\item \textsuperscript{331} Act of May 27, 2011, 82nd Leg., R.S., ch. 1207, § 1, 2011 Tex. Gen. Laws 3224, 3224 (amending \textit{Tex. Water Code Ann.} § 36.002(d)(3)).
\item \textsuperscript{332} Id. § 2, 2011 Tex. Gen. Laws 3224, 3225 (amending \textit{Tex. Water Code Ann.} § 36.101(a)(3)).
\item \textsuperscript{333} Id. § 1, 2011 Tex. Gen. Laws 3224, 3225 (amending \textit{Tex. Water Code Ann.} § 36.002(e)(1)).
\item \textsuperscript{334} See Senate Comm. on Natural Resources, Bill Analysis, Tex. S.B. 332, 82d Leg., R.S. (2011).
\end{itemize}
had been solved, but the Court was still mulling over Day and it was unclear how the decision would be handled in light of SB 332.

2. Edwards Aquifer Authority v. Day

Previous case law and legislative efforts to regulate groundwater culminated in the Day case. On February 24, 2012, the Texas Supreme Court finally weighed in on groundwater ownership in a way it never had before. The Court ruled that landowners have a vested ownership right in groundwater below their land even before it is captured. While many of the impacts of the Day decision have yet to be seen, the opinion can be evaluated within the context of what came before it.

In 1994, R. Burrell Day and Joel McDaniel (Day) purchased land within the EAA’s jurisdiction. Their intent was to grow oats and peanuts as well as graze cattle on the land. Although the land did not contain a working well, there was a lake used for irrigation that was filled by an intermittent creek, overland flow, and some artesian groundwater flow. Day applied for a permit to allow pumping of 700 acre-feet of water a year based on evidentiary statements that 300 acres were irrigated during the historic period as well fifty acre-feet for recreational use in the lake. As instructed by the enabling legislation, initial regular permits were based on beneficial use of water during the historic period.

In 1997, Day received information from the EAA that there was a preliminary finding that he was entitled to the 600 acre-feet of water based on their showing of previously irrigated land. In 1999, after receiving approval from the EAA to change the diversion location, Day drilled a new well even though the EAA had not yet officially ruled on his permit. In November 2000, the EAA denied the application because well “withdrawals . . . were not placed to a beneficial use.”

Day protested the EAA decision to the State Office of Administrative Hearing (SOAH). During discovery at SOAH, a previous landowner testified that 150 acres were irrigated during the historic period using a sprinkler, which drew water from the

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336 Id. at 831.
337 The first permit challenge ruling to be issued since the Day opinion found in favor of the landowners, which raises concerns about possible limitations on regulation. Bragg v. Edwards Aquifer Auth., 2013 WL 4535935, at *1 (Tex. App.—San Antonio 2013).
338 Day, 369 S.W. 3d at 818.
339 Id.
340 Id. There was a well drilled on the land in the mid 1950s, which was used for irrigation until the early 1970s when it collapsed and the pump was subsequently removed. The well was under sufficient pressure that continued to flow. The previous owner constructed a ditch to convey the artesian flow to the creek, which fed the lake. Id.
341 Id. at 820. Existing irrigation was allowed a permit for no less than two acre-feet a year for each acre of land irrigated in one calendar year during the historical period. Id.
342 Id. at 820 (Tex. 2012).
343 Day, 369 S.W. 3d at 820.
344 Id. The well cost $95,000. Id.
345 Id. at 820–21.
346 Id. at 821.
lake and was therefore surface water. 347 Only seven acres were irrigated using exclusively well water. 348 The administrative law judge determined that water from the lake, which included some overland flow from the artesian well, was surface water and not under EAA authority. 349 Based on the testimony, the administrative law judge determined that the maximum beneficial use of groundwater to earn a permit was fourteen acre-feet, calculated from the seven acres that used groundwater directly from the well for irrigation. 350 The EAA agreed and issued a permit in that amount. 351

Day appealed this finding, claiming, in part, that the decision amounted to a taking in violation of the Texas Constitution. 352 The trial court granted summary judgment for Day regarding the characterization of the 150 acres of irrigated land. However, the EAA prevailed on summary judgment on all constitutional claims, including the takings claim, based on the argument that landowners have no vested, protectable property right in groundwater prior to capture. 353 The court of appeals agreed with the EAA and affirmed the determination of fourteen acre-feet, but remanded the case on the takings claim, stating that "landowners have some ownership rights in the groundwater beneath their property . . . entitled to constitutional protection." 354

The EAA, Day, and the State of Texas—whom the EAA implored as a third-party defendant—filed petitions for discretionary review with the Texas Supreme Court. 355 The Court granted the petitions, and concluded, in accordance with SOAH and the appellate court's finding, that the EAA did not err by limiting Day's permit to fourteen acre-feet. 356 This decision was based in part, as it had been in previous forums, on the fact that the character of the water changed from groundwater to surface water as it flowed into and was contained by the surface lake. 357 In addition, there was no evidence provided to show that the 150 acres were irrigated on a consistent basis. 358 The primary use of the lake appeared to be for recreational purposes. 359

The issue that garnered the most attention was whether Day had a constitutionally-protected interest in the groundwater in place. 360 The court ultimately held that he did. 361 However, it remanded to determine whether a taking had occurred in this case. 362 Despite what many parties claimed before the opinion was issued, the Court was

347 Id.
348 Id., 369 S.W.3d at 821.
349 Id.
350 Id.
351 Id.
352 Id.
353 Id., 369 S.W.3d at 821.
355 Id. at 822.
356 Id. at 822, 823.
357 Id. at 822. The explicit exception to this is when a bed and banks permit has been issued for the downstream transport of groundwater using a natural watercourse. Id.
358 Id. at 823.
359 Id., 369 S.W.3d at 823.
360 See id. at 823–43.
361 Id. at 833.
362 Id. at 843.
clear in stating that, although ownership in place had long been the rule for oil and gas in Texas, the determination of when groundwater ownership began was a question of first impression. 363 Although the Court acknowledged that rule of capture could exist without ownership in place, it held that, in Texas, the two are one and the same. 364

The court continued to recognize the role of GCDs and the constitutional amendment that allowed for their creation. 365 The opinion also reiterated the regulations that dictate a district’s authority to regulate wells. 366 The Court referred to recently-promulgated SB 332 to show that the legislature had recognized this relationship between owners and regulators. 367 However, the Court could not say with certainty that SB 332 created a vested ownership right in groundwater. Instead, the opinion stated “the Legislature appears to mean ownership in place.” 368 It made no mention of the conspicuous absence of the word “vested,” which, although present in previous drafts, was ultimately removed. 369 The opinion also reiterated the court’s thoughts in Bragg regarding recognized the EAAA provision requiring “just compensation be paid if implementation of [the Act] causes a taking of private property.” 370 The Court read this to mean that the legislature recognized that limiting water rights for a public use might be a taking; however, the court did not say that the permitting system as written in EAAA would require compensation. 371 Instead, despite the attempted carve-out for the EAA in SB 332, the court directed standard takings analysis on any pumping regulations created by a GCD, including those implemented by the EAA. 372

Notably missing in the opinion, in stark contrast to previous cases, was any criticism of capture as a management system or any recommendations that the legislature should change it. This becomes more conspicuous considering that the author of the majority opinion in Day was Justice Hecht—the same Justice who wrote the concurring opinion in Sipriano. In Sipriano, Justice Hecht strongly advocated for the replacement of capture with a more reasonable system such as the Restatement. 373

Much of the briefing from the EAA and some amicus briefs focused on the importance of protecting the EAA’s ability to permit without fear of an onslaught of takings claims. 374 It was argued that any threat to the permitting scheme would violate the

363 See id. at 828.
364 Day, 369 S.W.3d at 823, 828, 832.
365 Id. at 833–43.
366 Id. at 814, 833–43.
367 Id. at 832.
368 Id.
370 Day, 369 S.W.3d at 843.
371 See id.
372 See id.
373 Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 83 (Tex. 1999) (Hecht, J., concurring); see discussion supra Part III.B.
intention of the state legislature when it created the EAA. Some amicus briefs attempted to extrapolate the consequences that a takings finding would have on other GCDs. The amicus brief of Angela Garcia and the Environmental Defense Fund listed the long history of legislative actions created to limit groundwater mining, including district creation and the regional planning process. These briefs argued that recognition of a landowner's constitutionally vested right in groundwater would threaten the ability of the EAA and other GCDs to manage groundwater in a sustainable way.

The Court disagreed with these arguments, stating that during its existence, there had only been a handful of takings claims against the EAA. While the holding in Day was certainly important to groundwater advocates and property owners alike, it represented a significant change in the Court's tone with regard to its deference to the legislature and its willingness to weigh in regarding groundwater regulation. Although the Court had criticized capture in past decisions, no criticisms appeared in this opinion, and it is unclear what caused this shift.

VII. Why the Change?

To many, the Day decision was a logical evolution of the Court's protection of the rule of capture first established in East. However, when evaluating the judicial and legislative history as a whole, the Day decision marked a departure from the previous trend of court decisions. Throughout history, although the Court respected the East decision in name, it regularly deferred to the increased regulation created by the legislature and often encouraged it. Dicta from several decisions indicates that previous courts felt that right of capture might not be a wise allocation scheme for a growing state and that more regulation was needed. This was particularly true in Sipriano, where the concurrence noted that the East court's concerns were no longer valid. Although Day does not technically overturn previous case law because the specific issue of ownership was one of first impression, the direction of the opinion varies significantly from previous groundwater cases, thus creating implications for future water and environmental issues.

The East court chose rule of capture in part because it did not have any legislative direction and did not understand groundwater characteristics. The opinion indicated that, had the legislature previously acted on groundwater, the court would have deferred to that action. Just a few years after the East case, the legislature did act by passing

375 See, e.g., id.
376 See, e.g., id.
377 Id. at *1-2.
378 Id. at *9.
381 See Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 82 (Tex. 1999) (Hecht, J., concurring).
383 See id. at 280.
the conservation amendment placing the role of groundwater regulation with the legislature even though a common law precedent was already set.\footnote{See TEX. CONST. art. XVI, § 59(a); see also Sipriano, 1 S.W.3d at 77.}

For a period of time, the courts deferred to the legislature regarding the allocation of Texas's groundwater. Subsequent cases leaned heavily on legislative efforts to regulate use and plan for the future. This is even true of cases that did not involve direct challenges to the role of capture. In \emph{City of Corpus Christi}, the Texas Supreme Court recognized that groundwater was no longer "occult" as it was described in \emph{East}; however, the court maintained deference to the role of the legislature established by the constitutional amendment and clarified the relationship between the court and lawmaker by stating, "[t]he power certainly does not lie with the courts to usurp the legislative function."

\footnote{City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 803 (Tex. 1955).}

The Court noted that, because the legislature had not limited transportation of groundwater based on excessive water loss, the Court could not create such a rule.\footnote{Id. ("The power certainly does not lie with the courts to usurp the legislative function and say what types of conduits and reservoirs may be used for the transportation and storage of water, lawfully obtained and lawfully used.")}

The Court did state, perhaps encouragingly, that the legislature was currently in session so state legislators would have the chance to create such a law if they were so inclined.\footnote{Id. at 30.}

Similarly, in \emph{Friendswood Development}, the Court stated, "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 \emph{City of Corpus Christi}."\footnote{Friendswood Dev. Co. v. Smith-Sw. Indus., Inc., 576 S.W.2d 21, 28-29 (Tex. 1978).} However, feeling bound by \textit{stare decisis}, the Court maintained capture, but used recent legislative action as an "opportunity to discard an objectionable aspect of the court-made English rule" and included subsidence through negligent pumping as a limit to capture.\footnote{Id. at 30.}

Both of these cases reflect the court's recognition of its obligation to abide by \emph{East} while still supporting increased regulation and indicating that a change to capture might be necessary.

\emph{Sipriano} was the Court's first modern opportunity to change the common law rule of capture. Although the Court ultimately upheld capture, language hinting at opposition to the system itself was prominent throughout the \emph{Sipriano} opinion.\footnote{See Sipriano, 1 S.W.3d at 80.} The court warned that while groundwater allocation was the responsibility of the legislature, if the legislature was not willing to do its job, the court would have no trouble stepping in.\footnote{See id.}

All indications were that the court was encouraging the legislature to move away from right of capture, "or else." \emph{Sipriano} was argued before the court shortly after SB 1—Texas's first omnibus water bill—was passed, which gave additional authority to GCDs.\footnote{Id. at 79-80; see also Act of June 1, 1997, 75th Leg., R.S., ch. 1010, § 4.30, 1997 Tex. Gen. Laws 3610, 3646-47 (amending TEX. WATER CODE ANN. § 36.113).}

This deference to SB 1 can be interpreted as an affirmation of increased groundwater regu-
tion from the court.\textsuperscript{394} In addition to the majority opinion, Justice Hecht's concurrence was particularly critical of capture and advocated for its replacement.\textsuperscript{395} He stated that "it has become clear, if it was not before, that it is not regulation that threatens progress, but the lack of it."\textsuperscript{396} It is an interesting statement to consider when reading the Day opinion, which Justice Hecht also authored.

Finally, the Court reached the Day case. As in previous cases, the Court upheld the right of capture; however, unlike those decisions, Day contained no discussion of the constitutional amendment or the importance of legislative authority, nor mention that capture may need to change in the future.\textsuperscript{397} While it recognized SB 332 and GCDs, the Court appeared to want to reign in the power that was previously encouraged, even reading "vesting" into SB 332.\textsuperscript{398} There was no discussion of changed circumstances, as was seen in Sipriano, which is particularly notable because the frequency of water issues has only increased since that ruling. Instead, the Court's holding in Day could arguably inhibit the legislatively created districts from doing their job as defined in their promulgating directives.\textsuperscript{399} In particular, the ruling could endanger the EAA, which was a legislatively-created special district that issued permits based on legislative direction. This outcome is particularly ironic considering that the motivation behind the EAA's creation was a desire to remedy the lack of regulation that had led to damaging over pumping.

It is a challenge to understand the shift from the language of the previous cases to the Court's decision in Day. There are several possible reasons why the Court ruled as it did in Day. First, the Day decision could have been based on a determination that the courts are the appropriate source for property law clarifications. Despite the presence of legislatively-created districts' rulemaking, some common law considerations may continue to lay with the courts. The decision may also be a testament to the current importance placed on private property in Texas, as evidenced by legislative initiatives and other court rulings. Finally, perhaps the Court was simply trying to align Texas's groundwater regime with that of oil and gas. If this is true, it raises significant questions about whether the Court also intended other aspects of oil and gas law, such as correlative rights, to extend to groundwater. Understanding the motivation of the Day opinion is an important step in predicting how the Court may rule in future cases involving upcoming water and other environmental issues.

A. COURTS v. LEGISLATURE

Over the last hundred years, American law has shifted from a system dominated by common law to one that is primarily statute driven.\textsuperscript{400} A major driver of this shift was

\textsuperscript{394} See id.
\textsuperscript{395} Id. at 82 (Hecht, J., concurring).
\textsuperscript{396} Id.
\textsuperscript{398} See id. at 832.
\textsuperscript{400} CALABRESI, supra note 77, at 44.
the proliferation of agencies and other regulatory authorities tasked with rulemaking. Agencies were usually given broad powers to apply the laws of the day, add specificity to legislative goals, and adjust regulations to the changing times; however, increased statutorification of this kind can create questions of jurisdiction. This is the conflict in Texas groundwater. Here, the constitutional amendment extends jurisdiction of the police power over natural resources to the legislature. Pursuant to the amendment, GCDs were created to be the regulators. However, this system was enacted after a common law rule was already present and continued contemporaneously with litigation concerning similar issues. These dual tracks raised questions about which entity – GCDs or the courts – had the authority to define and enforce groundwater and associated property rights.

The creation of an administrative body with regulatory authority does not divest the courts from all jurisdiction over the body’s actions. Concurrent jurisdiction between courts and agencies has always been allowed by the judicial system. Courts may still have authority in some common law areas in addition to common law expressly retained by the judiciary. Constitutional adjudications remain with courts. For example, all property is held subject to the valid exercise of the state’s police power. It is settled that, when regulations go beyond the valid exercise of police power, it is an unconstitutional taking of private property. This constitutional question creates judicial authority over the regulatory body to interpret if a taking occurred; however, this evaluation can only occur once a vested right has been established.

This is distinguishable from the Day case. Certainly, Texas courts have the right to determine if a regulation exceeds the police power, but the court in Day actually defined the property right itself, which must be determined before a takings analysis can take place. The current focus is whether this was proper based on precedent or whether the court should have deferred to legislative efforts to define and regulate groundwater

401 Id. at 45.
402 Id. at 44-45, 52.
403 TEX. CONST. art. XVI, § 59(a).
404 TEX. WATER CODE ANN. § 36.0015 (West 2012).
405 CALABRESI, supra note 77, at 52; Israel Gronisser, Primary Jurisdiction: The Rule And Its Rationalizations, 65 YALE L. J. 315, 329 (1956) (“The trouble is that if the primary jurisdiction rule is to apply whenever there is an expert adjudicating body available, then the rule must have unlimited applicability in the regulated industries. Logically, this leaves the courts no jurisdiction in that area at all.”)
407 CALABRESI, supra note 77, at 163–64.
408 Botein, supra note 406, at 871; CALABRESI, supra note 77, at 163–64.
411 See Stone v. Tex. Liquor Control Bd., 417 S.W.2d 385, 385–86 (Tex. 1967) (holding that there is no right to judicial review of an administrative order unless a statute violates a vested right).
412 The subsequent Bragg decision provides a clear example of a more typical property rights interpretation. Based on the decision that groundwater was vested, the court attempted to determine if existing regulation ran afoul of existing property rights. Bragg v. Edwards Aqui-
rights as it had in the past. To answer that question, one must first determine if the right in question was once reserved by the courts or delegated exclusively to the legislature.

The Texas Supreme Court stated that, “[w]here the issue is one inherently judicial in nature ... the courts are not ousted from jurisdiction unless the Legislature, by a valid statute, has explicitly granted exclusive jurisdiction to the administrative body.”

The same court repeatedly stated that the conservation amendment placed groundwater regulation exclusively with the legislature and, by proxy, with GCDs. Previous groundwater decisions deferred to legislative regulations for that reason. In contrast, Day did not. It could be argued that maintaining right of capture constituted deference; however, Justice Hecht's own words in Sipriano counter that notion. “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.” In contrast, the Day opinion included no reference to the amendment or the concerns regarding capture voiced in Sipriano.

It is arguable that Day did not implicate deference because the Court felt that determining a property right was a common law principle reserved for the judiciary. Texas oil and gas law serves as a good guidepost regarding the differentiation between the court's authority and other regulatory bodies in assigning or amending property rights. Although the Texas Railroad Commission (RRC) is vested with broad powers, it has no power to determine property rights. Authority to resolve title disputes or determinations of subsurface trespasses is maintained by the judiciary. The RRC is allowed to manage where or whether a well can be drilled, but is not permitted to determine ownership of oil and gas or how proceeds from sales can be apportioned between owners. The holdings in these cases explain that the authority of the legislatively-created Texas Railroad Commission is limited to the state's goals of "preventing waste and conserving natural resources."
While it is true that some legal power lies with the courts and not with the legislature, the legislative precedent and the court's language contradict the premise that this issue was maintained by the courts in the context of groundwater. First, the legislature was vested with management. Then, on several occasions, the Court specifically called on the legislature to increase groundwater regulations. In his Sipriano concurrence, Justice Hecht, then an advocate for more regulation, evaluated reasonable use as a potential alternative to capture. Although he remarked that reasonable use was not a perfect solution, he thought it preferable to the current regime. Since the Sipriano ruling, the legislature has increased regulatory authority through a series of bills and GCD-promulgated regulations. If the Day court had followed its own precedent, it would have deferred to the legislature citing the absence of the word "vested" in SB 332 and the special exception the bill included for the EAA, which was clearly meant to offer them additional protection in a regulatory review.

B. Private Property Rights

Many hailed the Day decision as another victory for private property owners. Celebrants included Texas state officials as well as special interest groups. Each of these factions viewed the ruling as a welcomed constraint on the unfettered growth of regulations limiting property rights. The State Comptroller's Office stated, "[t]he court's opinion ... provides a capstone for decades of efforts by the Texas Legislature to defend and protect private real property rights." The recent ruling in Bragg reiterates courts' focus on private property rights. Bragg v. Edwards Aquifer Auth., 2013 WL 4535935, at *1 (Tex. App.-San Antonio 2013). Although the Penn Central test requires an examination of the nature of the government action, the court of appeals placed little importance on this prong in comparison to the attention given to the reasonably back expectations of the individual plaintiff. Bragg v. Edwards Aquifer Auth., 2013 WL 4535935, at *17-22 (Tex. App.—San Antonio 2013). In fact, the former only warranted two paragraphs of the opinion. Id. at *21-22. This preference of protecting the rights of one over the good of the whole embodies concerns that were expressed during the Day debate. See e.g., Brief of Angela Garcia and Environmental Defense Fund, Inc. as Amici Curiae Supporting Petitioner and Cross-Respondent Edwards Aquifer Authority, Edwards Aquifer Auth. v. Day, 369 S.W.3d 814 (Tex. 2012) (No. 08-0964), 2010 WL 591444.

the courts, determining the value of oil and gas drained by hydraulic fracturing is more appropriate at the agency level. 268 S.W.3d 1, 14–16 (Tex. 2008).

422 Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 80 (Tex. 1999) (Hecht, J., concurring).

423 Id.

424 See discussion supra Part IV.B.


427 Wright, supra note 425.
rights legislation, individual rights have not been the focus of groundwater regulations. At the very least, there was an attempt to balance individual rights with the sustainability of the resource in a way that benefitted the whole state.

Private property rights have always been important to Texans.\textsuperscript{428} Perhaps it is because the state has a higher percentage of privately-held land than any other state.\textsuperscript{429} It may also stem from the independent nature of Texans. Whatever the reason, Texas's lawmakers and courts have attempted to protect property rights since early in the state's history. Article I of the Texas Constitution established the sanctity of private rights stating, "No person's property shall be taken, damaged, or destroyed for or applied to public use without adequate compensation being made."\textsuperscript{430} In addition to this overarching protection, Texas continued to promulgate legislation to protect property rights. Most of these bills were passed in reaction to regulatory changes or court decisions that were interpreted as threats to private rights. At times, Texas's deference to private property rights has been criticized because it valued those rights higher than the public good.\textsuperscript{431}

In 1995, the legislature passed the Texas Private Real Property Rights Preservation Act.\textsuperscript{432} The bill was motivated by increased regulations in many sectors, including the environment.\textsuperscript{433} "The Act represents the Texas legislature's acknowledgment of the importance of protecting private real property interests."\textsuperscript{434} The bill required governmental entities to consider whether takings of private real property may result from their actions.\textsuperscript{435} Failure to do so could lead to litigation or invalidation of the governmental action.\textsuperscript{436} Under the Act, a property owner can sue the government entity that issued a regulation if the regulation diminished property value by at least 25%.\textsuperscript{437}

While Texas has always valued private property rights, recent legislation demonstrated that their protection has never been so paramount. After the landmark 2005 Supreme Court \textit{Kelo} opinion, in which eminent domain was permitted for a "public use," Texas was one of the first states that attempted to enact response legislation.\textsuperscript{438}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{428} \textit{See e.g.}, Kate Galbraith, \textit{Property Owners Seek to Block Wind Power Lines}, \textit{Tex. Trib.} (Apr. 13, 2010), http://www.texastribune.org/texas-environmental-news/environmental-problems-and-policies/property-owners-seek-to-block-wind-power-lines/.
\item \textsuperscript{430} \textit{Tex. Const. art. 1, § 17}.
\item \textsuperscript{431} Jacqueline Lang Weaver, \textit{The Federal Government as a Useful Enemy: Perspectives on the Bush Energy/Environmental Agenda From the Texas Oilfields}, 19 \textit{PACE Envtl. L. Rev.} 1, 39 (2001) ("[I]n the secular religion of private property rights has become so strong in Texas that [the oil industry advocacy group] itself is not powerful enough to sway legislative opinion in support of the public good . . . ."). \textit{See supra} note 425.
\item \textsuperscript{432} Private Real Property Rights Preservation Act, 74th Leg., R.S., ch. 517, § 1, 1995 Tex. Gen. Laws 3266. (codified in \textit{Tex. Gov't Code Ann.} (West 2004)).
\item \textsuperscript{433} Grimes, \textit{supra} note 426, at 557.
\item \textsuperscript{434} Tex. Att'y Gen., \textit{supra} note 426, at 560.
\item \textsuperscript{435} Id. § 1.12.
\item \textsuperscript{436} Id. § 1.14.
\item \textsuperscript{437} \textit{Grimes, supra} note 426, at 560.
\end{itemize}
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Texas passed a law to further protect private property interests.\textsuperscript{439} Senate Bill 18 (SB 18) limited what could qualify for the "public use" for the purposes of eminent domain.\textsuperscript{440} The bill also sought to protect the landowner from underpriced compensation and included protections for circumstances if the project, which necessitated the eminent domain proceeding, was not completed.\textsuperscript{441}

Property rights have also seen increased protection in the Texas courts.\textsuperscript{442} With an elected judiciary, concerns often arise that political sentiments can find their way into court rulings.\textsuperscript{443} Day may be just another example of the rise in property rights interests held by Texas citizens along with the general rejection of additional regulations. Again, this was a shift in tone from previous case law. Although, previous groundwater cases involved property rights, they also mentioned the importance of a management system that benefitted the greater good of the state as well as protection of the individual.\textsuperscript{444}

Both East and Sipriano involved conflicts between landowners, so the Court attempted to balance the interests by giving each landowner an equal right to capture the water under his or her property.\textsuperscript{445} Even in Sipriano, which did not involve a regulatory body, the Court seemed concerned about the continuation of protecting individual property rights in light of growing demand and controversy.\textsuperscript{446} The court qualified its protection of the right by indicating that it might be appropriate for change at a later date.\textsuperscript{447} In fact, a primary reason for not changing common law was deference to the regulatory changes added by SB1, not protection the individual rights. Again, this consideration was not reflected in the Day opinion.

If the Day decision was, in fact, a victory for private rights, it is worth noting what the Court did not say. The Court did not say that the facts presented in Day constituted

\textsuperscript{444} See Houston & T. C. Ry. Co. v. East, 81 S.W. 279 (Tex. 1904); Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75 (Tex. 1999). In keeping with Day's limited discussion on the need to manage groundwater, the subsequent Bragg opinion gives little attention to the importance of sustaining water resources although the court acknowledged that Plaintiffs were growing a water intensive crop in a drought ridden area. Bragg v. Edwards Aquifer Auth., 2013 WL 4535935, at *21 (Tex. App.—San Antonio 2013).
\textsuperscript{445} See discussion supra Part III.A–B.
\textsuperscript{446} See Sipriano, 1 S.W.3d at 80.
\textsuperscript{447} See id.
a taking.\textsuperscript{448} Texas courts have followed federal case history for takings claims.\textsuperscript{449} Neither the Texas courts nor the United States Supreme Court has established a bright line test for a taking analysis when there is not a loss of total economic value; however, the general rule is that state government conduct constitutes a taking when it invades or physically appropriates property, or when it unreasonably interferes with the right to use and enjoy property.\textsuperscript{450} In Day, the court applied the facts to the \textit{Penn Central} test and held that there was not enough evidence to warrant summary judgment for Day on the takings claim.\textsuperscript{451} Although the case was remanded on that issue, the Court’s analysis indicated that the permit would not meet the takings standard based on their application of the facts to the \textit{Penn Central} factors.\textsuperscript{452} While there are some signals that the Day decision might have been motivated by private property protections there is another interpretation. It is possible that the court was just trying to simplify an already complicated system.

\section*{C. A Move Towards More Regulation: The Oil and Gas Model}

The motivation for the Day decision may be found in the Court’s own words. The vesting of rights in place could have been an effort to align the groundwater process with oil and gas law and thus provide additional regulations. Texas established the right of capture for oil and gas many years ago.\textsuperscript{453} However, unlike in the groundwater context, the parameters of the right of capture in the oil and gas arena are well defined.

Texas courts long ago established that a landowner holds a vested interest in the minerals in the ground. This right is subject to the same constitutional amendment discussed in previous sections.\textsuperscript{454} Instead of regionalized GCDs, the legislature created a statewide authority, the RRC, to manage minerals through the promulgation of rules and regulations.\textsuperscript{455} The RRC is specifically authorized to conserve the natural resources by determining whether wells may be drilled and how much oil or gas may be produced from permitted wells, as well as promulgating and enforcing density and spacing rules.\textsuperscript{456} Although the RRC is tasked with securing “the state’s goals of preventing waste and conserving natural resources,” it also limits production to protect similar rights held by neighboring property owners.\textsuperscript{457} These are called correlative rights.\textsuperscript{458}

\textsuperscript{449} Grimes, supra note 426, at 575–76.
\textsuperscript{450} Westgate, Ltd. v. State, 843 S.W.2d 448, 452 (Tex. 1992).
\textsuperscript{451} Day, 369 S.W.3d at 839–43.
\textsuperscript{452} See id. at 843.
\textsuperscript{453} See Texas Co. v. Daugherty, 107 Tex. 226, 176 S.W. 717 (Tex. 1915).
\textsuperscript{454} See \textit{TEX. CONST. art. XVI, § 59(a)}; Brown v. Humble Oil Co., 83 S.W.2d 935, (Tex. 1935).
\textsuperscript{455} \textit{TEX. NAT. RES. CODE ANN.} § 85.201 (West 2012).
\textsuperscript{456} 56 \textit{TEX. JUR. 3D Oil and Gas} § 737.
\textsuperscript{457} \textit{About the Oil & Gas Division, R.R. COMM’N OF TEX.}, http://www.rrc.state.tx.us/about/divisions/aboutog.php (last updated Aug. 2, 2007).
\textsuperscript{458} “The term ‘correlative rights’ is merely a convenient method of indicating that each owner of land in a common source of supply of oil and gas has legal privileges as against other owners of land therein to take oil or gas therefrom by lawful operations conducted on his own land; that each such owner has duties to the other owners not to exercise his privileges of taking so as to injure the common source of supply; and that each such owner has rights
The doctrine of correlative rights was established as a means to prevent waste and confiscation. The doctrine gives every property owner the opportunity to recover the oil and gas in or under his land.\textsuperscript{459} The owner's right of capture is subject to correlative rights.\textsuperscript{460} While early oil and gas precedent allowed unfettered pumping without liability for drainage of a neighbor's property, this was eventually found to be at odds with a right of capture doctrine.\textsuperscript{461} If there is no remedy for a landowner who is harmed by losing their minerals to another, the property right becomes illusory.\textsuperscript{462} The Texas Supreme Court approved correlative rights in the right of capture for minerals and it is currently enumerated as one of the RRC's statutory goals; therefore, regulation to protect correlative rights is not a taking.\textsuperscript{463} One of the reasons correlative rights were extended to property owners was because experts can now approximate the amount of oil and gas in place in a common pool, and determine what is recoverable by each tract owner under certain operating conditions.\textsuperscript{464} This was essential in a harm determination and was not always possible in the early years of the doctrine.\textsuperscript{465}

Language throughout the Day opinion demonstrated the Court's attempt to align groundwater allocation with the statewide treatment of oil and gas. Because ownership of groundwater was an issue of first impression, the court turned to well-established oil and gas law to guide its analysis.\textsuperscript{466} The opinion identifies similarities between the two resources.\textsuperscript{467} Using its reasoning in Texas Co., the Day court supported the decision to own groundwater in place in spite of its fugacious nature.\textsuperscript{468} In the end, the language used to describe the current state of groundwater ownership came directly from an oil and gas holding.\textsuperscript{469}

In contrast to oil and gas jurisprudence, past groundwater cases did not address correlative rights and these rights have not been explicitly added by the legislature.\textsuperscript{470}

\textsuperscript{460} Elliff, 210 S.W.2d at 583.
\textsuperscript{461} Canseco, supra note 459, at 515.
\textsuperscript{462} Id.
\textsuperscript{463} Elliff, 210 S.W.2d at 582; About the Oil & Gas Division, R.R. COMM'N OF TEX., http://www. rrc.state.tx.us/about/divisions/aboutog.php (last updated Aug. 2, 2007). Regulations promulgated to protect correlative rights do not constitute a taking of property. Ohio Oil Co. v. Indiana, 177 U.S. 190, 209-10 (1900).
\textsuperscript{464} Elliff, 210 S.W.2d at 561.
\textsuperscript{465} Id. at 581.
\textsuperscript{467} Id.
\textsuperscript{468} Id.
\textsuperscript{469} Id. at 831-32 (quoting Elliff, 210 S.W.2d at 561).
\textsuperscript{470} See Houston & T: C. Ry. Co. v. East, 81 S.W. 279, 281 (Tex. 1904) (linking the denial of correlative rights in part to the secret and occult nature of groundwater making enforcement of such rights difficult). An additional difference between water and minerals is Texas's oil and gas interests are also subject to taxation. Texas Co. v. Daugherty, 107 Tex.
Therefore, before Day, there was no remedy for a landowner whose water was drained by another user if the water was used for legitimate purposes. The Court in Day, however, argued that the very limited rules established in East, which disallow malice or wanton conduct, imply that some form of correlative rights are available for groundwater. The Court stated that this limitation is comparable to the oil and gas prohibition on waste, although the term "waste" has been used differently in the oil and gas context than the word "malice" has been interpreted in water cases. In fact, groundwater cases have allowed significant amounts of waste under rule of capture despite any impact on neighboring owners. In addition, previous interpretations of capture concluded that correlative rights did not exist in Texas groundwater law.

The Court in Day also attempted to equate the RRC goal of protecting correlative rights with EAAA provisions by arguing that the permitting plan provides an applicant with a "fair share" of water. However, in making that argument, the Court did not cite to the EAAA promulgating regulations, and a review of that legislation reveals no reference to the words "fair share" or "correlative rights." Even if the EAAA permitting system is read broadly to provide a fair share to applicants, that is really only true as to those who can show a historic, beneficial use, unless the Court is referring to the domestic and livestock exemption. It is difficult to parallel either the domestic exception or a limited historic use right to what is meant by "fair share" in an oil and gas context. Unlike situations where new permits are tied to historic use, in oil and gas, any leaseholder is entitled to a fair share of the minerals regardless of whether previous development occurred.

Courts defining oil and gas property rights did not view drainage or correlative rights to be "at odds" with the rule of capture. Instead, they redefined the parameters of the rule by clarifying that it did not sanction negligent or wasteful practices and included the fair share or correlative rights principal. Relying on this definition of the oil and gas property right, courts rejected owners' claims that regulations signed to prevent waste or protect correlative rights constituted a "taking" of their property. By invoking the oil and gas law analogy in Day, the Court has potentially provided an answer to future takings challenges aimed at groundwater regulation. Specifically,

226, 176 S.W. 717 (Tex. 1915). Based on the Day court's recognition of the behavioral similarities between groundwater and oil and gas, it is possible that taxation should also be considered in the groundwater context. Certainly, as in oil and gas, the presence of a valuable resource below the surface would increase the value of the land above it.

471 See East, 81 S.W. at 281.
473 See City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 803, 805 (Tex. 1955) (refusing to define the actions presented in the case as waste because the court felt that determination of that definition was the duty of the legislature).
474 See Dylan O. Drummond et al., The Rule of Capture in Texas-Still So Misunderstood After All These Years, 37 Tex. Tech L. Rev. 1, 70 (2004); Friendswood Dev. Co. v. Smith-Sw. Indus., Inc., 576 S.W.2d 21, 22, 24 (Tex. 1978) (citing East, 81 S.W. 279).
475 Day, 369 S.W.3d at 830-31.
477 See id.
478 See id.
479 See Day, 369 S.W.3d at 832.
if water rights are defined as vested but subject to the rule of capture, which includes waste prevention and correlative rights, then regulations based on those parameters are not, in general, a taking of that property right. 480 When looking at the court's reasoning in Day, it seems as though the Court is not opposed to an expanded application of correlative rights and appears to believe that some currently exist. 481 By equating the regulations of the RRC with what can be imposed on groundwater, it is possible that the Court intended for damages related to waste to be extended to groundwater in the same way they are used in oil and gas. 482 Judging from Justice Hecht's language in Sipriano, increased regulation is a more effective way to protect a resource than less regulation. 483 Perhaps Day is the Court's avenue to allow additional regulation, just as it had threatened to do in previous cases.

While additional constraints on capture may be wise, simply extending correlative rights to groundwater by overlaying the definitions used in oil and gas creates challenges. The oil and gas regulatory regime has been well established since the early 1900s. 484 Meanwhile, the full suite of laws that govern groundwater were established through a piecemeal evolution beginning in 1904. 485 While application of oil and gas rules in the groundwater context may have been a workable solution a hundred years ago, attempting to do it now only generates more questions than answers.

In addition to legal challenges, there are many geologic and social differences as well, which the Court recognized. 486 Although both oil and water are located and move underground, unlike oil and gas deposits, most groundwater aquifers recharge, which can both help and hinder attempts to align regulations between the sectors. 487 Perhaps the most important distinctions are the social differences between the two substances. Oil and gas, while definitely important economically, cannot match the social value of water. Because of the constant and growing need for water, long-term goals will be different for each. Existing legislation in both sectors reflects these varying objectives. 488 Throughout case law, the court has recognized the need for water sustainability and stated that addition regulations were necessary, yet Day seemed to ignore those concerns. 489 Despite the reasoning, both obvious and discreet, that led to the Day decision, courts will continue to answer questions as they arise, and the legislature will be forced to conform its regulations to this new definition of capture in hopes that Texas's groundwater resources can be sustained into the future.

480 See id. at 825-26.
481 See id.
482 See id.
483 See Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 82 (Tex. 1999) (Hecht, J., concurring).
485 See discussion supra Parts II-III.
486 See Day, 369 S.W.3d at 840-41.
487 See id. at 841.
488 See discussion supra Part IV.
489 See discussion supra Part III.B.
Texas groundwater management has a long history of intertwined court decisions and legislation. Although the common law rule of right of capture was established over 100 years ago, the rule has been modified based on the conservation amendment to the Texas Constitution, which authorized the legislature to manage groundwater. Court decisions regarding groundwater issues deferred to both the conservation amendment and subsequent legislative efforts to plan and manage groundwater.

The growth of the regional planning process paired with increased demand raised questions regarding when ownership began. Courts never stated whether ownership was vested in place or if the water must first be captured. The answer to this question was critical to understanding the extent to which regulations would be appropriate without a constitutional violation. The Texas Supreme Court's decision in *Day* provided the answer. In that regulatory challenge, the Court clearly stated that, like oil and gas, right of capture was synonymous with absolute ownership. Consequently, regulations that exceeded the police power would be an unconstitutional taking.

The *Day* opinion marked a divergence from previous groundwater case law. Although upholding capture was consistent, the Court's treatment of capture and deference to the legislative efforts to cap pumping was distinctly different from prior opinions. While past cases indicated that capture should be changed due to changing circumstances in the state, the *Day* court did not address this issue and instead aligned groundwater law with oil and gas.

There are three possible reasons why the *Day* court departed from precedent. First, the court may have been determining a property right, which was still within the authority of the court despite the constitutional amendment. Even in instances when primary authority is placed with lawmakers, determination of certain common law principles are reserved to the court. Second, the *Day* decision may have been another in a list of cases prioritizing private property rights. Finally, by aligning groundwater with Texas oil and gas law, the court may have been attempting to extend correlative rights where they were not previously present. In oil and gas law, absolute ownership of the minerals includes consideration of conservation and neighboring rights. By defining the right in this way, regulations that seek to protect either or these are protected from a takings claim in most circumstances. Although, correlative rights have not previous been present in groundwater law, perhaps they will be now.

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