Subsurface Tension: The Conflicting Laws of Texas and New Mexico Over Shared Groundwater and New Mexico’s Desire for Regulation

Kameron B. Smith
Texas A&M University School of Law, kbs1@tamu.edu

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SUBSURFACE TENSION: THE CONFLICTING LAWS OF TEXAS AND NEW MEXICO OVER SHARED GROUNDWATER AND NEW MEXICO’S DESIRE FOR REGULATION

By: Kameron B. Smith*

ABSTRACT

A recent oil boom in Southern New Mexico has resulted in increased hydraulic fracturing operations in the region and, as a result, a steady and reliable supply of water to fuel such operations is required. As New Mexico regulations make it difficult to acquire a steady supply of water within the state, oil and natural gas producers are turning to unregulated areas in Texas, which permit unlimited pumping of groundwater. However, this groundwater is being pumped from the Pecos Valley aquifer, which is the same source of water that New Mexico is regulating within its borders. This issue is only one in a series of interstate water feuds between the two states. This Comment identifies the current practice of groundwater imports from Texas into New Mexico and the methods New Mexico might employ to limit or prevent such imports. Additionally, this Comment discusses an interstate compact as an alternative to New Mexico attempting to regulate water imports, which would undoubtedly lead to extensive litigation.

TABLE OF CONTENTS

I. INTRODUCTION .......................................................... 454
II. A HISTORY OF GROUNDWATER LAW IN TEXAS AND NEW MEXICO ................................................................. 456
   A. Texas Groundwater Law ............................................. 457
      1. The Rule of Capture .............................................. 458
      2. Groundwater Conservation Districts ....................... 460
   B. New Mexico Groundwater Law ............................... 461
III. WHAT REGULATION CAN NEW MEXICO IMPOSE TO REDUCE GROUNDWATER IMPORTS? ............................ 462
   A. Regulating Groundwater Imports ............................ 463
   B. Regulating Groundwater Usage ............................. 466
   C. The Likelihood of Successful Regulation ............... 469
IV. ADDRESSING THE ISSUE THROUGH INTERSTATE COMPACT ................................................................................. 469

* J.D. Candidate, Texas A&M University School of Law, May 2020; B.A. in Political Science, Texas State University, Dec. 2014. I would like to thank my advisor, Professor Gabriel Eckstein, for his guidance throughout the writing and editing process, as well as the Texas A&M Law Review staff and board for getting this Comment publication-ready. Lastly, a huge thank you to my wife Katelyn for her endless support.
I. INTRODUCTION

In a June 5, 2018 press release, Houston-based water supply company Solaris Water Midstream, LLC (“Solaris”) announced that it had acquired the New Mexico water supply corporation, Vision Resources, Inc. The purpose of the acquisition was to add to Solaris’s existing Pecos Star System, which is a significant source of water for oil and natural gas producers in the Permian Basin. In addition, Solaris announced that it is constructing a new water supply line to provide a “crucial [and] permanent water supply infrastructure” for hydraulic fracturing operations that have been constrained by limited sources of water in southern New Mexico.

However, water supply for hydraulic fracturing operations is limited in southern New Mexico not only by nature, but also by the state’s imposition of tight regulations on its groundwater. In contrast, pumping groundwater under areas in Texas that are not within a Groundwater Conservation District (“GCD”) is not regulated and is subject only to the rule of capture. As a result, Solaris’s new line will be able to transport approximately 6.3 million gallons of water per day from Loving County, Texas to Eddy County, New Mexico to support hydraulic fracturing operations that have been burdened by New Mexico’s regulations.

Although gaining access to the Pecos Valley aquifer in New Mexico is difficult, securing groundwater rights in Loving County, Texas provides companies like Solaris virtually unlimited access to the same aquifer, as Loving County is not subject to the regulations of a GCD.

2. Id.
3. Id.
7. Id.; see also Edwards, 369 S.W.3d at 832.
With reports of giants such as ConocoPhillips and Texas Pacific Land Trust also piping water from Texas into New Mexico, it is clear that Solaris is not alone in capitalizing on the sharp distinctions between the two states’ groundwater regulations. In addition, water use for hydraulic fracturing operations is projected to substantially increase over the next decade, and pumping water to support such operations could have a substantial localized effect on water availability in arid regions such as the Permian Basin.

As a result, New Mexico is concerned that unregulated pumping in Texas will ultimately deplete its access to the aquifer. Therefore, companies using the lack of regulation in Texas to circumvent New Mexico’s regulation of the same aquifer has resulted in tension between state officials. Aubrey Dunn, the New Mexico land commissioner, has gone as far as accusing Texas of stealing New Mexico’s water by allowing companies to sidestep New Mexico’s regulation of the aquifer, essentially “sucking all the water from under New Mexico out in Texas and then selling it back to New Mexico.”

Meanwhile, Texas and New Mexico are already involved in litigation whereby Texas alleges New Mexico has violated the Rio Grande Compact of 1938. The Compact requires Colorado to deliver a specified amount of water to the New Mexico state line annually. However, rather than New Mexico delivering a specified amount of water to the Texas state line, the Compact requires delivery to the Elephant Butte Reservoir, which is more than 100 miles inside New Mexico. Initially, Texas was content with this agreement because the federal government promised to provide a certain amount of water from the Reservoir to Texas every year. However, Texas now alleges that New Mexico is “allowing downstream New Mexico users to siphon off water below the Reservoir in ways the Downstream Contracts do not anticipate.” In other words, Texas claims that New Mexico’s failure

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12. Weiser, supra note 4.
13. Id.
16. Id. at 957.
17. Id.
18. See id.
19. Id. at 958.
to regulate the water within its borders is harming Texas’s water supply from the shared resource.

This Comment shows that the similar complaints Texas and New Mexico have against each other can be resolved through an interstate compact that will produce results that both states desire, without spending years in the court system. Such an agreement could call for amending the Rio Grande Compact of 1938 to better protect Texas’s water supply and for the establishment of GCDs and management plans in currently unregulated areas along the Texas–New Mexico border to regulate the frequency and amount of water imported into New Mexico. Part II of this Comment provides an exposition of both Texas and New Mexico groundwater law and the institutions the two states use to regulate groundwater. Part III identifies how although unregulated Texas areas can soothe New Mexico’s concerns through management plans, such regulation is unlikely to occur—without something in exchange—as a result of the economic benefit that Texas landowners are receiving from the lack of regulation. Part III also discusses what action New Mexico might take if Texas refuses to regulate pumping from the Pecos Valley aquifer, including how New Mexico could attempt to control unregulated pumping through regulating the importation or usage of the water. It further discusses the litigation that would undoubtedly occur from this course of action, the evidence New Mexico would need to present to withstand a constitutional challenge, and the likelihood that such regulations would ultimately be struck down. Lastly, Part IV explains how both states’ complaints could be resolved through an interstate compact, with Texas agreeing to regulate the amount and frequency of water exports into New Mexico, and New Mexico agreeing to ensure Texas receives a certain amount of water from the Rio Grande. In connection with this proposed agreement, Part IV also discusses how Texas regulation of water exports could be barred by federal power to regulate interstate commerce and provides examples where this argument was raised but failed with respect to management plans.

II. A HISTORY OF GROUNDWATER LAW IN TEXAS AND NEW MEXICO

West Texas and southeastern New Mexico are essentially identical in climate, meaning the environmental issues the two areas face, including the need for groundwater conservation, are similar.20 Despite having similar issues, the two states’ methods of groundwater regulation are at odds, with New Mexico following a plan of centralized reg-

ulation\textsuperscript{21} as opposed to Texas’s decentralized regulation in the form of local districts.\textsuperscript{22} However, some areas in Texas along the New Mexico border are not under the control of a GCD, and thus, are subject only to the rule of capture.\textsuperscript{23} Consequently, these areas provide an attractive opportunity to hydraulic fracturing operations in southeastern New Mexico, as they allow producers to avoid pumping regulations entirely.\textsuperscript{24} In order to highlight why this practice is occurring and to provide a foundation for a discussion of what can be done in response, this Section compares the current state of groundwater law in Texas and New Mexico.

A. Texas Groundwater Law

Despite groundwater’s close ties to the Texas economy, and the issues that arise from demand exceeding supply, such as overdrafting from the aquifers, Texas has been slow to establish more than minimal regulation of the resource.\textsuperscript{25} Although scarcity requires regulation through allocation and management, such regulation is at odds with the state’s treatment of groundwater as a private property right.\textsuperscript{26} While the Texas Legislature ultimately adopted a form of decentralized regulation by deferring regulation to local GCDs, such regulation is only encouraged, not required.\textsuperscript{27} As a result, the default rule in the state is that landowners own the groundwater below the surface of their land and may “drill for and produce the groundwater below the surface,” subject only to “common law defenses or other defenses to liability under the rule of capture.”\textsuperscript{28} As “[t]he Texas legislature has never modified or replaced the rule of capture,”\textsuperscript{29} it remains the rule of law in areas without a GCD.\textsuperscript{30} This Section explains the rule of capture as it relates to groundwater in the state and how the rule can be limited by the establishment of GCDs and management plans.

\textsuperscript{24} Weiser, supra note 4.
\textsuperscript{26} Id.
\textsuperscript{27} Tex. Water Code Ann. § 36.0015(b).
\textsuperscript{28} Tex. Water Code Ann. § 36.002(a)–(b-1)(2).
1. The Rule of Capture

The Texas Supreme Court first applied the rule of capture to groundwater in *Houston & T. C. Railway Co. v. East.* In that case, the Houston & Texas Railway Company (“Houston”) dug a well twenty feet in diameter and sixty-six feet deep on land it owned to access water percolating through the land’s soil. Houston dug the well without any intention of injuring the neighboring property of W. A. East (“East”). However, East’s well, which was only about five feet in diameter and thirty-three feet deep, dried up as a result of Houston’s well. The court found that the surface owner is entitled to make “reasonable and legitimate use of the water . . . from its own land” and that no liability arises from exhaustion resulting from pumping the water for such uses, “whatever may be [the] effect upon his neighbor’s wells and springs.” As a result, Houston was within its rights to build a larger pump than its neighbor, East, and ultimately restrict East’s access to the water under his own land. This unavoidable consequence of the rule of capture has led to an alternative name for the rule: the “law of the biggest pump.”

Whereas many states have modified the rule of capture by adopting a criterion of reasonable use in resolving conflicts between competing landowners, Texas has not made any such modification and unanimously re-affirmed the standard rule of capture in *Sipriano v. Great Spring Waters of America, Inc.* In *Sipriano,* the plaintiffs, landowners in Henderson County, Texas, sued Great Spring Waters of America, Inc., a/k/a Ozarka Natural Spring Water Co. (“Ozarka”), for negligently draining their water wells as a result of Ozarka pumping roughly 90,000 gallons of water a day from nearby land. Plaintiffs argued that Texas should abandon the traditional rule of capture and modify it to include the requirement of reasonable use. In response to the plaintiffs, the court provided a history of its groundwater jurisprudence, highlighting instances where the court had recognized exceptions to the standard rule of capture but continually upheld it without modification. Such exceptions include that a “[l]andowner may not maliciously take water for the sole purpose of injuring his

32. Id.
33. Id.
34. Id.
35. Id. at 281–82.
36. See id.
40. Id. at 76.
41. Id. at 77–79.
neighbor, or wantonly and willfully waste it,” and that landowners can be held liable when their negligence is a proximate cause of the subsidence of another’s land. Outside of these exceptions, the Sipriano court, quoting Barshop v. Medina County Underground Water Conservation District, refused to modify the standard rule, finding that “water regulation is essentially a legislative function.” Therefore, any limitation or modification of the standard rule must be done through GCDs, the state’s preferred method of groundwater management.

A discussion of Texas groundwater law would be incomplete without discussing the landmark case of Edwards Aquifer Authority v. Day, in which the Supreme Court of Texas drew sharp comparisons between groundwater and oil and gas, finding that landowners have absolute title in severalty to the groundwater under their land. The court noted that both groundwater and oil and gas exist in subterranean reservoirs where they are fugacious. Accordingly, the court determined that groundwater and oil and gas should be treated similarly with respect to ownership rights. Although the court acknowledged that the considerations shaping the regulatory schemes of hydrocarbons and groundwater are fundamentally different, it rejected the argument that groundwater cannot be treated like oil and gas with respect to ownership. As a result, the court directly applied the law regarding ownership of oil and gas to groundwater. The court found that landowners are “regarded as having absolute title in severalty to the [groundwater] in place beneath [their] land,” and it reaffirmed that the rule of capture is the only qualification on such ownership. However, as in Sipriano, the court found that although landowners have absolute ownership of the groundwater under their land, the rights to access and use that water can be restricted by regulations imposed by GCDs.

42. Id. at 77 (quoting City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 801 (Tex. 1955)).
43. Id. at 78 (citing Friendswood Dev. Co. v. Smith-Sw. Indus., Inc., 576 S.W.2d 21, 30 (Tex. 1978)).
44. Id. at 78 (quoting Barshop v. Medina Cty. Underground Water Conservation Dist., 925 S.W.2d 618, 633 (Tex. 1996)).
45. Sipriano, 1 S.W.3d at 79.
47. Id. at 829.
48. Id. at 829–30.
49. Id. at 831.
50. Id.
51. Id. at 833–36.
2. Groundwater Conservation Districts

The Texas Constitution was amended in 1917 to place the duty of preserving the state’s natural resources, including groundwater, on the legislature.\(^{54}\) To conserve the state’s groundwater, the legislature established GCDs as “the state’s preferred method of groundwater management.”\(^{55}\) There are three ways that a GCD can be created: (1) through legislative action; (2) through landowner petition; or (3) through the Texas Commission on Environmental Quality’s (“TCEQ”) “own motion in a designated Priority Groundwater Management Area (“PGMA”).”\(^{56}\) Once a GCD is created, TCEQ appoints temporary directors to manage the district and establish election procedures for future directors.\(^{57}\) Alternatively, territory can be added to an existing district that is willing to accept new territory.\(^{58}\) “Entire counties can petition a GCD’s board for inclusion,” after which the board conducts hearings and determines whether the territory will be included.\(^ {59}\) GCDs are granted broad rulemaking authority to conserve and prevent groundwater waste.\(^ {60}\) There are three primary duties the districts are tasked with in managing groundwater resources: (1) accepting or denying well permits upon request; (2) establishing a management plan for the district’s groundwater; and (3) adopting rules necessary to effectuate the management plan.\(^ {61}\) In order to highlight the possible regulations GCDs can impose, and to provide an example of how unregulated areas in Texas can control the excessive pumping currently taking place, it will be useful to present certain provisions of the Reeves County GCD Management Plan, the most recently established GCD in the state.\(^ {62}\) Additionally, a large portion of the Pecos Valley aquifer, the groundwater at issue, is located in Reeves County.\(^ {63}\)

Applicants seeking to establish wells in the Reeves County GCD must provide a detailed statement including “[t]he nature and purpose of the proposed use including the amount of water to be used for each

\(^{54}\) TEX. CONST. art. XVI, § 59; Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75, 77 (Tex. 1999).

\(^{55}\) TEX. WATER CODE ANN. § 36.0015(b).


\(^{57}\) Id.

\(^{58}\) Id.

\(^{59}\) Id.

\(^{60}\) TEX. WATER CODE ANN. § 36.101.

\(^{61}\) What Is a Groundwater Conservation District?, supra note 56.

\(^{62}\) GCD Map, supra note 8.

purpose” and “conservation practices in effect or proposed.” Additionally, the application must include “a water conservation plan or a declaration that the applicant will comply with the District’s management plan” and “[a] statement of the projected effect of the proposed withdrawal on the aquifer or aquifer conditions, depletions, subsidence, or effects on existing permit holders or other groundwater users in the District.” Applicants must also request a certain pumpage volume and provide an estimated pumping rate.

The Reeves Plan contains even more stringent requirements on water that is to be transported out of the District. Applications to transfer groundwater outside of the District’s boundaries require an additional application fee, and the transfers are subject to export fees. In determining whether to grant a transfer application, the District may consider whether the proposed transfer will have a negative effect on the availability of water in the District, aquifer conditions and levels, existing permit holders or other groundwater users within the District, or any approved management plans. If it is determined that the proposed well will have any such negative effect, the permit can be limited or denied.

B. New Mexico Groundwater Law

While Texas treats its groundwater as a private property right allocated to the surface owner, all water in New Mexico is owned by the state. The state has the right to prescribe how water, whether above or below the surface, may be used, with beneficial use as the basis for determining the rights and limitations of appropriation. A right to use groundwater can be obtained by filing an application with the State Engineer. The application requires applicants to identify their intended operations with some specificity, including the particular underground reservoir from which the water will be apportioned, the beneficial use intended, and the amount of water applied for.

65. Id. at 14.
66. Id. at 14–15.
67. See id. at 32–34.
68. Id. at 32–33.
69. Id. at 33.
70. Reeves Rules, supra note 64, at 33.
74. N.M. STAT. ANN. § 72-12-3 (2019).
75. Id.
application is granted if “there is unappropriated groundwater available” or if “the proposed new appropriation will not impair existing water rights,” but only if “granting the application will not be contrary to the conservation of water within the State, and if granting the application will not be detrimental to the public welfare of the State.” While what constitutes impairment to an existing water right has not been defined through statute, the courts have highlighted some factors to consider in analyzing impairment. These factors include “the incremental drawdown that would result . . . [and] the ability of the water right owner to continue to use the well.” The State Engineer also ensures that the proposed appropriation will not impair existing surface water rights. Generally, a proposed appropriation that will have an effect on hydrologically connected surface water will be denied.

III. WHAT REGULATION CAN NEW MEXICO IMPOSE TO REDUCE GROUNDWATER IMPORTS?

In the event Texas fails to regulate the excessive pumping and interstate transfer of water, New Mexico officials and lawmakers might wonder if something can be done on their end to stop or lessen the practice. This Section focuses on two possibilities as to New Mexico’s power to influence the pumping in Texas, given that it cannot regulate such pumping directly. The first possibility is the regulation of water importation, either by blocking all water imports or by regulating the amount that will be accepted into the state. However, as such regulation would place a restriction on interstate commerce in “the most direct manner possible,” New Mexico would be required to show that there is no less-discriminatory means of protecting against excessive pumping and aquifer depletion. In addition, New Mexico would have to clearly show that the regulation serves a legitimate local purpose which is not grounded in economic protectionism or isolation. Rather, New Mexico must show that the regulation serves to prevent harm to its natural resources that cannot be prevented through other means. Alternatively, in order to avoid the strict scrutiny imposed on facial discrimination of interstate commerce, New Mexico could attempt to dissuade the pumping and transfer of water from Texas by imposing regulations on the usage of water pumped from the Pecos Valley aquifer in connection with oil wells in the state. Such a regula-

76. Id.; Brockmann, supra note 72, at 4.
77. Brockmann, supra note 72, at 4.
78. Id.
79. Id.
80. Id.
82. Id. at 148.
83. See id. at 151.
84. See id. at 138.
tion would be imposed on all water that was pumped from the Pecos Valley aquifer, regardless of whether it was pumped in Texas or New Mexico. As a result, the regulation would be even-handed, and the burden imposed on interstate commerce would be incidental. Such a regulation would likely be upheld unless the burden imposed on interstate commerce was excessive in relation to the local benefits, or the local interest involved could be promoted through other means that place less of a burden on interstate activities. This Section explores both of these possible regulations, what they might look like, and their likelihood of being upheld if challenged.

A. Regulating Groundwater Imports

Restricting the amount of water imported from Texas would dissuade the excessive pumping in Texas. The incentive to pump excessively in Texas is the market available for the groundwater’s use in New Mexico; therefore, a restriction on that market would likely result in less production. However, such a direct manner of regulating commerce is subject to strict scrutiny and is only available when there is a legitimate local purpose, not based in economic protectionism, that cannot be resolved through other less-discriminatory means. Accordingly, if New Mexico were to restrict water imports from Texas, and the restriction was challenged, New Mexico’s best argument would be to analogize the restriction to the statute at issue in Maine v. Taylor, which prohibited the importation of live baitfish into Maine.

In Maine v. Taylor, the Supreme Court found that Maine had legitimate local reasons for prohibiting the importation of live baitfish that “could not adequately be served by available nondiscriminatory alternatives.” In order to protect the state’s fisheries from parasites and other species that might be included in shipments of live baitfish, Maine enacted a statute that prohibited importing live baitfish into the state. The statute was challenged as an unconstitutional burden on interstate commerce. The Court found that although the statute restricted interstate commerce in the “most direct manner possible,” direct restriction alone is not enough to render a statute unconstitutional. While the states’ regulatory powers are limited by the Com-

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86. Cf. Wickard v. Filburn, 317 U.S. 111, 127–28 (1942) (discussing how the government can effectively regulate price by regulating the market. Just as the government can maintain a price by limiting production, it could effectively regulate production by removing the economic incentive to produce.).
88. Id. at 137.
89. Id. at 151–52.
90. Id. at 132–33.
91. Id. at 133.
92. Id. at 137–38.
merce Clause, such limitation is not absolute.\textsuperscript{93} States retain regulatory authority under their police powers to regulate matters of local concern, even if doing so places a burden on interstate commerce.\textsuperscript{94} The Supreme Court has distinguished between statutes that only incidentally burden interstate commerce and those that affirmatively discriminate against interstate transactions.\textsuperscript{95} If a statute is found to discriminate against interstate commerce on its face, then the state must demonstrate that it serves a legitimate local purpose which cannot be served by other, nondiscriminatory means.\textsuperscript{96}

The Court found that the Maine statute discriminated against interstate trade on its face, and thus Maine had the burden of showing that prohibiting baitfish imports served a legitimate local purpose that could not be accomplished through other, nondiscriminatory means.\textsuperscript{97} Experts for Maine testified that live baitfish imported into Maine would place Maine’s wild fish population at risk by parasites common in out-of-state baitfish but not present in Maine’s wild fish.\textsuperscript{98} In addition, the experts testified that non-native species included in shipments of live baitfish could disrupt Maine’s aquatic ecosystem, as such species would prey on native species or compete with them for food or habitat.\textsuperscript{99} Lastly, the experts testified that there was “no satisfactory way to inspect shipments of live baitfish for parasites or commingled species,” making prohibition on imports the only means of prevention.\textsuperscript{100}

Although there was “substantial scientific uncertainty” concerning the environmental risks associated with the importation of live baitfish, the Court found that Maine had a legitimate interest in guarding against such risks, despite an imperfect understanding of the risks and “the possibility that they may ultimately prove to be negligible.”\textsuperscript{101} Moreover, the Court held the Commerce Clause cannot be interpreted as requiring states to remain inactive until environmental damage occurs or the scientific community agrees as to the risk.\textsuperscript{102} While the Commerce Clause significantly limits the states’ ability to regulate interstate commerce, the Court found that the limitation is not put before all other values.\textsuperscript{103} Rather, a state retains “broad regulatory authority to protect the health and safety of its citizens and the integrity of its natural resources.”\textsuperscript{104} As a result, the Court held

\textsuperscript{93} Id. at 138.
\textsuperscript{94} Id.
\textsuperscript{95} Id.
\textsuperscript{96} Id. (citing Hughes v. Oklahoma, 441 U.S. 322, 336 (1979)).
\textsuperscript{97} See id. at 138–39.
\textsuperscript{98} Id. at 140–41.
\textsuperscript{99} Id. at 141.
\textsuperscript{100} Id.
\textsuperscript{101} Id. at 148.
\textsuperscript{102} Id.
\textsuperscript{103} Id. at 151.
\textsuperscript{104} Id.
Maine’s prohibition on live baitfish imports was implemented to serve “legitimate local purposes that could not adequately be served by available nondiscriminatory alternatives” and, thus, the prohibition was not unconstitutional.\textsuperscript{105}

New Mexico has a legitimate local interest in conserving its water source for when it will be most needed. While droughts generally have a greater impact on surface water than groundwater, a drought causes an increased water demand for irrigation.\textsuperscript{106} In times of severe drought, increased pumping to support irrigation needs can cause a substantial drop in the water level of an aquifer.\textsuperscript{107} This drop occurs as a result of pumpage overdrafts in which water is pumped from the aquifer at a higher rate than the rate at which the aquifer is recharged through rainfall.\textsuperscript{108} It follows that such drops are sustainable through a period of drought if the water level remains at its typical level through periods of non-drought. However, intensive hydraulic fracturing operations like those in southern New Mexico can have large, localized impacts on an aquifer’s water level, with declines of around 100 to 200 feet.\textsuperscript{109} In comparison, the irrigation demand for groundwater in the severe drought of the 1950s caused the Pecos Valley aquifer’s level to drop roughly 100 feet.\textsuperscript{110} Hydraulic fracturing operations can cause a local decline in the water level similar to the severe decline which results from the irrigation demand in a period of drought. As a result, a period of drought following such intensive operations could result in disaster for certain regions, with inadequate water supply to provide for an increased demand in irrigation. In other words, permit holders for irrigation pumping could be left high and dry.

The interest in protecting the availability of water, aquifer levels, and existing permit holders or other groundwater users is one that Texas must agree with, given that interest is stated in GCD management plans across the state.\textsuperscript{111} Although there is not concrete evidence that the excessive pumping in Texas has or will cause a drop in the water level under New Mexico, there might be enough evidence to indicate that it is a possibility.\textsuperscript{112} As such, similar to the circumstances in \textit{Maine v. Taylor}, although there is substantial scientific uncertainty regarding the effects of excessive pumping for hydraulic fracturing, a court might find that New Mexico has a legitimate interest in guarding

\textsuperscript{105} \textsuperscript{Id. at 151–52.}
\textsuperscript{106} \textsuperscript{Scanlon et al., supra note 11, at 7.}
\textsuperscript{108} \textsuperscript{Id. at 23.}
\textsuperscript{109} \textsuperscript{Scanlon et al., supra note 11, at 12.}
\textsuperscript{110} \textsuperscript{See Ashworth, supra note 107, at 19.}
\textsuperscript{111} \textsuperscript{See, e.g., Reeves Rules, supra note 64.}
\textsuperscript{112} \textsuperscript{See Kondash et al., supra note 10.}
against the potential effects, despite an imperfect understanding of the risks and “the possibility that they may ultimately prove to be negligible.”\textsuperscript{113}

Just as the Court in \textit{Maine v. Taylor} held that the state of Maine had “broad regulatory authority to protect the health and safety of its citizens and the integrity of its natural resources,” the state of New Mexico has equal regulatory authority.\textsuperscript{114} If a court determines that this authority extends to New Mexico safeguarding its groundwater to prevent possible scarcity in the event of a drought—even if that scarcity is uncertain—then New Mexico might be able to place limited restrictions on the importation of groundwater from Texas without violating the Commerce Clause. While such regulation would have a direct effect on the Texas water market, New Mexico has a substantial interest in protecting its own water supply, which happens to be the same supply that Texas producers use. No additional regulation on pumping in New Mexico is going to offset the excessive pumping in Texas. Therefore, if Texas refuses to impose its own regulations, then New Mexico’s only option is to dissuade excessive pumping by manipulating the market.

\textbf{B. Regulating Groundwater Usage}

Any attempt to directly discriminate against interstate commerce is met with the strictest scrutiny,\textsuperscript{115} whereas regulation that imposes a burden on interstate commerce only incidentally is subject to less scrutiny.\textsuperscript{116} Therefore, while direct discrimination might be upheld under a \textit{Maine v. Taylor} analogy, New Mexico might want to use less-direct methods to better ensure its efforts are upheld. When the statute or regulation is imposed on both local and interstate activity “even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”\textsuperscript{117} The extent of the burden permitted depends “on the nature of the local interest involved” and the availability of less-impactful alternatives.\textsuperscript{118} Therefore, if New Mexico is able to construct a rule that effectively regulates groundwater usage from the Pecos Valley aquifer in connection with hydraulic fracturing operations in the state, then such a regulation would impose a burden on groundwater that was pumped from the aquifer regardless of whether such water was pumped in Texas or New Mexico. In determining what that regulation would look like, it is useful to

\begin{itemize}
\item \textsuperscript{113} Maine v. Taylor, 477 U.S. 131, 148 (1986).
\item \textsuperscript{114} Id. at 151.
\item \textsuperscript{115} Hughes v. Oklahoma, 441 U.S. 322, 337 (1979).
\item \textsuperscript{116} See \textit{Pike v. Bruce Church, Inc.}, 397 U.S. 137, 142 (1970).
\item \textsuperscript{117} Id.
\item \textsuperscript{118} Id.
\end{itemize}
examine the Supreme Court case of *Minnesota v. Clover Leaf Creamery Co.*, in which the Court found that a Minnesota statute banning the retail sale of milk in plastic non-returnable, non-refillable containers was not unconstitutional despite the burdens it placed on interstate commerce.\(^{119}\)

In 1977, Minnesota enacted a statute that banned retailers from selling milk in plastic non-returnable, non-refillable containers.\(^{120}\) However, sale in other non-returnable, non-refillable containers, such as paperboard milk cartons, was still permitted.\(^{121}\) The legislature determined that the use of plastic containers “present[ed] a solid waste management problem for the state, promote[d] energy waste, and deplete[d] natural resources.”\(^{122}\) Therefore, the statute forbid the retail sale of milk in containers composed of at least 50 percent plastic.\(^{123}\) Respondents, composed of milk sellers and others in the industry, challenged the statute as an unreasonable burden on interstate commerce.\(^{124}\) The district court concluded that the statute would not succeed in effecting its policy goal and found that, contrary to the statute’s proclaimed purpose, the actual purpose of the statute was to promote the economic interests of local dairy and pulpwood industries over the interests of non-local industries.\(^{125}\) The Supreme Court stated that even “[w]hen legislating in areas of legitimate local concern, such as environmental protection and resource conservation, States are nonetheless limited by the Commerce Clause.”\(^{126}\) Moreover, state laws that purport to promote environmental protection and conservation but are, in reality, instances of economic protectionism, are generally held to be invalid.\(^{127}\) While statutes that regulate even-handedly and only impose incidental burdens on interstate commerce are not *per se* invalid, such statutes can still be found invalid if “the burden imposed . . . is clearly excessive in relation to the putative local benefits.”\(^{128}\) The extent of the burden permitted is dependent on “the nature of the local interest” and the availability of alternatives that would have “a lesser impact on interstate activities.”\(^{129}\)

The Court found the Minnesota statute was not merely economic protectionism, but rather, the statute regulated even-handedly by prohibiting the retail sale of milk in plastic containers regardless of whether the retailers, the milk, or the containers were from outside of


\(^{120}\) *Id.* at 458.

\(^{121}\) *Id.*

\(^{122}\) *Id.* at 459.

\(^{123}\) *Id.* at 460.

\(^{124}\) *Id.*

\(^{125}\) *Id.* at 471.

\(^{126}\) *Id.* (quoting *Pike v. Bruce Church*, Inc., 397 U.S. 137, 142 (1970)).

\(^{127}\) *Id.*
the state.\textsuperscript{130} As the statute did not discriminate between interstate and intrastate commerce, the Court had to determine whether it imposed an incidental burden on interstate commerce that was excessive in relation to the local benefits.\textsuperscript{131} The Court found the burden imposed by the Minnesota statute was relatively minor because milk could still freely move across state lines and most dairies packed their products in a variety of packages, making conformance to particular packaging requirements only a slight inconvenience.\textsuperscript{132} While the statute would cause producers to switch from manufacturers of plastic containers to manufacturers of paperboard cartons, there was no indication that the manufacturers positioned to gain from the switch would be Minnesota firms, or that the manufacturers negatively affected would be from outside the state.\textsuperscript{133} The Court held that even if it was shown “that the out-of-state plastics industry [was] burdened relatively more heavily than the Minnesota pulpwood industry,” such a burden would not be “clearly excessive” given the substantial local interest in promoting the conservation of natural resources.\textsuperscript{134} In addition, the Court found all proposed alternatives were either more burdensome or less likely to be effective, making the prohibition on plastic containers the only available regulation.\textsuperscript{135} As nondiscriminatory regulations serving a substantial local interest are not invalid simply because they cause some economic benefit to shift from out-of-state industry to in-state industry, the Court upheld the Minnesota statute because the local interest outweighed the burden placed on interstate commerce.\textsuperscript{136}

New Mexico could potentially establish regulations in connection with oil well permits, which would impose restrictions on the amount of Pecos Valley aquifer water that could be used in hydraulic fracturing operations. Such a regulation would be imposed even-handedly because it would apply equally to water pumped in New Mexico and Texas. As such, the regulation would be subject to less scrutiny. Given the facts in \textit{Clover Leaf Creamery}, it could be argued that although such a regulation would have the effect of shifting business away from Texas, or at least reducing such business in Texas, there is no indication that the economic benefit would shift to New Mexico. As the local interest outweighs the incidental effect that would be placed on the Texas water market, if a restriction on groundwater usage rather than imports is possible, it has a better chance of being upheld.

\begin{itemize}
  \item \textsuperscript{130} \textit{Id.} at 471–72.
  \item \textsuperscript{131} \textit{Id.}
  \item \textsuperscript{132} \textit{Id.}
  \item \textsuperscript{133} \textit{Id.} at 472–73.
  \item \textsuperscript{134} \textit{Id.} at 473.
  \item \textsuperscript{135} \textit{Id.} at 473–74.
  \item \textsuperscript{136} \textit{Id.} at 474.
\end{itemize}
C. The Likelihood of Successful Regulation

It is important to note that while this argument is possible, its effectiveness is shrouded in uncertainty given that it is based on a lack of evidence. Under both methods of regulation, New Mexico will be required to show that it has a legitimate local interest in protecting its natural resources from hydraulic fracturing operations in Texas.\(^\text{137}\) However, the evidence that is available could be used to support a counterargument to New Mexico’s claim that regulation is necessary to protect its natural resources.

In the Scanlon study—the most prominent study to date with respect to the effects of hydraulic fracturing operations on groundwater availability\(^\text{138}\)—the authors indicated that hydraulic fracturing operations can have large, localized impacts on water availability, whereas the regional impact of such operations is small.\(^\text{139}\) Therefore, while there is a remote possibility that New Mexico’s water availability could be substantially affected by operations in Texas, it is more likely that such operations would only have an effect, if any, in those areas in Texas where the pumping actually occurred.\(^\text{140}\) As a result, it is uncertain whether a court would uphold a New Mexico regulation on imports under the Maine v. Taylor principle—that the health and safety of a state’s citizens and the integrity of its natural resources trump substantial scientific uncertainty\(^\text{141}\)—or if that court would find that there is enough scientific certainty to show that New Mexico does not have legitimate local interests to qualify its regulations. Therefore, if New Mexico believes its interests are legitimate, it should turn to a compact to ensure those interests are adequately met.

IV. Addressing the Issue Through Interstate Compact

Texas and New Mexico are currently litigating a separate issue concerning the Rio Grande Compact of 1938.\(^\text{142}\) The Compact requires New Mexico to deliver a specified amount of water to the Elephant Butte Reservoir annually.\(^\text{143}\) Texas then receives a specified amount of water from the federal government through a separate agreement.\(^\text{144}\) Texas claims that New Mexico is permitting users downstream of the Reservoir to divert water before it reaches the Texas state line.\(^\text{145}\) New Mexico has taken the position that the Compact does not require New Mexico to guarantee that a certain amount of water reaches the Texas

\(^{138}\) Scanlon et al., supra note 11.
\(^{139}\) Id. at 12.
\(^{140}\) See id.
\(^{141}\) See Taylor, 477 U.S. at 148.
\(^{143}\) Id. at 957.
\(^{144}\) See id.
\(^{145}\) Id. at 958.
state line or to prevent downstream diversion.\textsuperscript{146} Rather, New Mexico argues that its only duty under the Compact is to deliver the specified amount of water to the reservoir.\textsuperscript{147} In response, Texas contends that the obligation to deliver the specified amount of water to the reservoir would be meaningless if New Mexico was then permitted to recapture that water before it reached Texas.\textsuperscript{148}

In essence, Texas's interests ultimately hinge on a Supreme Court decision, the same remedy with which New Mexico would be left if Texas were to not regulate its pumping. As a result, Texas might be inclined to ensure its interests are met by regulating water exports from Texas into New Mexico in exchange for a modification of the Rio Grande Compact. Such a modification could include more concrete language that requires a certain amount of water be delivered to the Texas state line. This would remove the ambiguity which permits New Mexico to argue that it has no such duty. In exchange, Texas could regulate the frequency and amount of groundwater exports into New Mexico. As a result, New Mexico will receive both the assurance that its natural resources are protected and the potential for economic benefit if companies begin to pump from the aquifer in New Mexico.\textsuperscript{149} However, in regulating groundwater exports, Texas will likely be required to overcome constitutional challenges made under the Commerce Clause. Therefore, the remainder of this Section discusses the potential issues Texas might face and how to impose regulations that will withstand such challenges.

### A. Potential Issues with Federal Commerce Power in Regulating Groundwater Exports

Somewhat ironically, New Mexico has attempted to restrict the transfer of its groundwater into Texas by imposing an outright ban on interstate transfers.\textsuperscript{150} The ban, in pertinent part, read: “No person shall withdraw water from any underground source in New Mexico for use in any other state . . . .”\textsuperscript{151} While such a ban would certainly resolve the issues New Mexico currently faces, in City of El Paso ex rel. Public Service Board v. Reynolds, the United States District Court for

\begin{itemize}
  \item \textsuperscript{146} First Interim Report of the Special Master On New Mexico’s Motion To Dismiss Texas’s Complaint And The United States’ Complaint In Intervention And Motions Of Elephant Butte Irrigation District And El Paso County Water Improvement District No. 1 For Leave To Intervene at 188, Texas v. New Mexico, 138 S. Ct. 954 (2018) (No. 141) [https://perma.cc/HCA3-3E27].
  \item \textsuperscript{147} Id.
  \item \textsuperscript{148} Id. at 190.
  \item \textsuperscript{149} See Weiser, supra note 4 (discussing the economic benefits New Mexico is not receiving as a result of companies importing from Texas rather than pumping in New Mexico).
  \item \textsuperscript{151} N.M. STAT. ANN. § 72-12-19 (1978) (repealed Feb. 22, 1983); Reynolds, 563 F. Supp. at 381 n.2.
\end{itemize}
the District of New Mexico held that outright bans on out-of-state groundwater transfers, like the one the New Mexico legislature had enacted, are unconstitutional as “explicit barrier[s] to interstate commerce.” The court found that, as a whole, New Mexico’s regulation of its groundwater was both important and legitimate, and that “limited, non-discriminatory burdens on interstate commerce” through such regulation can be justified. However, the court highlighted the distinction between regulation for the purpose of benefiting the health and safety of the state’s citizens and regulation that is grounded in economic protectionism. It found that a state does not have the power to “burden or constrict the flow of . . . commerce for [its] economic advantage . . . .” Therefore, while a state may not ban the transfer of its groundwater to other states outright, it can regulate interstate transfers by “impos[ing] the same withdrawal and use restrictions on out-of-state users as it does on its own citizens.” As a result, pumping for interstate transfer will be subject to permit requirements, and such permits can be terminated if the pumping does not conform to the standards required for all permits in the state.

The holding that interstate transfer of groundwater may be regulated if the regulation is identical to the regulations imposed on pumping groundwater for in-state use was reiterated in Ponderosa Ridge LLC v. Banner County. Ponderosa Ridge LLC (“Ponderosa”), a Nebraska company, was denied a permit to transfer groundwater to Wyoming from a well in Nebraska. Despite finding that Ponderosa’s intended use was beneficial, the director of the Department of Water Resources determined that there was sufficient supply in Wyoming for Ponderosa’s needs. In response, Ponderosa contended the guiding statute discriminated against interstate commerce. The statute, in pertinent part, reads: “Any person . . . or other entity intending to withdraw ground water from any water well located in the State of Nebraska and transport it for use in another state shall apply . . . for a permit to do so.” The statute then identifies factors that the director shall consider in determining whether to grant the permit, including the beneficial use of the groundwater, the availability of alternative

152. Reynolds, 563 F. Supp. at 388.
153. Id. at 389.
154. Id.
155. Id. (quoting H.P. Hood v. DuMond, 336 U.S. 525, 533 (1949)).
156. Id. at 390 (citing Sporhase v. Nebraska, ex rel. Douglas, 458 U.S. 941, 952 (1982)).
157. Id.
159. Id. at 155.
160. Id.
161. Id. at 156.
sources, the negative effects of the proposed withdrawal, and any other factors deemed relevant.\textsuperscript{163}

The court found that, although Congress has the power to regulate water as an article of commerce, a state is not foreclosed from regulating its water in the absence of federal regulation.\textsuperscript{164} A state may regulate interstate commerce in water if the statute “regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental.”\textsuperscript{165} Therefore, the regulation may burden interstate commerce if it serves a legitimate local interest and places no greater burden on interstate commerce than intrastate commerce.\textsuperscript{166} The court found the Nebraska statute, while operating specifically on interstate transfers, was not discriminating against interstate commerce when “severe withdrawal and use restrictions” were imposed on intrastate transfers as well.\textsuperscript{167} The court further held that “measures taken by a State to conserve and preserve [groundwater] for its own citizens . . . in times of severe shortage” are reasonable with respect to its police power.\textsuperscript{168}

While there is no concrete rule as to the extent that a state may prefer its own citizens, the court highlighted some guidelines that have been applied consistently, including the principle that regulations grounded in economic protectionism are invalid \textit{per se}.\textsuperscript{169} However, when economic interests are merely implicated as a consequence of a state preferring its own citizens on the basis of public welfare, “the Court must try to accommodate the competing local and national interests.”\textsuperscript{170} While the “public welfare” of its citizens is not limited only to their survival and includes many interests, including economic interests, a state “may not require interstate commerce to shoulder the entire burden of furthering those interests.”\textsuperscript{171} If domestic wells result in the same detrimental impact as interstate transfers, a state may not deny interstate transfers while permitting detrimental domestic wells because regulating all wells even-handedly would likely be an equally effective alternative that would be less burdensome on interstate

\begin{footnotesize}
\begin{align*}
\text{163. } \text{NEB. REV. STAT. ANN. } & \text{§ 46-613.01; } \text{Ponderosa, 554 N.W.2d } \text{at 156–57.} \\
\text{164. } \text{Ponderosa, 554 N.W.2d } \text{at 159 } \text{(citing Sporhase v. Nebraska, ex rel. Douglas,} \text{458 U.S. 941, 954 (1982)).} \\
\text{165. Id. (quoting Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970)).} \\
\text{166. Id.} \\
\text{167. Id. at 160 (quoting Sporhase v. Nebraska, ex rel. Douglas, 458 U.S. 941, 955–56 (1982)).} \\
\text{168. Id.} \\
\text{169. Id. at 161–62.} \\
\end{align*}
\end{footnotesize}
commerce. When such alternatives exist, “the [s]tate must use them.”

B. How Texas Can Impose Regulations

In order to impose regulations on groundwater usage, GCDs must be created in unregulated areas, as GCDs are the chosen form of groundwater regulation in Texas. As landowners in these presently unregulated areas do not have any incentive to petition for the creation of a GCD, the GCD would likely need to be created through legislative action. Once a GCD is created, management plans could be adopted in the areas that would address the excessive interstate groundwater transfers.

However, the management plans adopted must address the interstate transfer of water without placing a substantial burden on interstate commerce. This can be done by either making the regulations for interstate and intrastate transfers identical or by enacting interstate regulations that do not require interstate transfers to suffer any greater burden than intrastate transfers. As it is unclear what would constitute a greater burden on interstate transfers if the regulations are not identical, the safest method is to adopt regulations that are identical for both interstate and intrastate transfers. This can easily be done by following the Reeves example, which imposes more stringent requirements and additional fees on applications to transfer groundwater out of the district. Such regulations apply to both district exports to other areas within the state and to exports that are transferred to other states. Therefore, a plan modeled after the Reeves example would even-handedly impose burdens on both intrastate and interstate transfers and would likely be upheld, as even-handed regulation prevents interstate activity from “shoulder[ing] the entire burden” in effectuating a local purpose. While the regulations would be identical, it would likely have a far greater effect on interstate transfers, essentially closing the “loophole” of freely transferring groundwater from unregulated areas in Texas to highly regulated areas in New Mexico.

172. See id. at 162–63.
174. TEX. WATER CODE ANN. § 36.0015(b).
175. See Weiser, supra note 4 (landowners are profiting from the lack of regulation and, thus, would likely not create a GCD, as its restrictions are adverse to the landowner’s economic interests).
176. See generally TEX. CONST. art. XVI, § 59 (discussing the legislative requirements for the creation of a GCD).
While such regulation may not deter the practice of pumping groundwater in Texas for transfer to New Mexico, because of the greater availability of groundwater in Texas, it would at least reduce the scope of such operations and the current concentration of those operations in unregulated areas. It might also cause some pumping to move into New Mexico for convenience, which would result in an economic benefit for New Mexico.

V. Conclusion

If New Mexico imposed regulations on the importation of Texas groundwater or on the amount of water used from the Pecos Valley aquifer in connection with New Mexico oil wells, it would have to show that the regulations did not overly restrict the flow of commerce between the two states.\footnote{While New Mexico might be able to succeed in defending such regulations, the legal battle that would surely result would be long, costly, and damaging to state relations. A more efficient process would be one of diplomacy in the form of an interstate compact between Texas and New Mexico. While Texas seemingly has no incentive to restrict the flow of its groundwater into New Mexico, it might be enticed to do so through a reciprocal promise, such as a modification of the Rio Grande Compact. It seems that Texas would be interested in a modification of that compact in order to ensure the security of its natural resources. In examining New Mexico’s complaint regarding excessive pumping and importation, the two states appear to share similar concerns over different issues. A modification of the Rio Grande Compact to meet Texas’s needs, and the creation of a new compact to address New Mexico’s concerns would effectively end the costly, ongoing litigation and prevent additional litigation in the future.\footnote{See Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 472 (1980); Maine v. Taylor, 477 U.S. 131, 138–39 (1986).}}