

MUNICIPAL REGULATION OF GROUNDWATER AND TAKINGS¹

BY ROSS CROW²

I.	Introduction	3
II.	Statutory and Constitutional Grants of Power to Cities Relevant to Authority to Regulate Groundwater	3
	A. Overview of Statutory and Constitutional Authority	3
	B. Statutory Grant of Police Power to Every Type of Texas City	4
	C. Home Rule Cities Also Derive Powers Directly from Texas Constitution	5
	D. Incorporation of Police Power in Home Rule City Charter	5
	E. Municipal Authority to Regulate Nuisances	5
	F. Other Statutory Authority for Municipal Regulation of Groundwater—Municipal Settings Designation, Protection of Watersheds, and Water Quality	7
	G. Texas Water Well Driller Rules	8
	H. Zoning Authority to Regulate Wells	9
	I. Subdivision Regulations to Regulate Wells	10
	J. Municipal Authority to Regulate Within the Municipality’s ETJ	11
	K. Conclusion Regarding Municipal Regulation of Groundwater: Statutory Grant of Police Powers Most Significant	11
III.	Police Powers	11
	A. Introduction: Exercise of Police Powers to Protect Public Health and Safety Supports Defense of Takings Claim	11
	B. What are Police Powers? Power to Prevent Detrimental Uses of Property	12
	C. All Property Held Subject to Valid Exercise of Police Power	12
	D. Under Due Process Test, Validity of Police Power Action Founded on Reasonableness	13
	E. Police Power Does Not Authorize Ad Hoc Actions, but Rather Must be Exercised by Ordinance	14
	F. Conflicts: Municipal Police Power Controlling Despite Regulation of Same Subject by State Law	15
	G. Police Power Not Static; Broad Discretion	16

1 This article was originally presented at the State Bar of Texas conference, Changing Face of Water Rights 2012, February 23–24, 2012 in San Antonio under the title, “Municipal Regulation of Groundwater.” The presentation was subsequently updated for the International Municipal Law Officers and presented at the International Municipal Lawyers Association (IMLA) 77th Annual Conference, held in Austin, Texas, October 21–24, 2012.

2 The views expressed in these materials do not necessarily represent those of the City of Austin.

	H. Limits to Police Powers.....	16
IV.	Standards for Assessing Constitutionality of an Ordinance Adopted Pursuant to Police Power	16
	A. Introduction: Police Powers and Takings	16
	B. Physical Takings—Compensation for Actual Taking	17
	C. Regulatory Takings—Regulatory Restrictions on Uses of Property Under Police Powers May or May Not be a Compensable Taking	17
	D. Justice Holmes’ Dilemma: Government Cannot Pay for Every Impact of Regulation, But If Regulation Goes Too Far, It is a Taking	18
	E. When Does Regulation Go Too Far? No One Test for a Taking	18
	F. Taking is Compensable When Regulations Result in Physical Invasion or Deprive All Economically Beneficial Use	19
	G. The <i>Penn Central</i> Factors	19
	H. <i>Lingle</i> and the “Government Character” <i>Penn Central</i> Factor	20
	I. Due Process and Equal Protection Claims	21
V.	Various Jurisdictions Address Takings Challenges and Preemption Claims Related to Restrictions on groundwater.....	22
	A. Courts in Various Jurisdictions Uphold Municipal Regulation of Groundwater as Not Preempted by State Law	24
VI.	Landmark Texas Supreme Court Decision on Groundwater Ownership— <i>EAA v. Day</i>	25
	A. <i>Day</i> Facts and Decision in a Nutshell	25
	B. <i>Day</i> Court Affirms That Groundwater Ownership in Place is Subject to Police Powers	26
	C. The <i>Day</i> Court’s <i>Penn Central</i> Analysis.....	27
	D. Distinguishing “Fact-Sensitive Test of Reasonableness” for Takings Claims From Reasonableness Test Used in Due Process Claims.....	28
	E. Does the <i>Day</i> Court’s Pronouncement That This is the First Time it Has Decided the Ownership of Groundwater Issue Affect an Analysis of Investment-Backed Expectations?.....	29
VII.	<i>Bragg</i> Litigation: Another Groundwater Takings Case to Watch.....	31
	A. District Court Opinion: <i>Bragg v. Edwards Aquifer Authority</i>	31
	B. Fourth Court of Appeals Opinion: <i>Edwards Aquifer Authority v. Bragg</i>	33
VIII.	Municipal Police Power Cases Applying Takings Analysis.....	34
	A. Overview	34
	B. Municipal Regulation of Oil and Gas Wells	35
	1. Overview of Facts and General Holdings	35
	2. Key Legal Issues Addressed in Opinions on Municipal Regulation of Oil and Gas Wells.....	37
	C. Takings Analysis Summary	47
	D. Application of Takings Law to Municipal Regulation of Groundwater	48
IX.	Examples of Municipal Ordinances	48
	A. San Antonio.....	49
	B. Victoria.....	49
X.	Conclusion	50

I. INTRODUCTION

The exceptional drought conditions persisting in Texas for the last few years have prompted questions about many water management issues, among them the extent to which municipalities can regulate groundwater well drilling and production within their city limits and extraterritorial jurisdictions (ETJs). This article focuses on the authority cities have to regulate groundwater, looking first at statutory and constitutional authority, with special attention given to Texas cities' authority to regulate pursuant to their police powers. As with all groundwater regulation, the possibility exists that cities may face a takings claim from property owners. Consequently, this paper looks at essential takings law with its basis in federal jurisprudence, such that the fundamental takings analysis is essentially the same for virtually any city in any state. Although the primary focus of this article is on Texas law, an analysis of key cases from other jurisdictions relevant to the issue of municipal groundwater regulation has been included. This article also analyzes cases where cities have successfully defended against a takings or due process claim when exercising their police powers in regulating oil and gas well drilling within their jurisdiction.

Current case law indicates that courts support a governmental regulation as not effecting a taking when the regulation addresses important public health and safety concerns.

Before examining the relevant cases, however, this article provides a broader look at statutory and state constitutional grants of power to municipalities, how courts have interpreted municipal authority to exercise police powers, and how Texas courts have analyzed takings claims with regard to regulations imposed by various municipal ordinances.

II. STATUTORY AND CONSTITUTIONAL GRANTS OF POWER TO CITIES RELEVANT TO AUTHORITY TO REGULATE GROUNDWATER

A. OVERVIEW OF STATUTORY AND CONSTITUTIONAL AUTHORITY

This article focuses on municipal authority in Texas to regulate groundwater as an exercise of police power and whether such municipal groundwater regulation could amount to a compensable taking. As discussed in Section III, the Texas legislature has granted police powers to all Texas cities by statute, and for general law cities, such statutory grant is the only source of police power authority.³ Home rule cities, in addition to statutory grants, have police powers stemming directly from the Texas Constitution.⁴ In addition specific statutory authority exists pursuant to which cities may regulate groundwater wells. Should a city rely on these specific statutory grants, the city would nonetheless likely ultimately rely on its police powers that underlie the specific grant of authority, or its general statutory grant of police powers, or both. Thus, this paper devotes considerable analysis to the city's exercise of police powers to regulate ground-

3 See TEX. LOC. GOV'T CODE ANN. §§ 51.001, 54.001 (West 2013).

4 TEX. CONST. art. XI, § 5.

water. The following discusses statutes related to municipal authority to regulate groundwater.

B. STATUTORY GRANT OF POLICE POWER TO EVERY TYPE OF TEXAS CITY

The primary municipal authority for regulating groundwater wells is a municipality's police power.⁵ Texas has four primary types of cities: home rule cities, and Type A, B and C cities.⁶ Home rule cities derive their authority to exercise police powers both from the Texas Constitution and statutory grants of power.⁷ In addition, the Texas legislature has granted police power authority to every type of city by statute.⁸

The court in *Grothues* noted that, “[a] general grant of such power is found at section 54.001 of the Local Government Code, which states: (a) The governing body of a municipality may enforce each rule, ordinance, or police regulation of the municipality and may punish a violation of a rule, ordinance, or police regulation”⁹ The court explained, “[t]he term ‘municipality’ as used in § 54.001 encompasses general-law municipalities, home-rule municipalities, and special-law municipalities.”¹⁰

Another general grant of authority to Texas cities is found in section 51.001 of the Local Government Code, whereby a city may adopt an ordinance or police regulation that is for good government, peace, order or trade and commerce and is necessary for carrying out a power granted the city, which includes its police power.¹¹

Besides the general statutory grant of police powers to every type of city, the police power has also been expressly conferred on home rule cities by statute.¹² Other specific grants related to police power authority for general law cities are included in Local Government Code sections 51.012 (Type A city) and 51.032 (Type B city).¹³ As the *Grothues* court explained, the police power “is vested in the state and flows to a general law municipality through a legislative grant.”¹⁴

5 Brown v. Humble Oil & Refining Co., 83 S.W.2d 935, 940 (Tex. 1935).

6 City of Houston v. Johnson, 353 S.W.3d 499, 504 (Tex. App.—Houston [14th Dist.] 2011, no pet.).

7 City of Crosbyton v. Texas–New Mexico Utilities Co., 157 S.W.2d 418, 420 (Tex.Civ.App.—Amarillo 1941, writ ref'd w.o.m.).

8 Grothues v. City of Helotes, 928 S.W.2d 725, 729 n.6 (Tex. App.—San Antonio 1996, no writ) (citations omitted).

9 *Id.*

10 *Id.* (citing TEX. LOC. GOV'T CODE ANN. § 1.005(3) (West 1988)).

11 TEX. LOC. GOV'T CODE ANN. § 54.001 (West 2013).

12 Texas River Barges v. City of San Antonio, 21 S.W.3d 347, 355 (Tex. App.—San Antonio 2000, pet. denied) (citing TEX. LOC. GOV'T CODE ANN. § 54.004 (1999), which currently states, “[a] home-rule municipality may enforce ordinances necessary to protect health, life, and property and to preserve the good government, order, and security of the municipality and its inhabitants.”).

13 TEX. LOC. GOV'T CODE ANN. §§ 51.012, .032 (West 2013). In addition, Type B and C cities have generally been granted Type A city authority to the extent that the authority does not conflict with other provisions specific to a Type B or C class of city. TEX. LOC. GOV'T CODE ANN. §§ 51.035, .051 (West 2013).

14 *Grothues*, 928 S.W.2d at 729 n.6.

C. HOME RULE CITIES ALSO DERIVE POWERS DIRECTLY FROM TEXAS CONSTITUTION

Home rule cities derive their power from the Texas Constitution, as the Texas Supreme Court has explained:

A home rule city derives its power not from the Legislature but from Article XI, Section 5, of the Texas Constitution. Accepting cities and towns of more than 5,000 population have ‘full power of self-government, that is, full authority to do anything the legislature could theretofore have authorized them to do. The result is that now it is necessary to look to the acts of the legislature not for grants of power to such cities but only for limitations on their powers.’¹⁵

The Court further held that “[t]he powers of home rule cities are subject to and may be limited only by their charters or by the Constitution or by general law.”¹⁶ Expressed another way, a home rule city has all the powers of the state not inconsistent with the Texas Constitution, the general laws, or the city’s charter.¹⁷ This concept is embodied in the Local Government Code provision, applicable only to home rule cities, which states, “[t]he municipality has full power of local self-government.”¹⁸

D. INCORPORATION OF POLICE POWER IN HOME RULE CITY CHARTER

A home rule city’s charter is its organic act.¹⁹ The charter is the fundamental law of the municipality just as a constitution is the fundamental law of a state.²⁰ A city can exercise only such powers as are expressly granted by the charter, such powers as may be reasonably implied from the powers granted, and such powers as are incidental to the purpose for which the city was created.²¹

The opinion in *Texas River Barges* provides a helpful example of how a home rule city charter provision incorporates police powers:

The City Charter authorizes the City to enact ordinances ‘as shall be needed for the government, interest, welfare and good order of the city and the interest, welfare, health, morals, comfort, safety and convenience of its inhabitants.’ This provision incorporates the police power as a power of the City.²²

Similar provisions incorporating police powers are common to Texas home rule city charters.

E. MUNICIPAL AUTHORITY TO REGULATE NUISANCES

Statutes authorizing the regulation of nuisances, at least in some instances, also apply to the regulation of groundwater wells. Local Government Code, chapter 217, autho-

15 Lower Colorado River Auth. v. City of San Marcos, 523 S.W. 2d 641 (Tex. 1975) (citations omitted).

16 *Id.* at 644.

17 Proctor v. Andrews, 972 S.W.2d 729, 733 (Tex. 1998).

18 TEX. LOC. GOV’T CODE ANN. § 51.072 (a) (West 2013).

19 Anderson v. City of San Antonio, 67 S.W.2d 1036, 1037 (Tex. 1934).

20 Texas River Barges v. City of San Antonio, 21 S.W.3d 347, 354 (Tex. App.—San Antonio 2000, pet. denied).

21 *Anderson*, 67 S.W.2d at 1037.

22 *Texas River Barges*, 21 S.W.3d at 355 (citations omitted).

rizes cities to define and regulate nuisances.²³ Although the language differs from the grant to home rule cities, Chapter 217 generally grants such authority to regulate nuisances to Type A and Type B cities.²⁴ At least one Texas city has declared private groundwater wells a nuisance if they either pollute or tend to pollute the city's water supply in a manner that cannot be corrected.²⁵

Common law distinguishes between nuisances per se and nuisances in fact.²⁶ A "nuisance per se" is a nuisance at all times and locations.²⁷ A "nuisance in fact" is a condition that is a nuisance because of its particular surroundings.²⁸ For example, courts have expressed that although an oil and gas well is not a nuisance per se, considering the circumstances, wells clustered in an urban area may be considered a nuisance.²⁹ The

23 TEX. LOC. GOV'T CODE ANN. § 217.042(a) (West 2013).

24 *Id.* §§ 217.002, 217.022. Type C cities are not given an express grant of authority regarding regulating nuisances, although pursuant to Section 51.051(a), such authority appears to be granted indirectly. That provision states:

The governing body of a Type C general-law municipality with 501 to 4,999 inhabitants has the same authority and is subject to the same duties as a Type A general-law municipality unless the authority or duties conflict with a provision of this code relating specifically to a Type C general-law municipality.

Id. § 51.051(a). Type B cities have a similar grant of Type A municipal authority at Section 51.035. Thus, the authority to *define* a nuisance, which is granted specifically only to Type A cities, may by virtue of these provisions also be a power granted to Type B and C cities.

25 Victoria, Texas, CODE OF ORDINANCES ch. 13, art. II, § 13-74, *available at* <http://library.municode.com/index.aspx?clientId=10065>. This City of Victoria ordinance states:

Any well or other opening now constructed or which may hereafter be constructed penetrating the city's underground water supply, and which has polluted or contaminated or tends, in the judgment of the director, water and wastewater department, to pollute or contaminate the city's water supply and which cannot be corrected, in the judgment of the director, to prevent pollution or contamination, is hereby declared a nuisance, and on notice to the owner of such well or opening, or to the owners agent in charge of it or on the property of which is situated, issued by the director, such nuisance shall be abated by the owner within sixty (60) days from date of such notice, by filling and plugging the well or opening in the manner provided for in this division of abandoned wells, and if such owner or agent shall fail to abate such nuisance within such time or if after exercising reasonable diligence, the director is unable to locate the owner or the owner's agent, the director shall go on the land or property upon such the well is situated, and abate such nuisance in the manner above provided, the owner thereof shall be liable to the city for the cost of such work.

26 GTE Mobilnet of S. Tex. Ltd. P'ship v. Pascouet, 61 S.W.3d 599, 614 (Tex. App.—Houston [14th Dist.] 2001, pet. denied).

27 *Id.*

28 *Id.*

29 *See, e.g.,* Marris v. City of Oxford, 32 F.2d 134, 139–40 (8th Cir. 1929). The *Marris* court stated, "[w]hile oil and gas wells are not nuisances per se, and the business of drilling and operating them is ordinarily legitimate and harmless, it is conceivable that they may become detrimental in a high degree. . .when work of the kind under consideration is carried on in residential or business sections of a town or city without some limit to the number of

Marrs court commented on the multiplier effect—the more wells in a residential area, the more problems. The court stated:

The greater the number of wells in a city block the greater will be the annoyance and hazards to the public. Indeed, it would be hard to say that an ordinance prohibiting the drilling and operation of any well within the business or residential districts of a city would be an unreasonable and invalid exercise of the police power.³⁰

Although for somewhat different reasons, it may be possible in some instances to describe as a nuisance the proliferation of groundwater wells in a crowded urban setting. This may be the case where there are significantly increased chances of pollution of both the aquifer and the public water supply due to numerous perforations of the aquifer, providing a route for pollutants and possible cross-connections with the public system that would require vigilant monitoring to avoid.³¹ A city regulating or seeking to regulate groundwater wells for health and safety reasons may consider defining as a nuisance the drilling or operation of groundwater wells in a certain manner within the city's jurisdiction if the facts justify such a definition. However, by no means is it necessary for a city to contend that groundwater wells are a nuisance before regulation for public health and safety or other police power objectives can be considered. In cases discussed herein, where courts have upheld municipal regulation of oil and gas wells, cities have typically not relied on the characterization of oil and gas wells as a nuisance.³²

F. OTHER STATUTORY AUTHORITY FOR MUNICIPAL REGULATION OF GROUNDWATER—MUNICIPAL SETTINGS DESIGNATION, PROTECTION OF WATERSHEDS, AND WATER QUALITY

To prevent a use of or contact with groundwater that presents an actual or potential threat to human health, all types of Texas cities may regulate the pumping, extraction, or use of groundwater by persons other than retail public utilities by establishing a mu-

wells in a given area, they will necessarily become nuisances of a most aggravated sort to its inhabitants and its business interests." *Id.*

30 *Marrs*, 32 F.2d at 140.

31 Even though more and more areas are now regulated by groundwater conservation districts, there may still be municipal areas without a district where a proliferation of private residential wells in an aquifer that is, or at some point may become, an important supply for municipal water could result in dangerously unregulated drainage of the aquifer in times of severe drought.

32 Note that if a property use has been restricted based upon a state's common law of nuisance, it can serve as an exception to the general rule that a regulation totally depriving the owner of all economically beneficial use is a compensable taking. In this regard, the U.S. Supreme Court has explained, "[w]e held in *Lucas* that the government must pay just compensation for such 'total regulatory takings,' except to the extent that 'background principles of nuisance and property law' independently restrict the owner's intended use of the property." *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 538 (2005).

nicipal setting designation.³³ This law applies where there has been serious contamination of groundwater and may be useful in “brownfields” recovery programs.³⁴

Some home rule cities may also have authority to regulate groundwater wells under a statute relating to the protection of streams and watersheds by home rule cities.³⁵ Among other things, this law authorizes a home rule municipality to prohibit the pollution of watersheds, police recharge features and areas, and protect and police watersheds.³⁶ To the extent that the purpose in regulating groundwater wells is related to these issues, home rule cities may consider this as additional authority for their police powers.

If one of a municipality’s objectives in regulating groundwater wells is the protection of water quality, then authority to regulate groundwater wells may also stem from Texas Water Code section 26.177, whereby a city may establish a water pollution control and abatement program.³⁷ This authority may be extended to areas within the ETJ that, in the judgment of the city, should be included for achieving the program objectives within the city.³⁸

G. TEXAS WATER WELL DRILLER RULES

Texas Water Well Driller rules promulgated pursuant to the Texas Occupations Code, Chapters 1901 and 1902, while not a grant of authority to municipalities, do recognize municipal ordinance authority with regard to groundwater well drilling. The state agency rules state expressly that they operate in addition to any requirements under municipal ordinance (or groundwater district), providing that “[w]ells shall be completed in accordance with the following specifications and in compliance with the local groundwater conservation district rules or incorporated city ordinances.”³⁹ With regard to well drilling, the rules primarily relate to well spacing and construction.⁴⁰ Although it appears that the state spacing rules would preclude well drilling on most typically-sized

33 TEX. LOC. GOV’T CODE ANN. § 551.005 (West 2013); TEX. HEALTH & SAFETY CODE ANN. §§ 361.808(b) (West 2013).

34 See, e.g., *Municipal Settings Designation*, CITY OF DALLAS, <http://www.dallascityhall.com/oeq/msd.html> (lasted visited Feb. 9, 2014). “The MSD Legislation provided a mechanism for allowing a developer to limit or avoid conducting a cleanup of contaminated groundwater if access to the groundwater has been restricted from use as potable water by an ordinance. The intent of the legislation is to encourage redevelopment of vacant or abandoned Brownfield properties while protecting the public health.” *Id.*

35 TEX. LOC. GOV’T CODE ANN. § 551.002 (West 2013).

36 *Id.*

37 TEX. WATER CODE ANN. § 26.177 (West 2013). Chapter 26 of the Water Code, in its definitions section, includes groundwater in the definition of “water,” and the definition of “to discharge” includes relevant terms such as “conduct,” “drain,” “run,” and “allow to seep.” *Id.* §§ 26.001(5), (20) (West 2013).

38 *Id.* at § 26.177(b). Authority to extend these regulations to the ETJ is subject to Section 26.179. This section, however, is aimed at surface water issues. *Id.* at § 26.179 (West 2013). Subsections (c) and (o) also limit the applicability of Section 26.179 to certain municipalities.

39 16 TEX. ADMIN. CODE § 76.100(a) (2013) (Tex. Dept of Licensing and Regulation, Technical Requirements—Locations and Standards of Completion for Wells).

40 *Id.* § 76.100.

residential lots in a city, the rules provide for exceptions and variances such that they would allow for a well unless otherwise prohibited by city ordinance.⁴¹

By way of example, the property line setback in the rules is 50 feet, and without an exception, the setback rule could not be met on a common residential lot with dimensions of 50 feet by 100 feet.⁴² Only lots with both a width and a length of more than 100 feet would possibly have space if other setbacks or obstructions did not prevent the well drilling. The rule, however, provides for wells to be drilled as close as 5 feet from a property line if certain well construction standards are met.⁴³ In addition, a property owner can seek a variance from the 5 foot distance to drill even closer to the property line.⁴⁴ Other considerations under the rules are distances from septic, as well as public and private, sewer lines.⁴⁵ Again, the distance requirements vary with the type of well construction.⁴⁶

H. ZONING AUTHORITY TO REGULATE WELLS

Zoning has long been widely recognized by courts as a valid exercise of municipal police powers.⁴⁷ Texas courts have plainly held that, “[t]he enactment of zoning laws is an exercise of the police powers of the State by the legislative branch of the government. The State of Texas has delegated some of this legislative authority to municipalities.”⁴⁸

Consistent with this recognition, the list of purposes for the statutory grant of zoning authority to cities in Local Government Code section 211.001 reads like a description of police power objectives, stating that “[t]he powers granted under this subchapter are for the purpose of promoting the public health, safety, morals, or general welfare”⁴⁹ Regarding the use of this authority to regulate wells, one commentator recognized that Texas cities may regulate oil and gas drilling pursuant to their zoning authority within the municipal limits.⁵⁰ Zoning authority is also available to cities for regulating groundwater wells as long as statutory requirements in Chapter 211 of the Local Government Code are met.

Zoning statutes, in fact, do provide a specific grant of authority to regulate groundwater production in the instance where contact with groundwater may present a threat to human health, similar to authority in Local Government Code sections 551.005 and 212.003(a). Specifically, Local Government Code section 211.003 provides, “[t]he gov-

41 *Id.*

42 *See id.* § 76.100(a)(4).

43 *Id.* § 76.100(a)(2).

44 *See id.* § 76.109(a).

45 *Id.* § 76.100(a)(4).

46 *Id.*

47 *See Lombardo v. City of Dallas*, 73 S.W.2d 475, 483 (Tex. 1934) (quoting extensively from *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926)).

48 *Lawton v. City of Austin*, 404 S.W.2d 648, 650 (Tex. Civ. App.—Austin 1966, writ ref'd n.r.e).

49 TEX. LOC. GOV'T CODE ANN. § 211.001 (West 2013).

50 Dwight Shupe, *Takings Litigation: Compensable Regulatory Takings in Texas*, No. 4 ROCKY MTN. MIN. L. INST. Paper No. 8 (2004) (noting that “[i]f oil and gas development is regulated as part of a city’s comprehensive zoning ordinance pursuant to the authority granted by Chapter 211 of the Texas Local Government Code (Municipal Zoning Authority), then such powers are limited to the corporate limits of the city.”).

erning body of a municipality may regulate: . . . the pumping, extraction, and use of groundwater by persons other than retail public utilities, as defined by Section 13.002, Water Code, for the purpose of preventing the use or contact with groundwater that presents an actual or potential threat to human health.”⁵¹ This same section also provides broad authority to cities to regulate “the location and use of buildings, other structures, and land for business, industrial, residential and other purposes”⁵²

State law requires that zoning regulations be adopted in accordance with a comprehensive plan designed to accomplish various specified purposes.⁵³ Relevant to the regulation of groundwater, those purposes include regulations designed to “promote health and the general welfare” as well as to “facilitate the adequate provision of transportation, water, sewers, schools, parks, and other public requirements.”⁵⁴

Texas courts have held, however, that with regard to cities regulating oil and gas well drilling, the exercise of police power by ordinance requiring a permit within the city limits did not require the city to include in its ordinance all statutory requirements for zoning regulations.⁵⁵ Thus, the exercise of police powers for regulating wells is an authority independent of a city’s zoning powers, although zoning authority may be used in addition to a city’s general grant of police powers.⁵⁶

I. SUBDIVISION REGULATIONS TO REGULATE WELLS

Similar to zoning, the authority granted to cities to regulate subdivisions and plats also has similar police power objectives and provides another means by which cities can regulate private water well drilling. Statutory authority for municipal subdivision regulation provides that “[a]fter a public hearing on the matter, the governing body of a municipality may adopt rules governing plats and subdivisions of land within the municipality’s jurisdiction to promote the health, safety, morals, or general welfare of the municipality and the safe, orderly, and healthful development of the municipality.”⁵⁷

That authority can be extended to a city’s ETJ, and this includes—besides a general extension of the subdivision authority into the ETJ—a specific provision of authority to regulate groundwater use for preventing a threat to human health.⁵⁸

51 TEX. LOC. GOV’T CODE ANN. § 211.003(a)(6) (West 2013).

52 *Id.* § 211.003(a)(5).

53 *Id.* § 211.004(a).

54 *Id.*

55 *Unger v. State*, 629 S.W.2d 811, 813 (Tex. App.—Fort Worth 1982, writ ref’d).

56 *See Lombardo v. City of Dallas*, 73 S.W.2d 475, 479 (Tex. 1934). The Texas Supreme Court in *Lombardo* noted that zoning-type actions had already been authorized by courts pursuant to police powers before the enactment of zoning regulations. *Id.* In this regard the Court stated:

[i]t is not to be doubted that long before the enactment of zoning legislation in the United States the courts of the country had found ample authority in the dominance of the police power to regulate, govern, and restrict the construction of buildings, and in some instances prohibit their location and construction for certain uses, and to prohibit certain occupations in specified localities.

Id. at 479.

57 TEX. LOC. GOV’T CODE ANN. § 212.002 (West 2013).

58 *Id.* § 212.003 (West 2013). *See also id.* § 212.0101 (stating, in regards to other municipal subdivision authority related to groundwater, that a city can require certification of ground-

J. MUNICIPAL AUTHORITY TO REGULATE WITHIN THE MUNICIPALITY'S ETJ

A patchwork of statutes provides cities some ability to exercise ordinance authority related to groundwater well regulation in their ETJs. As mentioned, a city can elect to apply subdivision regulations in the ETJ,⁵⁹ but zoning regulation is limited to areas within the city limits.⁶⁰ The authority to protect recharge areas and watersheds under section 551.002 of the Local Government Code may be enforced by certain cities within their ETJ and even beyond that area in some instances.⁶¹ Authority to police watersheds in the ETJ, depending on the given facts, may support municipal regulation of groundwater wells in the ETJ. A city may apply an ordinance establishing a municipal setting designation under section 551.005(b) of the Local Government Code in the ETJ.⁶² Water Code section 26.177, as discussed, also provides authority to extend a water pollution abatement program to the ETJ.⁶³ Finally, pursuant to Local Government Code section 217.042, a home rule city can prohibit a nuisance within 5000 feet (a little less than a mile) outside its corporate limits.⁶⁴

K. CONCLUSION REGARDING MUNICIPAL REGULATION OF GROUNDWATER: STATUTORY GRANT OF POLICE POWERS MOST SIGNIFICANT

Although there are a variety of statutes—and in the case of home rule cities, constitutional provisions—authorizing some extent of municipal regulation of groundwater, the broadest and most significant of these is the grant of police powers to cities. The remainder of this article is dedicated to the interplay between municipal police powers and property owners' constitutional rights and the relevancy of this interplay to municipal regulation of groundwater.

III. POLICE POWERS

A. INTRODUCTION: EXERCISE OF POLICE POWERS TO PROTECT PUBLIC HEALTH AND SAFETY SUPPORTS DEFENSE OF TAKINGS CLAIM

While there are a variety of statutory authorizations by which a city may regulate groundwater, the most likely challenge to that authority will be a claim that the regulation constitutes a taking of property in violation of the U.S. and Texas Constitutions. When police power is protective of public health and safety, courts will weigh that in a regulatory takings analysis against impacts to property rights using a balancing test.⁶⁵ This section provides an overview of fundamental aspects of municipal police power.

water availability with the submission of a subdivision plat when the intended source of water for the subdivision is groundwater under the land).

59 TEX. LOC. GOV'T CODE ANN. § 212.003 (West 2013).

60 *Id.* § 211.003; *Lombardo v. City of Dallas*, 73 S.W.2d 475, 479 (Tex. 1934).

61 TEX. LOC. GOV'T CODE ANN. § 551.002(c) (West 2013).

62 *Id.* § 551.005(b).

63 TEX. WATER CODE ANN. § 26.177 (West 2013).

64 TEX. LOC. GOV'T CODE ANN. § 217.042(a) (West 2013).

65 *See Lombardo*, 73 S.W.2d at 479.

Texas courts' approach to assessing a takings claim and how that relates to municipal groundwater regulation is also discussed.

B. WHAT ARE POLICE POWERS? POWER TO PREVENT DETRIMENTAL USES OF PROPERTY

The Texas Supreme Court has explained that “[t]he police power may be loosely described as the power of the sovereign to prevent persons under its jurisdiction from conducting themselves or using their property to the detriment of the general welfare.”⁶⁶ This same court, on another occasion, declared that “[t]he police power is a grant of authority from the people to their governmental agents for the protection of the health, the safety, the comfort and the welfare of the public. In its nature it is broad and comprehensive.”⁶⁷ Besides the statutory and constitutional grants of police powers discussed above, the Texas Supreme Court has also recognized that “a municipal corporation is considered an arm of the State and has the police power to protect the safety of the public.”⁶⁸

C. ALL PROPERTY HELD SUBJECT TO VALID EXERCISE OF POLICE POWER

A landmark Texas Supreme Court case regarding the extent of municipal police powers is *Lombardo v. City of Dallas*.⁶⁹ *Lombardo* concerned the validity of the state's zoning statutes and Dallas' zoning ordinances, in particular the exclusion of businesses from residential areas.⁷⁰ The court upheld both the zoning statute and the ordinance.⁷¹ In framing the discussion of police powers and their extent, it is worth reviewing some of the holdings from this opinion as it makes numerous clear and essential pronouncements relating to municipal exercise of police powers with regard to both due process and takings claims.⁷² Regarding the constitutionality of police power regulations that affect private property under due process, the court confirmed the principle that:

66 *DuPuy v. City of Waco*, 396 S.W.2d 103, n.3 (Tex. 1965).

67 *Spann v. City of Dallas*, 235 S.W. 513, 515 (Tex. 1921).

68 *Town of Ascarte v. Villalobos*, 223 S.W.2d 945, 950 (Tex. 1949). Texas courts have also recognized the grant of police power authority to districts created under Article XVI, Section 59 of the Texas Constitution. See, e.g., *Banker v. Jefferson Cnty. Water Control and Imp. Dist. No. One*, 277 S.W.2d 130, 133–34 (Tex. Civ. App.—Beaumont 1955, writ ref'd n.r.e.).

69 *Lombardo*, 73 S.W.2d 475.

70 *Id.* at 476, 479.

71 *Id.* at 483.

72 It is important to consider earlier takings cases in light of clarifications made by the U.S. Supreme Court in *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528 (2005). Although *Lingle* has not yet been fully adopted by the Texas Supreme Court, even in the recent *Day* opinion discussed herein, at least one appeals court has expressed that they expect it to be adopted when the Texas Supreme Court has an opportunity. *2800 La Frontera No. 1A, Ltd. v. City of Round Rock*, No. 03-08-00790-CV, 2010 WL 143418, at *7 (Tex. App.—Austin 2010, no pet.) (mem. op.). The *Lingle* opinion, among other things, makes a clear distinction between takings and substantive due process claims and the standards for analyzing these. *Lingle*, 544 U.S. at 540–43. Importantly, the *Lingle* Court concluded that the test of whether a regulation substantially advances legitimate state interests prescribes an inquiry

All property is held subject to the valid exercise of the police power; nor are regulations unconstitutional merely because they operate as a restraint upon private rights of person or property or will result in loss to individuals. The infliction of such loss is not a deprivation of property without due process of law; the exertion of the police power upon subjects lying within its scope, in a proper and lawful manner, is due process of law.⁷³

Besides affirming that the proper exercise of police power meets the constitutional due process requirements, the court also addressed the police powers' relationship with the constitutional protection from property being taken without just compensation, stating:

Moreover, police regulations do not constitute a taking of property under the right of eminent domain; and compensation is not required to be made for such loss as is occasioned by the *proper* exercise of the police power. . . . It may be invoked to abridge the right of the citizen to use his private property when such use will endanger public health, safety, comfort or welfare,—and only when this situation arises.⁷⁴

However, as discussed in more detail below, the Texas Supreme Court has also stated that “a restriction in the permissible uses of property or a diminution in its value, resulting from regulatory action within the government’s police power, may or may not be a compensable taking . . . ‘not every regulation is a compensable taking, although some are.’”⁷⁵ Also discussed in detail below, in determining whether a regulation effects a taking, Texas courts now apply a balancing test adopted from federal takings jurisprudence.⁷⁶

D. UNDER DUE PROCESS TEST, VALIDITY OF POLICE POWER ACTION FOUNDED ON REASONABLENESS

Aside from the threat of a compensable taking, the validity of an ordinance can be challenged by a due process claim. With regard to substantive due process claims, the validity of a police power action is founded in its reasonableness, and a measure of its reasonableness is whether it is reasonably necessary to achieve a legitimate police power objective.⁷⁷ The court in *Lombardo* stated plainly that “every regulation adopted under the police power must be a reasonable one.”⁷⁸ Further, the court held that “to be valid as an exercise of this [police] power, an ordinance must be reasonable in its operation upon

into the nature of due process, not a takings test, and that it has no proper place in takings jurisprudence. *Id.* at 540.

73 *Lombardo*, 73 S.W.2d at 478.

74 *Id.* at 478–79. As discussed below in greater detail, today, whether a regulation is a “proper” exercise of police power that would not be a taking—and consequently would not require compensation—is now determined by a balancing test with factors adopted by the Texas Supreme Court from *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104 (1978).

75 *Sheffield Dev. Co., Inc. v. City of Glenn Heights*, 140 S.W.3d 660, 670 (Tex. 2004) (quoting *City of College Station v. Turtle Rock Corp.*, 680 S.W.2d 802, 804 (Tex.1984)).

76 *See id.* at 673 (describing the balancing test Texas courts use to determine if a regulation effects a taking).

77 *Lombardo*, 73 S.W.2d at 478.

78 *Id.* at 479.

the persons whom it affects”⁷⁹ The court held more specifically that “[t]o be valid and constitutional ordinances . . . [they must] have a reasonable relation to the preservation of the public health, safety, morals and comfort of the inhabitants.”⁸⁰

Regarding reasonableness, in assessing a substantive due process challenge, courts also assess whether the regulation has a rational relationship to its purpose. The Texas Supreme Court, for example, has held that “[i]f it is at least fairly debatable that the decision was rationally related to legitimate government interests, the decision must be upheld. The ordinance will violate substantive due process only if it is *clearly* arbitrary and unreasonable.”⁸¹ Relevant to the reasonableness of governmental authority to regulate groundwater, in *Barshop v. Medina County Underground Water Conservation District*, the Texas Supreme Court upheld the Edwards Aquifer Act—which had created the Edwards Aquifer Authority and authorized that entity to regulate groundwater—in response to a claim that the Act was unconstitutional on its face under various constitutional provisions.⁸² In response to a challenge that the Act denied property owners’ substantive due process—claiming that the statute had no rational basis and was “an overbroad application of the police power”—the Court held that the provisions of the Act were “all rationally related to legitimate state purposes in managing and regulating this vital resource.”⁸³

As a general principle, presumptions favor the validity of a municipal ordinance enacted pursuant to police powers. As one court held, “[i]n determining the constitutionality of an ordinance passed pursuant to the police power of the city, it must be borne in mind that the presumptions favor the ordinance. For a challenge to be successful, the ordinance must clearly appear to be unreasonable and arbitrary.”⁸⁴

E. POLICE POWER DOES NOT AUTHORIZE AD HOC ACTIONS, BUT RATHER MUST BE EXERCISED BY ORDINANCE

Police power is not a *carte blanche* grant of authority to a governmental entity to act at any time as it deems necessary. As courts have explained, “[p]olice power does not authorize government officials to make an *ad hoc* determination that a particular activity is detrimental to the public good and then mete out an *ad hoc* punishment. The police power must ordinarily be exercised through properly enacted statutes, ordinances, or regulations.”⁸⁵ The court in *Texas River Barges* recognized that “pursuant to its police power, a municipality may enact ordinances designed to promote the public safety and welfare.”⁸⁶

79 *Id.*

80 *Id.* at 481 (quoting Eugene McQuillin, *The Law of Municipal Corporations* § 962 (2d ed. 1928)).

81 *Mayhew v. Town of Sunnyvale*, 964 S.W.2d 922, 938 (Tex. 1998) (citations omitted).

82 925 S.W.2d 618, 638 (Tex. 1996).

83 *Id.* at 633.

84 *Shelby Operating Company v. City of Waskom*, 964 S.W.2d 75, 82 (Tex. App.—Texarkana 1998, *pet. denied*).

85 *Texas River Barges v. City of San Antonio*, 21 S.W.3d 347, 356 n.1 (Tex. App.—San Antonio 2000, *pet. denied*).

86 *Id.* at 355.

F. CONFLICTS: MUNICIPAL POLICE POWER CONTROLLING DESPITE REGULATION OF SAME SUBJECT BY STATE LAW

As discussed in more detail below, several Texas courts have also found that city regulation of oil and gas drilling is permissible under a city's police power, even in instances where a mineral right owner has obtained a well permit from the Railroad Commission under state law.⁸⁷ Similarly, zoning regulations, which are an exercise of police power, recognize this principle by statute whereby standards set by municipal ordinance higher than those set by statute are controlling.⁸⁸

Home rule cities have broad powers subject to the Texas Constitution, which provides that "[t]he adoption or amendment of charters is subject to such limitations as may be prescribed by the Legislature, and no charter or any ordinance passed under said charter shall contain any provision inconsistent with the Constitution of the State, or of the general laws enacted by the Legislature of this State."⁸⁹ Specifically with regard to home rule cities, courts have held that the fact that the legislature has addressed a subject does not ordinarily prevent a home rule city from regulating the same subject.⁹⁰ The Texas Supreme Court has held that "if the Legislature chooses to preempt a subject matter usually encompassed by the broad powers of a home-rule city, it must do so with unmistakable clarity."⁹¹

87 See, e.g., *Unger v. State of Texas*, 629 S.W.2d 811 (Tex. App.—Fort Worth 1982, writ ref'd).

88 The Local Government Code, in a section relating to Conflict With Other Laws, provides that:

If a zoning regulation adopted under this subchapter requires a greater width or size of a yard, court, or other open space, requires a lower building height or fewer number of stories for a building, requires a greater percentage of lot to be left unoccupied, or otherwise imposes higher standards than those required under another statute or local ordinance or regulation, the regulation adopted under this subchapter controls. If the other statute or local ordinance or regulation imposes higher standards, that statute, ordinance, or regulation controls.

TEX. LOC. GOV'T CODE ANN. § 211.013(a) (West 2013) (emphasis added).

89 TEX. CONST. art. XI, §5.

90 See *Dallas Merchant's and Concessionaire's Ass'n v. City of Dallas*, 852 S.W.2d 489, 491 (Tex. 1993). Quoting earlier Texas Supreme Court opinions, the court in *Dallas Merchant's and Concessionaire's Ass'n* held:

[T]he mere fact that the legislature has enacted a law addressing a subject does not mean the complete subject matter is completely preempted. . . a general law and a city ordinance will not be held repugnant to each other if any other reasonable construction leaving both in effect can be reached.

Id. In *Dallas Merchant's and Concessionaire's Ass'n*, the court based its holding on specific language in state law that preempted local ordinances concerning alcohol sales on express statutory language, stating, "[i]t is the intent of the legislature that this code shall exclusively govern the regulation of alcoholic beverages in this state . . ." *Id.* at 491.

91 *Id.* at 491. An example of a court requiring this unmistakable clarity can be found in *Texas River Barges* where the court concluded that the city's police powers authorized the city "to enact ordinances regulating navigation on the River within the City's boundaries and that the exercise of this authority does not conflict with the legislation creating SARA [San Antonio River Authority]." *Texas River Barges v. City of San Antonio*, 21 S.W.3d 347, 355 (Tex. App.—San Antonio 2000, pet. denied). The court found that similar authority

G. POLICE POWER NOT STATIC; BROAD DISCRETION

Importantly, what may not have been considered a valid police power action in the past may today be considered a proper exercise of this authority.⁹² For this reason, courts have recognized the importance of police powers remaining broad and flexible, and as one court expressed, “[p]olice power is not static or unchanging. As the affairs of the people and government change and progress, so the police power changes and progresses to meet the needs.”⁹³

H. LIMITS TO POLICE POWERS

Police powers extend only so far as is reasonably necessary to achieve the objective of the regulation. The Texas Supreme Court has held that police power “is commensurate with, but does not exceed, the duty to provide for the real needs of the people in their health, safety, comfort and convenience as consistently as may be with private property rights.”⁹⁴ The court further elaborated:

[T]o be valid as an exercise of this [police] power, an ordinance must be reasonable in its operation upon the persons whom it affects, and must not be unduly oppressive—that is, it must appear that the means adopted are reasonably necessary and appropriate for the accomplishment of a legitimate object falling within the domain of the police power.⁹⁵

Other opinions have similarly expressed that police power extends only to regulations reasonably necessary to protection of public health, safety and morals, and “attempted regulations which extend beyond this legitimate scope run afoul of due process requirements of both state and federal Constitutions.”⁹⁶

IV. STANDARDS FOR ASSESSING CONSTITUTIONALITY OF AN ORDINANCE ADOPTED PURSUANT TO POLICE POWER

A. INTRODUCTION: POLICE POWERS AND TAKINGS

As the Texas Supreme Court has explained:

The Just Compensation Clause of the Fifth Amendment provides that ‘private property [shall not] be taken for public use, without just compensation.’ This prohibition has been incorporated through the Fourteenth Amendment to apply to the individual states. Similarly, article I, section 17 of the Texas Constitution provides, in pertinent part, that no ‘person’s property shall be taken, damaged or

to that exercised by the city was included in the enabling legislation of the river authority had never been triggered since SARA never constructed a certain statutorily authorized canal project. *Id.* at 353–54.

92 *City of Breckenridge v. Cozart*, 478 S.W.2d 162, 165 (Tex. Civ. App.—Eastland 1972, writ ref’d n.r.e.) (citations omitted).

93 *Id.*

94 *Lombardo v. City of Dallas*, 73 S.W.2d 475, 478 (Tex. 1934).

95 *Id.* at 479.

96 *Falfurrias Creamery Co. v. City of Laredo*, 276 S.W.2d 351, 353 (Tex. Civ. App.—San Antonio 1955, writ ref’d n.r.e.).

destroyed for or applied to public use without adequate compensation being made⁹⁷

How these few words have actually been interpreted to determine whether property has indeed been taken, and hence compensation required, has been the subject of extensive analysis by the courts. “Takings can be classified as either physical or regulatory takings.”⁹⁸ Although physical takings are discussed briefly herein, the great majority of this article is devoted to a discussion of regulatory takings and ultimately how a claim of regulatory taking in the context of a municipal groundwater regulation would be analyzed by a court.

B. PHYSICAL TAKINGS—COMPENSATION FOR ACTUAL TAKING

If the exercise of police power results in property being actually taken and applied to public use, it will require compensation. In *DuPuy* the Texas Supreme Court stated:

[I]t is universally conceded that when land or other property is actually taken from the owner and put to use by the public authorities, the constitutional obligation to make just compensation arises, however much the use to which the property is put may enhance the public health, morals or safety.⁹⁹

“Physical takings occur when the government authorizes an unwarranted physical occupation of an individual’s property.”¹⁰⁰

C. REGULATORY TAKINGS—REGULATORY RESTRICTIONS ON USES OF PROPERTY UNDER POLICE POWERS MAY OR MAY NOT BE A COMPENSABLE TAKING

Some broader context is helpful before discussing the specific factors courts use in determining whether a regulatory taking has occurred. As previously mentioned, the Texas Supreme Court in *Sheffield* stated that “a restriction in the permissible uses of property or a diminution in its value, resulting from regulatory action within the government’s police power, may or may not be a compensable taking . . . not every regulation is a compensable taking, although some are.”¹⁰¹ Ultimately, only a takings analysis conducted as a result of a claim that takes into account all of the circumstances can determine whether a regulation of groundwater wells by a city has gone so far that compensation would be required.

Note that the Texas Supreme Court looks to federal jurisprudence for guidance in regulatory takings analysis.¹⁰² The U.S. Supreme Court in *Penn Central* referred to these determinations of whether or not a compensable taking has occurred as “ad hoc factual

97 *Mayhew v. Town of Sunnyvale*, 964 S.W.2d 922, 933 (Tex. 1998). The Fifth Amendment to the U.S. Constitution also provides the guarantee of due process before a person can be deprived of property. U.S. CONST. amend. V (“No person shall . . . be deprived of life, liberty, or property, without due process of law. . .”).

98 *Mayhew*, 964 S.W.2d at 933.

99 *DuPuy v. City of Waco*, 396 S.W.2d 103, 107 n.3 (Tex. 1965).

100 *Mayhew*, 964 S.W.2d at 933.

101 *Sheffield Dev. Co., Inc. v. City of Glenn Heights*, 140 S.W.3d 660, 670 (Tex. 2004).

102 *Id.* at 669.

inquiries” and noted that whether a regulation amounts to a taking depends largely upon the “particular circumstances in that case.”¹⁰³

D. JUSTICE HOLMES’ DILEMMA: GOVERNMENT CANNOT PAY FOR EVERY IMPACT OF REGULATION, BUT IF REGULATION GOES TOO FAR, IT IS A TAKING

Justice Holmes famously stated in the first regulatory takings case in the United States Supreme Court, “[g]overnment hardly could go on if to some extent values incident to property could not be diminished [by government regulation] without paying for every such change in the general law.”¹⁰⁴ Justice Holmes further explained that the general rule is that “while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking.”¹⁰⁵

E. WHEN DOES REGULATION GO TOO FAR? NO ONE TEST FOR A TAKING

The Texas Supreme Court has stated that there is “no one test” for determining a compensable taking, and “[t]he need to adjust the conflicts between private ownership of property and the public’s interests is a very old one which has produced no single solution.”¹⁰⁶ The U.S. Supreme Court similarly explained that “this Court, quite simply, has been unable to develop any ‘set formula’ for determining when ‘justice and fairness’ require that economic injuries caused by public action be compensated by the government”¹⁰⁷ The Texas Supreme Court has, in fact, described the attempt to decide when a regulation has gone too far as a “sophistic Miltonian Serbonian Bog,” explaining by footnote that a Serbonian Bog is described by John Milton in his book *Paradise Lost* as a place “[w]here armies whole have sunk.”¹⁰⁸

103 *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978).

104 *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922).

105 *Id.* at 415.

106 *City of Austin v. Teague*, 570 S.W.2d 389, 392 (Tex. 1978).

107 *Penn Cent. Transp. Co.*, 438 U.S. at 124.

108 *Sheffield Dev. Co., Inc. v. City of Glenn Heights*, 140 S.W.3d 660, 671 n.52 (Tex. 2004). Over time, by clarifying the tests for and categories of takings, it is arguable there has been improvement. For example, bringing at least some categorical organization to the bog, a Texas appeals court citing *Lingle* recently summarized the various regulatory takings:

A plaintiff potentially may invoke multiple distinct theories in challenging a government regulation as an unconstitutional taking. The plaintiff may assert (1) a physical taking, which occurs when regulatory action requires an owner to suffer physical invasion of his property; (2) a *Lucas*-type total regulatory taking, which occurs when regulatory action completely deprives an owner of all economically beneficial use of his property; (3) a *Penn Central* taking, which occurs when regulatory action unreasonably interferes with a property owner’s right to use and enjoy his property; or (4) a land-use exaction, which occurs when the government requires an owner to give up his right to just compensation for property taken in exchange for a discretionary benefit conferred by the government.

City of Houston v. Maguire Oil Co., 342 S.W.3d 726 (Tex. App.—Houston [14th Dist.] 2011, pet. denied) (citations omitted).

F. TAKING IS COMPENSABLE WHEN REGULATIONS RESULT IN PHYSICAL INVASION OR DEPRIVE ALL ECONOMICALLY BENEFICIAL USE

The Texas Supreme Court does note a few “small islands in the bog” where the U.S. Supreme Court has identified two types of regulatory action that are compensable without case-specific inquiry.¹⁰⁹ First, a regulation that compels a property owner to suffer a physical invasion is compensable.¹¹⁰ An example of a physical invasion by regulation is found in a U.S. Supreme Court decision holding that a “law requiring landlords to allow television cable companies to emplace cable facilities in their apartment buildings constituted a taking.”¹¹¹ Second, the Texas Supreme Court will find a compensable taking where regulation has deprived a property owner of all economically beneficial or productive use of the owner’s land; however, the Court cautions that this “is limited to the extraordinary circumstance when no productive or economically beneficial use of land is permitted.”¹¹² A taking of all economically beneficial or productive use is commonly referred to as a “*Lucas*-type” taking, based on the U.S. Supreme Court decision in *Lucas v. South Carolina Coastal Council*.¹¹³

G. THE *PENN CENTRAL* FACTORS

If a compensable taking cannot be determined within the physical taking or *Lucas* theories, a careful analysis will be required using what has popularly become known as the *Penn Central* factors (based on *Penn Central Transportation Co. v. City of New York*), which essentially balance public and private interests.¹¹⁴ This test looks at: (1) the economic impact of the regulation on the claimant; (2) the extent to which the regulation interferes with reasonable investment-backed expectations; and (3) the character of the governmental action.¹¹⁵

The *Sheffield* Court warned that these factors are not formulaic, but serve as guideposts, and that the Court considers all of the surrounding circumstances.¹¹⁶ In addition,

109 *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 671.

110 *Id.*

111 *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1015 (1992) (referring to *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435–40 (1982)).

112 *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 671 (quoting *Tahoe–Sierra Pres. Council, Inc., v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 330 (2002) (quoting *Lucas*, 505 U.S. at 1017–19)).

113 *See Lucas*, 505 U.S. at 1019. Note that the *Sheffield* court also held that a regulation will effect a taking if it fails to substantially advance a legitimate state interest. *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 671. However, if the Texas Supreme Court follows its practice of relying on federal constitutional law in regard to takings, then it is expected that this would change in response to *Lingle*.

114 *See Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 123–24 (1978).

115 *Id.*; *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 672, citing *Connolly v. Pension Benefit Guar. Corp.*, 475 U.S. 211, 224–25 (1986) (identifying three factors from *Penn Central* which have “particular significance” to finding a taking). Note that in both the *Penn Central* and *Sheffield* opinions, the Court initially refers to “distinct” investment-backed expectations, but both courts in their later analysis refer to “reasonable” investment-backed expectations. *See Penn Cent.*, 438 U.S. at 125; *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 677.

116 *See Sheffield Dev. Co., Inc.*, 140 S.W.3d at 672–73 (quoting *Tahoe–Sierra Pres. Council v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 326 n.23 (2002)).

the Texas Supreme Court has identified another test for considering whether a compensable taking has occurred, stating that there can be recovery of damages “when the government’s action against an economic interest of an owner is for its own advantage.”¹¹⁷

H. LINGLE AND THE “GOVERNMENT CHARACTER” *PENN CENTRAL* FACTOR

In 2005, the U.S. Supreme Court’s *Lingle* opinion changed the regulatory takings landscape. Beyond holding that a requirement that a regulation substantially advance legitimate state interests is not a valid takings test, the *Lingle* Court also clarified that regulatory takings analysis “aims to identify regulatory actions that are functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain. Accordingly, each of these tests focuses directly upon the severity of the burden that government imposes upon private property rights.”¹¹⁸ Further, in a statement that has caused some to question the importance of the third prong of the *Penn Central* factors, the Court stated that “the *Penn Central* inquiry turns in large part, albeit not exclusively, upon the magnitude of a regulation’s economic impact and the degree to which it interferes with legitimate property interests.”¹¹⁹

On this score, the U.S. Federal Circuit Court of Appeals has asserted, “we do not believe *Lingle* caused any diminution in the importance of the *Penn Central* character prong, at least with respect to public health and safety regulations.”¹²⁰ In addressing the *Lingle* Court’s treatment of the third *Penn Central* factor, this federal appeals court stated, “[I]n our view, although *Lingle* alters one aspect of analyzing regulatory takings, it leaves unchanged a substantial body of case law concerning the character prong. The asserted taking in *Lingle* had nothing to do with the safety or health of the public.”¹²¹ The court further pronounced that “[w]e think it is clear that *Lingle* neither addressed nor disturbed *Penn Central*’s consideration of the health and safety aspect of the regulations.”¹²²

The *Rose Acre Farms* opinion concerned a claim of regulatory taking for hens and eggs lost due to new U.S. Department of Agriculture salmonella regulations for which the court found no compensable taking.¹²³ Regarding the takings analysis under *Penn Central*, the court opined, “[t]here is little doubt that it is appropriate to consider the harm-preventing purpose of a regulation in the context of the character prong of a *Penn Central* analysis.”¹²⁴ Regarding the character of the government’s act, the court agreed with the U.S. government that “protecting the public health by identifying diseased eggs and forcing their owner to remove them from the table market, weighs strongly against finding a taking here.”¹²⁵

117 *City of Austin v. Teague*, 570 S.W.2d 389, 393 (Tex. 1978).

118 *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 539 (2005).

119 *Id.* at 540.

120 *Rose Acre Farms, Inc. v. United States*, 559 F.3d 1260, 1281 (Fed. Cir. 2009), *cert. denied*, 130 S.Ct. 1501 (2010).

121 *Id.* at 1279.

122 *Id.*

123 *Id.* at 1283–84.

124 *Id.* at 1281.

125 *Id.*

In explaining its holding, the *Rose Acre Farms* court stated:

The character of the governmental action factor requires a court to consider the purpose and importance of the public interest underlying a regulatory imposition, by obligating the court to ‘inquire into the degree of harm created by the claimant’s prohibited activity, its social value and location, and the ease with which any harm stemming from it could be prevented.’¹²⁶

This has prompted one commentator to conclude, “[e]xercises of the police power that directly protect public health and safety remain unlikely, even after *Lingle*, to be a taking under *Penn Central*.”¹²⁷

I. DUE PROCESS AND EQUAL PROTECTION CLAIMS

In addition to claims under the takings provision of the Fifth Amendment to U.S. Constitution and Article I, Section 17 of the Texas Constitution—which both require compensation when the government takes private property for public use—claimants contesting municipal regulations have asserted that their constitutional rights have been violated under the due process¹²⁸ and equal protection clauses.¹²⁹ However, the trend in

126 *Id.* at 1283 (quoting *Maritrans Inc. v. United States*, 342 F.3d 1344, 1356 (Fed. Cir. 2003)).

127 Robert Meltz, *Substantive Takings Law: A Primer*, THE 14TH ANNUAL CONFERENCE ON LITIGATING TAKINGS CHALLENGES TO LAND USE AND ENVIRONMENTAL REGULATIONS, Georgetown University Law Center, November 18, 2011, at 26, available at <http://www.vermontlaw.edu/Documents/2011TakingsConference/3%20Meltz-%20Substantive%20Takings%20Law%20Primer.pdf>. The author reached this conclusion after noting that there is disagreement among courts regarding the importance of the third *Penn Central* factor after *Lingle*. *Id.*

128 In *Mayhew v. Town of Sunnyvale*, the court well summarizes the due process standard stating:

A generally applicable zoning ordinance will survive a substantive due process challenge if it is designed to accomplish an objective within the government’s police power and if a rational relationship exists between the ordinance and its purpose. This deferential inquiry does not focus on the ultimate effectiveness of the ordinance, but on whether the enacting body could have rationally believed at the time of enactment that the ordinance would promote its objective. If it is at least fairly debatable that the decision was rationally related to legitimate government interests, the decision must be upheld. The ordinance will violate substantive due process only if it is *clearly* arbitrary and unreasonable.

Mayhew, 964 S.W.2d at 938 (citations omitted).

129 The Texas Supreme Court, with regard to equal protection claims, has explained that [a]n as-applied equal protection claim requires that the government treat the claimant different from other similarly-situated landowners without any reasonable basis. The ordinance generally must only be rationally related to a legitimate state interest to survive an equal protection challenge, unless the ordinance discriminates against a suspect class.

Id. at 939 (citations omitted). Regarding oil and gas well drilling, the court in *Helton*, for example, held in its equal protection analysis that the ordinance applied “to all persons similarly situated within the city limits.” *Helton v. City of Burkburnett*, 619 S.W.2d 23, 24 (Tex. Civ. App.—Fort Worth 1981, writ ref’d n.r.e.).

more recent Texas regulatory takings litigation, such as the *Sheffield* case, has been to simply assert a takings claim under Article, I, Section 17 of the Texas Constitution rather than a due process or equal protection claim.¹³⁰ Nonetheless, there are several, mostly older, cases involving municipal regulation of oil and gas wells that have analyzed challenges to ordinances under due process and equal protection claims that assess the validity of the police power regulation.¹³¹ If litigated today, these cases would likely include a takings claim and analysis wholly separate from the due process or equal protection claims. Therefore, it is important to be mindful of this change in approach as the analyses and holdings in some older cases may require some degree of interpolation into the more recent standards such as the *Penn Central* factors to assess how a court might treat similar cases today. What follows is a brief discussion of certain standards that were used to assess earlier challenges to municipal regulation of oil and gas wells and the linkage to the *Penn Central* takings analysis as more recently adopted by the courts. Although takings analysis has become more refined over time, as an aspect of the balancing test used to assess a takings claim, courts continue to apply a fact-sensitive test that includes a consideration of the character of the governmental action.

V. VARIOUS JURISDICTIONS ADDRESS TAKINGS CHALLENGES AND PREEMPTION CLAIMS RELATED TO RESTRICTIONS ON GROUNDWATER

In *Allegretti & Co. v. County of Imperial*, the property owner, Allegretti, challenged the constitutionality of a permit restricting the property owner's use of groundwater to 12,000 acre-feet per year for his entire property.¹³² As discussed below in *Baldwin*, the county's authority to regulate stems from the same state constitutional grant of police powers to cities and counties.¹³³ Allegretti purchased 2,400 acres of farm land and claimed that the permit limit restricted his ability to cultivate and irrigate to 800 acres or less.¹³⁴ Allegretti claimed that the county's action constituted: (1) a physical taking; (2) a per se taking for depriving him of all economically beneficial use of his land; and (3) a regulatory taking under the *Penn Central* standards.¹³⁵ The court decided that the county's action in approving the permit with use restrictions "did not effect a physical or regulatory taking."¹³⁶

130 See, e.g., *Sheffield Dev. Co., Inc.*, 140 S.W.3d at 660.

131 One commentator observed that earlier cases concerning regulation of oil and gas wells blended their constitutional analysis, stating, "Modern challenges, however, face the backdrop of cases decided under what I have earlier called the "sausage" approach to constitutional law. In these cases, substantive due process, equal protection and regulatory takings analysis tend to be blended into one big sausage." Bruce M. Kramer, *Local Land Use Regulation of Oil and Gas Development*, in *Surface Use for Mineral Development in the New West: Finding Good Ground 16* (Rocky Mountain Mineral Law Foundation, 2008).

132 *Allegretti & Co. v. Conty. of Imperial*, 42 Cal.Rptr.3d 122, 125 (2006), cert. denied, 549 U.S. 1113 (2007).

133 *Baldwin v. Cnty. of Tehama*, 36 Cal. Rptr. 2d 886, 890–91 (1994).

134 *Allegretti & Co.*, 42 Cal. Rptr. 3d at 133.

135 *Id.* at 125–26.

136 *Id.* at 126.

The court provided a detailed analysis of the takings claim, addressing each theory in turn.¹³⁷ Regarding the claim of physical invasion, the court concluded that “[t]he County’s permit decision does not effect a per se physical taking under any reasonable analysis.”¹³⁸ Allegretti based his claim for physical invasion on the federal court decision in *Tulare Lake Basin Water Storage District v. United States*.¹³⁹ The court made clear that it was not bound to follow a lower federal court opinion, that the opinion was distinguishable, and that the opinion was later undercut in *Klamath Irrigation District v. United States*.¹⁴⁰ The court strongly repudiated the *Tulare Lake* decision, declaring:

[W]e disagree with Tulare Lake’s conclusion that the government’s imposition of pumping restrictions is no different than an actual physical diversion of water. The reasoning is flawed because in that case the government’s passive restriction, which required the water users to leave water in the stream, did not constitute a physical invasion or appropriation like the government’s diversion in *International Paper Co. v. United States*, or its low flight of army and navy airplanes in *Causby*. Tulare Lake’s reasoning disregards the hallmarks of a categorical physical taking, namely, actual physical occupation or physical invasion of a property interest.¹⁴¹

The court then quickly dispensed with Allegretti’s claim that he had been denied all economically beneficial use of his property, noting that “[a] governmental regulation that restricts certain private uses of a portion of an owner’s property does not constitute a categorical taking.”¹⁴² The court found that the county’s action was taken under the authority of its police powers and therefore should be analyzed under regulatory takings jurisprudence.¹⁴³ Regarding economic impact, the court’s *Penn Central* analysis concluded that “mere diminution in value of property, however serious does not constitute a taking,” and that “a reasonable investment-backed expectation must be more than a unilateral expectation or an abstract need.”¹⁴⁴ Ultimately, the court concluded that “Allegretti’s claim of a regulatory taking under *Penn Central* is not persuasive.”¹⁴⁵

137 *Id.* at 129–36.

138 *Id.* at 131.

139 *Id.* at 129 (citing *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed.Cl. 313 (2001)). The court summarized the *Tulare Lake* facts and holding: “In *Tulare Lake*, water districts argued that their water rights, which were contractually conferred by certain governmental agencies, were taken in violation of the Fifth Amendment by use restrictions imposed by the State Water Resources Control Board (the Board) under the Endangered Species Act. Comparing the circumstances to the overflights of aircraft found to constitute a taking in *United States v. Causby*, the *Tulare Lake* court held the restrictions caused a physical taking of the plaintiffs’ contractual entitlement to a particular amount of water from the Board’s facilities.” *Id.* at (citations omitted).

140 *Allegretti & Co.*, 42 Cal. Rptr. 3d at 131–32.

141 *Id.* at 132.

142 *Id.*

143 *Id.*

144 *Id.* at 135–36.

145 *Id.* at 136.

A. COURTS IN VARIOUS JURISDICTIONS UPHOLD MUNICIPAL REGULATION OF GROUNDWATER AS NOT PREEMPTED BY STATE LAW

California courts have consistently supported county regulation of groundwater, as when the California County of Tehama faced a challenge by landowners asserting that state law preempted the county's regulation of groundwater pumping practices.¹⁴⁶ As discussed above, the court interchangeably refers to the county regulation as municipal regulation, having established that the police power authority to regulate flows from the same state constitutional provision.¹⁴⁷ In 1992, Tehama County enacted an ordinance requiring a permit to extract groundwater for the purpose of use on land other than where the extraction occurs.¹⁴⁸ A permit could only be granted if the board found that it would not result in: "a withdrawal of more water from the groundwater basin than will be replenished over time ("overdraft"), saltwater intrusion, adverse effects upon the rate of flow of water through the aquifer, [or] adverse effects upon the water table," among other impacts.¹⁴⁹

In response to the property owners' challenge to the county regulation based upon preemption by state law, the court explained: "The fact that a matter is of state-wide concern does not oust municipal governments of police power. 'Even in matters of state-wide concern the city or county has police power equal to that of the state so long as the local regulations do not conflict with general laws.'"¹⁵⁰ One reason relied upon by the court in not finding preemption was that the state statutes encourage local water agencies to address groundwater management.¹⁵¹ The court found, however, that "[s]ince many of these agencies are not municipalities and have no reservoir of police power, they are limited to powers specifically conferred by statute."¹⁵² The court, in rejecting the landowners' claim of preemption, concluded, "[n]o implication can be drawn that the Legislature intended to impair the constitutional exercise of the police power over groundwater because it has granted limited authority over groundwater to local agencies which draw their power solely from state legislation."¹⁵³

Regarding preemption, the Supreme Court of Indiana recently upheld the Town of Avon's authority to regulate groundwater in face of challenges of, among other things, preemption by state law.¹⁵⁴ Similar to the court in *Baldwin*, the Indiana court found gaps of coverage in the state law that could be filled in by municipalities.¹⁵⁵

146 *Baldwin v. Cnty. of Tehama*, 36 Cal.Rptr.2d 886, 889 (1994).

147 *Id.* at 890–91.

148 *Id.* at 889.

149 *Id.*

150 *Id.* at 891.

151 *Id.* at 895.

152 *Id.*

153 *Id.*

154 *Town of Avon v. W. Cent. Conservancy Dist.*, 957 N.E.2d 598 (Ind. 2011).

155 *Id.*

VI. LANDMARK TEXAS SUPREME COURT DECISION ON GROUNDWATER OWNERSHIP—EAA v. DAY

A critical threshold question in a takings determination is whether a property right exists in the first place. Whether property—in this instance, groundwater—is a property right compensable under the U.S. Constitution or a state constitution takings clause is a matter of state law. Hence, one must determine whether the relevant state law considers groundwater a constitutionally protected property right and whether the issue has been clearly addressed. Until recently, for example, the issue had not been addressed with certainty in Texas. The Supreme Court’s opinion in *Edwards Aquifer Authority v. Day & McDaniel*¹⁵⁶ changed that.

A. DAY FACTS AND DECISION IN A NUTSHELL

In *Day*, the property owners, R. Burrell Day and Joel McDaniel (collectively “Day”) applied to the Edwards Aquifer Authority (“EAA” or “Authority”) for authorization to pump 700 acre-feet of groundwater annually for irrigation.¹⁵⁷ The EAA General Manager proposed the denial of the application because withdrawals from the owners’ well during the historical period were not put to beneficial use.¹⁵⁸ After a contested case hearing on the matter, the EAA agreed that based on water use during a historical period of twenty-one years, Day should be issued an Initial Regular Permit (IRP) for fourteen acre-feet of water per year.¹⁵⁹

Day appealed the decision to district court and sued for takings under the Texas Constitution, along with other alleged constitutional violations.¹⁶⁰ The district court granted summary judgment for Day on his appeal of the permit decision, but also granted summary judgment for the EAA on Day’s constitutional claims, including the takings claim.¹⁶¹ Both parties appealed, and the appeals court affirmed the EAA’s decision to issue a permit for fourteen acre-feet, but, while rejecting Day’s other constitutional arguments, held that Day’s taking claim should not have been dismissed and remanded the case to district court for further proceedings.¹⁶²

At the district court level, the EAA had impleaded the State of Texas as a third-party defendant on Day’s takings claim, asserting indemnification and contribution.¹⁶³ The Texas Supreme Court granted the EAA’s, the State’s, and Day’s petitions for review.¹⁶⁴ The court succinctly summarized its decision, stating:

We begin by considering whether, under the EAAA [Edwards Aquifer Authority Act], the Authority erred in limiting Day’s IRP to 14 acre-feet and conclude that it did not. Next, we turn to whether Day has a constitutionally protected interest in the groundwater beneath his property and conclude that he does. We then

156 *Edwards Aquifer Auth. v. Day & McDaniel*, 369 S.W.3d 814 (Tex. 2012).

157 *Id.*

158 *Id.* at 820–21.

159 *Id.* at 821.

160 *Id.*

161 *Id.*

162 *Id.*

163 *Id.*

164 *Id.* at 822.

consider whether the Authority's denial of an IRP in the amount Day requested constitutes a taking and conclude that the issue must be remanded to the trial court for further proceedings. We end with Day's other constitutional arguments, concluding that they are without merit.¹⁶⁵

The question of whether the application of the EAAA to Day has resulted in a compensable taking was remanded to the trial court.¹⁶⁶ It appears likely that the trial court would have applied a *Penn Central* analysis to the facts in the *Day* case, however, as discussed further below, the parties in the *Day* case have settled.¹⁶⁷

B. DAY COURT AFFIRMS THAT GROUNDWATER OWNERSHIP IN PLACE IS SUBJECT TO POLICE POWERS

The Court in *Day* held that, as with oil and gas, ownership of groundwater in place is subject to police powers, stating that:

In *Elliff*, we restated the law regarding ownership of oil and gas in place:

In our state the landowner is regarded as having absolute title in severalty to the oil and gas in place beneath his land. The only qualification of that rule of ownership is that it must be considered in connection with the law of capture and is subject to police regulations. The oil and gas beneath the soil are considered a part of the realty. Each owner of land owns separately, distinctly and exclusively all the oil and gas under his land and is accorded the usual remedies against trespassers who appropriate the minerals or destroy their market value.

We now hold that this correctly states the common law regarding the ownership of groundwater in place.¹⁶⁸

The *Day* opinion reaffirmed that whether the exercise of police powers in regulating groundwater goes "too far" and constitutes a compensable taking can only be determined by a court employing a takings analysis.¹⁶⁹ The Texas Supreme Court noted, as it did in *Sheffield*, that "in construing article I, section 17 of the Texas Constitution, we have generally been guided by the United States Supreme Court's construction [of] . . . the Fifth Amendment to the United States Constitution . . ." ¹⁷⁰ In this regard, as to the fundamental approach to takings analysis, the *Day* court quoted extensively from the 2005 U.S. Supreme Court opinion in *Lingle* and stated that "[t]he *Penn Central* factors—though each has given rise to vexing subsidiary questions—have served as the principal guidelines for resolving regulatory takings claims that do not fall within the physical takings or *Lucas* rules."¹⁷¹

165 *Id.* at 822.

166 *Id.*

167 *See id.* at 838 (noting that when construing the takings clause of the Texas Constitution, the Texas Supreme Court generally uses the United States Supreme Court's decisions on the same guarantee provided by the Fifth and Fourteenth Amendments as guidance and providing an analysis of the *Penn Central* framework for evaluating regulatory takings claims).

168 *Id.* at 831–32

169 *Id.* at 838.

170 *Id.* at 838.

171 *Id.* at 838–39.

C. THE DAY COURT'S *PENN CENTRAL* ANALYSIS

It appears that the *Day* court intended for the trial court to apply a *Penn Central* analysis on remand because the court offered its own preliminary takings analysis.¹⁷² Regarding per se takings, the court stated that a physical invasion “does not apply to the present case,” and the court found it doubtful that a *Lucas*-type taking occurred.¹⁷³ In regard to this, as well as the first *Penn Central* factor (economic impact), the court observed that “the denial of Day’s application certainly appears to have had a significant, negative economic impact on him, though it may be doubted whether it has denied him all economically beneficial use of his property.”¹⁷⁴

With regard to the second *Penn Central* factor of investment-backed expectations, the court, although noting that Day presumably was aware of the restrictions under the EAAA before purchasing the property, did not think that notice settled the issue.¹⁷⁵ The court commented that “government cannot immunize itself” from a taking “by discouraging investment” and went on to say that “[w]hile Day should certainly have understood that the Edwards Aquifer could not supply landowners’ unlimited demands for water, we cannot say that he should necessarily have expected that his access to groundwater would be severely restricted.”¹⁷⁶

Concerning the third *Penn Central* factor—the character of the government action—the court offered a more lengthy analysis.¹⁷⁷ The court acknowledged that “[r]egulation [of groundwater] is essential to its conservation and use.”¹⁷⁸ However, the court also commented that, “[a]s with oil and gas, one purpose of groundwater regulation is to afford each owner of water in a common, subsurface reservoir a fair share.”¹⁷⁹

The *Day* opinion, with regard to the third *Penn Central* factor, also touched on the historic use requirement in the EAAA and compared it with groundwater district regulations under Chapter 36 of the Texas Water Code.¹⁸⁰ The court characterized historic use in the Water Code as just one of several factors a district may consider in permitting groundwater production.¹⁸¹ The court found that, “[b]y contrast, the EAAA requires that permit amounts be determined based solely on the amount of beneficial use during the historical period.”¹⁸² The court also appeared concerned that, “[u]nder the EAAA, a

172 *Id.* at 840.

173 *Id.* at 839. Although concluding that physical invasion did not apply in the *Day* case, something for consideration by municipalities is that the court, nonetheless, offered that “[i]t is an interesting question, and one we need not decide here, whether regulations depriving a landowner of all access to groundwater—confiscating it, in effect—would fall into the [physical invasion] category.” *Id.* The Texas Supreme Court appears to leave the door open to property-owner plaintiffs to assert that they have suffered per se takings in the form of a physical invasion of their property in groundwater when a regulation denies them all access to that groundwater.

174 *Id.* at 840.

175 *Id.*

176 *Id.*

177 *Id.*

178 *Id.*

179 *Id.*

180 *Id.* at 841.

181 *Id.*

182 *Id.*

landowner may be deprived of all use of groundwater other than a small amount for domestic or livestock use, merely because he did not use water during the historical period.”¹⁸³ On this third factor—the character of government action—the court suggested that the EAAA was more restrictive than necessary, stating that “[n]either the Authority nor the State has suggested a reason why the EAAA must be more restrictive in permitting groundwater use than chapter 36, nor does the Act suggest any justification.”¹⁸⁴

Although the *Day* court remanded the case to the trial court for further development of the record, the court, without reaching a final determination in its *Penn Central* analysis, nonetheless sounded a negative note regarding the EAAA in its test of whether a regulation has gone “too far.”¹⁸⁵ The court concluded that “[i]n sum, the three *Penn Central* factors do not support summary judgment for the Authority and the State. A full development of the record may demonstrate that EAAA regulation is too restrictive of *Day*’s groundwater rights and without justification in the overall regulatory scheme.”¹⁸⁶

D. DISTINGUISHING “FACT-SENSITIVE TEST OF REASONABLENESS” FOR TAKINGS CLAIMS FROM REASONABLENESS TEST USED IN DUE PROCESS CLAIMS

In *Day*, after providing the summary of takings analysis from *Lingle*, the Texas Supreme Court concluded that “[w]e followed this analytical structure in *Sheffield*, adding that all of the surrounding circumstances must be considered in applying ‘a fact-sensitive test of reasonableness,’ but in the end, ‘whether the facts are sufficient to constitute a taking is a question of law.’”¹⁸⁷ The court further commented that “no single *Penn Central* factor is determinative; all three must be evaluated together, as well as any other relevant considerations.”¹⁸⁸

Lingle makes clear that a test examining whether a regulation substantially advances a governmental interest may be part of a due process analysis of a regulation, but it should not be a part of a takings analysis.¹⁸⁹ The Court also acknowledges some blurring of the lines by courts in the past in conducting due process and takings analyses, in effect overlapping the two.¹⁹⁰ “*Agin*’s’ apparent commingling of due process and takings inquiries had some precedent in the Court’s then-recent decision in *Penn Central*.”¹⁹¹ The *Lingle* court draws a clear distinction.¹⁹² Whereas a regulatory takings analysis is based on the inquiries found in *Loretto*, *Lucas*, and *Penn Central*, a due process analysis generally

183 *Id.*

184 *Id.* at 843.

185 *Id.* at 838.

186 *Id.* at 843.

187 *Id.* at 839 (quoting *Sheffield Dev. Co., Inc. v. City of Glenn Heights*, 140 S.W.3d 660, 672–73 (Tex. 2004)).

188 *Id.* at 840.

189 *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 540-41 (2005).

190 *Id.*

191 *Id.* at 541.

192 *Id.* at 542.

looks to whether a regulation is clearly unreasonable or arbitrary.¹⁹³ The due process inquiry is essentially a reasonableness inquiry.

It is important to note then that when the Texas Supreme Court concludes that its takings analysis considers all of the surrounding circumstances in applying “a fact-sensitive test of reasonableness,” this is not the same reasonableness test used in a due process analysis. This fact-sensitive test of reasonableness, taken in context to the Texas Supreme Court’s analysis in *Day*, is clearly considered with and alongside the three-prong *Penn Central* analysis as part and parcel of that analysis.¹⁹⁴ It is an enhancement of that analysis, looking at all surrounding circumstances, and not a departure from that analysis that stands alone. An aspect of this fact-sensitive test of reasonableness will necessarily include a balancing of the private and public interests embodied in *Penn Central*’s three-prong test, and thus it does not run afoul of *Lingle*’s bright line between takings and due process analyses.

E. DOES THE *DAY* COURT’S PRONOUNCEMENT THAT THIS IS THE FIRST TIME IT HAS DECIDED THE OWNERSHIP OF GROUNDWATER ISSUE AFFECT AN ANALYSIS OF INVESTMENT-BACKED EXPECTATIONS?

The Texas Supreme Court asserted multiple times in *Day* that it was the first time it had ever addressed the issue of groundwater ownership in place.¹⁹⁵ It specifically noted “[w]hether groundwater can be owned in place is an issue we have never decided. But we held long ago that oil and gas are owned in place, and we find no reason to treat groundwater differently.”¹⁹⁶ Further, the court stated, “[n]o issue of ownership of groundwater in place was presented in *East*, and our decision implies no view of that issue. . . . In four cases since *East*, we have considered the rule of capture as applied to groundwater. In none of them did we determine whether the water was owned in place.”¹⁹⁷

The second prong of the *Penn Central* analysis requires a determination of the extent to which a regulation has interfered with a property owner’s distinct and reasonable investment-backed expectations. One has to ask: until the *Day* opinion issued on February 24, 2012 (or possibly the action taken by the Legislature in 2011 to amend section 36.002 of the Texas Water Code), to what extent could property owners claim that they had distinct and reasonable investment-backed expectations based on the understanding that they owned the groundwater in place underneath the property they were purchasing?¹⁹⁸

What was the nature of groundwater ownership rights prior to *Day*? The *Day* court stated, “[t]he effect of our decision denying *East* a cause of action was to give the Railroad ownership of the water pumped from its well at the surface.”¹⁹⁹ The court further commented, regarding its opinion in *East*, that “we could have meant only that a land-

193 See *id.* at 539–41.

194 See *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 839 (Tex. 2012).

195 *Id.* at 837.

196 *Id.* at 823.

197 *Id.* at 826.

198 See generally Acts 2011, 82nd Leg., R.S., ch. 1207 (S.B. 332), § 1, eff. Sept. 1, 2011 (recognizing that the landowner owns the groundwater under his or her property).

199 *Day*, 369 S.W.3d at 826.

owner is the absolute owner of groundwater flowing at the surface from its well, even if the water originated beneath the land of another.”²⁰⁰

The Texas Supreme Court in *Barshop*, in summarizing the parties’ arguments, commented that “[t]he State insists that, until the water is actually reduced to possession, the right is not vested and no taking occurs.”²⁰¹ In light of the *Day* court’s insistence that the issue had not been previously decided, and the *Day* court’s further statements that the effect of the *East* opinion “was to give the Railroad ownership of the water pumped from its well at the surface,” was the State’s argument in *Barshop* a correct statement of the law pre-*Day*? If so, what level of investment-backed expectations could be based on that? The court in *Barshop*, however, noted that:

The State concedes that Plaintiffs have significant rights to the water under their land. In the [Edwards Aquifer Authority] Act, the Legislature specifically recognized the ownership and rights of the landowner in the underground water and that action taken pursuant to the Act may not be construed as depriving or divesting the owner of these ownership rights.²⁰²

According to the court, the plaintiff property owners in *Barshop* maintained “that they own the water beneath their land and that they have a vested property right in this water.”²⁰³ The *Barshop* court summed up the matter, declaring that “[t]he parties simply fundamentally disagree on the nature of the property rights affected by this Act.”²⁰⁴ Ultimately, the court at the time found that “it is not necessary to the disposition of this case to definitively resolve the clash between property rights in water and regulation of water.”²⁰⁵

Since the state of the law was unclear and fiercely debated prior to the *Day* decision, to what degree could any property owner be said to have reasonably relied on any particular property right in groundwater when there was such great uncertainty over ownership rights? The *Day* opinion essentially confirmed that uncertainty had existed until the court issued its opinion. Until then, one could argue that it was unreasonable to have distinct investment-backed expectations based on an assumption of ownership of groundwater in place, as such ownership was so hotly contested.²⁰⁶

200 *Id.*

201 *Barshop v. Medina Cnty. Underground Water Conservation Dist.*, 925 S.W.2d 618, 625 (Tex. 1996).

202 *Id.* at 626.

203 *Id.*

204 *Id.* at 625.

205 *Id.* at 626.

206 On June 20, 2013, the parties to the *Day* case settled their dispute. Settlement Agreement at 6, *Day v. Edwards Aquifer Authority* (2013) (No. 04-04-0294-CVA). The key term of the agreement is the payment by the EAA to Plaintiff of \$950,000. *Id.* at 2. On July 15, 2013, the district court issued an Agreed Judgment of Dismissal Agreed Judgment of Dismissal at 1, *Day v. Edwards Aquifer Authority* (2013) (No. 04-04-0294-CVA). The EAA issued a statement regarding the settlement which, among other things, stated that “[s]ettlement is not an admission of a taking . . .”

VII. BRAGG LITIGATION: ANOTHER GROUNDWATER TAKINGS CASE TO WATCH

A. DISTRICT COURT OPINION: *BRAGG V. EDWARDS AQUIFER AUTHORITY*

Since the settlement of the *Day* litigation, another case that bears watching is *Bragg v. Edwards Aquifer Authority*.²⁰⁷ The Fourth Court of Appeals in San Antonio recently issued its opinion in this dispute.

The denial by the EAA of one groundwater permit application and the partial denial of another application prompted this litigation by plaintiff property owners Glenn and JoLynn Bragg.²⁰⁸ The Braggs applied for Initial Regular Permits (IRPs) on two tracts in Medina County used for pecan orchards—the Home Place Orchard, on which the Braggs had used groundwater during the historical period required for the granting of a permit, and the D’Hanis Orchard, on which the Braggs had not drilled a well or otherwise used Edwards groundwater during the historical period.²⁰⁹ The EAA granted an IRP for the Home Place Orchard, but only for 120.2 acre-feet per year rather than the requested 228.85 acre-feet per year, and denied the IRP for the D’Hanis Orchard.²¹⁰ In its Conclusions of Law, the trial court recognized that “[t]he Authority acted solely as mandated by the Act and without discretion in denying the D’Hanis Application and in granting a permit on the Home Place Property for 120.2 acre-feet of annual Edwards Aquifer water withdrawals.”²¹¹

With regard to the Braggs’ takings claim, the trial court declined to find either a physical taking or categorical taking.²¹² Conducting a *Penn Central* analysis, however, the court found a taking occurred by the permit denial for the D’Hanis tract and the partial permit denial on the Home Place Orchard.²¹³ The trial court concluded that the EAA’s permit decisions unreasonably impeded the Braggs’ use of the tracts as pecan farms, caused them a severe economic impact, interfered with their investment-backed expectations, and constituted a regulatory taking of the Braggs’ property.²¹⁴

Among its findings of fact, the trial court noted that the Braggs purchased the property with the intent to grow pecan orchards and that pecan trees require a significant amount of water to produce a profitable crop.²¹⁵ The court found also that the Braggs

207 *Edwards Aquifer Auth. v. Bragg*, 04-11-00018-CV, 2013 WL 5989430 (Tex. App.—San Antonio 2013, pet. filed).

208 *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 25, 2011).

209 *Id.*

210 *Id.*

211 Amended Findings of Fact and Conclusions of Law, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 11, 2011) (Conclusion of Law No. 9).

212 *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 25, 2011).

213 *Id.*

214 *Id.*

215 Amended Findings of Fact and Conclusions of Law, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 11, 2011) (Conclusion of Law No. 2.).

had spent \$769,784 on improvements and expenses over the years.²¹⁶ In conducting a balancing test of the public and private interests, there is little mention of the public interest represented by the EAA in the trial court's analysis.²¹⁷ Although the trial court's conclusion in its Letter Opinion of May 7, 2010 specifically calls out key terms of the first two prongs of the *Penn Central* analysis, mentioning economic impact and interference with investment-backed expectations, it is difficult to discern any express acknowledgement of the third prong of the *Penn Central* test—the character of the governmental action—and its purpose.²¹⁸

Regarding the assessment of damages, the trial court determined that it must use a different approach to determine the value of each orchard.²¹⁹ For the D'Hanis Orchard, the court found the proper method of determining compensation should be the difference between the price per acre for a dry land farm in Medina County and the value per acre for an irrigated farm in Medina County.²²⁰ The trial court determined this amount to be \$134,918.40.²²¹ With regard to the Home Place Orchard, the court noted that the Braggs were 108.65 acre-feet short of the amount requested and needed to efficiently operate their farm and that they should be compensated at “the defendant's market value of \$5,500.00 an acre-foot,” making the Bragg's loss on the Home Place Orchard \$597,575.²²² Thus, the court determined the total compensation owed on both tracts to be \$732,493.40.²²³ It is noteworthy that, with regard to the assessment of damages, the trial court did not treat groundwater as separate property, stating in a conclusion of law that the water should be valued as part of the land.²²⁴

The trial court's decision in *Bragg* indicates that some courts are inclined to find a taking when a regulatory entity imposes restrictions on groundwater use. The case also highlights the very fact-specific and property-specific nature of a court's analysis of a takings claim and the damages assessment. With regard to the district court's reasons for concluding the EAA had taken property, there may be little precedential value for mu-

216 *Id.* Finding of Fact No. 6.

217 *See* *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 25, 2011).

218 Letter Ruling, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. May. 7, 2010). Subsequent to the trial court's decision, the trial court almost a year later issued Findings of Fact, which included a generalized statement of the EAA Act's public function of regulating and preserving water in the Edwards Aquifer, but then noted that the Act results in advantages and disadvantages that affect everyone within the boundaries of the Aquifer and that the EAA Act burdens “different people within the boundaries in different ways.” Amended Findings of Fact and Conclusions of Law, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 11, 2011) (Finding of Fact No. 20).

219 Letter Ruling, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. May. 7, 2010).

220 *Id.*

221 *Id.*

222 *Id.*

223 *Id.*

224 Amended Findings of Fact and Conclusions of Law, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. Mar. 11, 2011). (Conclusion of Law No. 10).

municipal regulation of groundwater. The trial court indicated that it believed that the thing taken, as much as anything, was the property owner's lifestyle.²²⁵ In this regard, the trial court stated:

I believe that this is as much about the taking away of a lifestyle as it is about the decrease in value of land. The Braggs invested their lives, labor and money in a good family farm that could be passed on to their heirs. That life plan has been undermined, and their investment severely devalued.²²⁶

It seems less likely that a court would be as concerned about the lifestyle of a property owner drilling a groundwater well on a residential lot, especially if that property is already provided water by a utility. Nonetheless, the *Bragg* holding could have a chilling effect on any governmental entity in Texas, including municipalities, contemplating new groundwater regulations or maintaining existing ones.

B. FOURTH COURT OF APPEALS OPINION: *EDWARDS AQUIFER AUTHORITY V. BRAGG*

The Fourth Court of Appeals on November 13, 2013 issued its opinion in *Edwards Aquifer Authority v. Bragg*.²²⁷ The court upheld the trial court's determination that the EAA's implementation of the EAAA resulted in a taking.²²⁸ The appeals court, however, concluded that the trial court erred in its calculation of compensation owed to the Braggs.²²⁹ The appeals court reversed the trial court's judgment and remanded the cause for further proceedings consistent with its opinion on the issue of compensation owed.²³⁰

The appeals court instructed the trial court:

[T]o calculate the compensation owed on the Home Place Orchard as the difference between the value of the land as a commercial-grade pecan orchard with unlimited access to Edwards Aquifer water immediately before implementation of the Act in 2005 and the value of the land with access to Edwards Aquifer water limited to 120.2 acre-feet of water immediately after implementation of the Act in 2005.²³¹

The appeals court required a similar calculation with regard to the compensation owed on the D'Hanis Orchard, except that it compared the value of the land with unlimited access to Edwards Aquifer water to the value of the land as a commercial-grade pecan orchard with no access to Edwards Aquifer water immediately after implementation of the Act.²³²

On the taking issue, the appeals court conducted a *Penn Central* analysis, finding that the first two prongs relating to economic impact and investment-backed expecta-

225 Letter Ruling, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170 (38th Dist. Ct., Medina County, Tex. May. 7, 2010).

226 *Id.*

227 *Edwards Aquifer Auth. v. Bragg*, 04-11-00018-CV, 2013 WL 5989430 (Tex. App. Nov. 13, 2013, pet. filed).

228 *Id.* at *1.

229 *Id.*

230 *Id.*

231 *Id.* at *29.

232 *Id.*

tions of the property owner weighed heavily in favor of a compensable taking of both orchards.²³³ Regarding the third prong, the appeals court quoted the EAAA, citing the recent *Trail Enterprises* opinion:

Given the importance of ‘protect[ing] terrestrial and aquatic life, domestic and municipal water supplies, the operation of existing industries, and the economic development of the state,’ we conclude this factor weighs heavily against a finding of a compensable taking. See *City of Houston v. Trail Enters., Inc.*, 377 S.W.3d 873, 880 (Tex.App.—Houston [14th Dist.] 2012, pet. filed) (holding same where express purpose of ordinance in question was to protect City’s public water supply).²³⁴

The appeals court also looked at other factors, in particular that the Braggs’ agricultural business is heavily dependent on water and no expert disputed that rain alone could not provide a sufficient source of water.²³⁵ However, the appeals court did not appear to conduct any express balancing of the three *Penn Central* factors. The appeals court, for example, did not explain how the property owner’s economic consideration overcame the significant public purpose for the regulation. Although petitions for review were filed on March 3, 2014, it remains to be seen if this cause will be further litigated and whether this or another court will undertake the kind of analysis that balances the *Penn Central* factors by explaining more specifically how and why the particular economic considerations noted by the appeals court evidently outweighed the significant public purpose of the EAAA in determining that implementation of the EAAA resulted in a compensable taking.

Although a city regulating groundwater may best defend against a takings claim by demonstrating a firm basis for the regulation in the protection of public health and safety, this phase of the *Bragg* litigation creates uncertainty as to whether a court may determine that implementation of the municipal regulations effect a compensable taking. The specific rationale a court would offer in a *Penn Central* analysis for such a conclusion, however, remains unclear.

VIII. MUNICIPAL POLICE POWER CASES APPLYING TAKINGS ANALYSIS

A. OVERVIEW

There do not appear to be any reported Texas cases regarding a challenge to municipal authority to restrict or prohibit a groundwater well. However, there have been some Texas cases that address municipal authority to limit or prohibit oil and gas wells.²³⁶ Until recently, property owners have typically asserted due process and equal protection

233 *Id.* at *16–21.

234 *Id.* at *22.

235 *Id.*

236 See, e.g., *Unger v. State of Texas*, 629 S.W.2d 811 (Tex. App.—Fort Worth 1982, writ ref’d); *Helton v. City of Burkburnett*, 619 S.W.2d 23 (Tex. Civ. App.—Fort Worth 1981, writ ref’d n.r.e.); *Klepak v. Humble Oil & Refining Co.*, 177 S.W.2d 215 (Tex. Civ. App.—Galveston 1944, writ ref’d w.o.m.); *Tysco Oil Co. v. Railroad Commission of Texas*, 12 F.Supp. 202 (S.D. Tex. 1935).

challenges in these instances, and the courts' response has been that the restrictions on oil and gas drilling by a municipality is a valid exercise of police powers for the protection of public health and safety. More lawsuits of this nature, including takings claims, may emerge with the prevalence of gas wells using hydraulic fracturing methods in urban areas.²³⁷

Texas cases supporting municipal police power regulations of oil and gas wells as a valid exercise of police power have typically been based on a finding that the municipal ordinance does not violate a property owner's substantive due process rights (and some courts further find that equal protection rights were also not violated).²³⁸ In making such findings with regard to due process claims, these courts have concluded that the municipal regulations are not unreasonable or arbitrary.²³⁹ Only ordinances that are clearly unreasonable or arbitrary raise constitutional concerns and a court will not substitute its judgment for that of the city.²⁴⁰

Most likely, if these cases were brought today, Texas claimants would assert a taking and courts would assess the ordinances under the takings standards established in the *Mayhew* and *Sheffield* cases, based on federal jurisprudence.²⁴¹ The public health and safety purpose of these regulations would likely be evaluated in the *Penn Central* balancing test under the third *Penn Central* factor for takings analysis.

B. MUNICIPAL REGULATION OF OIL AND GAS WELLS

1. OVERVIEW OF FACTS AND GENERAL HOLDINGS

Texas courts have upheld cities' authority in challenges to cities' regulation of oil and gas wells as a valid exercise of municipal police power.²⁴² In *Unger v. State of Texas*, a property owner was convicted and fined \$105 for drilling an oil well within the city limits of Burkburnett, Texas, a home rule city, without securing a drilling permit as required by city ordinance.²⁴³ On appeal, the appeals court held that the city "under its

237 See, e.g., Sabrina Tavernise, *As Gas Drilling Spreads, Towns Stand Ground Over Control*, N.Y. TIMES, December 15, 2011, at A20, available at http://www.nytimes.com/2011/12/15/us/towns-fighting-to-stand-ground-against-gas-drillers.html?_r=1&ref=Sabrinatavernise ("In Texas, a restrictive gas drilling ordinance adopted by an affluent suburb of Dallas called Flower Mound has drawn several lawsuits charging that it amounts to an unconstitutional seizure of mineral rights.").

238 See, e.g., *Unger v. State*, 629 S.W.2d 811 (Tex. App.—Fort Worth 1982, writ ref'd); *Helton v. City of Burkburnett*, 619 S.W.2d 23 (Tex. Civ. App.—Fort Worth 1981, writ ref'd n.r.e.); *Klepak v. Humble Oil & Refining Co.*, 177 S.W.2d 215 (Tex. Civ. App.—Galveston 1944, writ ref'd n. r. e.); *Tysco Oil Co. v. Railroad Comm'n of Texas*, 12 F.Supp. 202 (S.D. Tex. 1935) (disposing of due process and equal protection challenges to oil and gas drilling ordinance).

239 *Supra* note 238.

240 *See id.*

241 Note that *Mayhew* has a substantive due process analysis that looks specifically at whether an ordinance is arbitrary. *Mayhew v. Town of Sunnyvale*, 964 S.W.2d 922, 938–39 (Tex. 1998). In addition, *Mayhew* includes an equal protection analysis. *Id.* at 939.

242 See, e.g., *Unger*, 629 S.W.2d at 811; *Helton*, 619 S.W.2d at 23; *Klepak*, 177 S.W.2d at 215.

243 *Unger*, 629 S.W.2d at 811.

police power has full authority to both regulate and prohibit the drilling of oil wells within its city limits.”²⁴⁴

The court in *Unger* relied in part on an opinion it had issued a year earlier interpreting the same ordinance.²⁴⁵ In *Helton v. City of Burkburnett*, property owner Helton refused to obtain an oil well drilling permit required by municipal ordinance.²⁴⁶ The city obtained a permanent injunction, and Helton challenged the constitutionality of the city ordinance, asserting that the ordinance violated the 14th Amendment of the U.S. Constitution on its face by denying due process and equal protection.²⁴⁷ Helton argued that the ordinance did not merely regulate drilling, but by purporting “to provide the power to totally prohibit drilling,” it went “beyond the legitimate use of the city’s police power.”²⁴⁸ The court, however, found that “the deprivation of individual rights cannot prevent the operation of the police power, once it is shown that its exercise is within the meaning of due process of law.”²⁴⁹ The court also held that the ordinance “is neither unreasonable, arbitrary, nor discriminatory upon its face or as applied. Its enforcement does not deprive Helton of his property rights without due process of law.”²⁵⁰

The *Unger* court, in reaching its conclusion, also cited several earlier cases on the subject, including *Klepak v. Humble Oil & Refining Co.*, in which the plaintiff sought an order declaring invalid the city ordinance regulating oil wells.²⁵¹ In *Klepak*, the plaintiff had obtained a permit from the Railroad Commission.²⁵² The city refused to recognize the validity of that permit and prohibited the property owners and their oil and gas lessee, Klepak, from drilling without a city permit.²⁵³ The court affirmed municipal police power authority “to regulate the drilling for and production of oil and gas within their corporate limits” for the protection of citizens and property as well as the preservation of good government, peace, and order therein.²⁵⁴

Municipal authority to regulate oil and gas drilling had earlier been strongly confirmed in a federal opinion based on Texas law wherein the court held:

That plaintiff’s title to the oil and gas estate owned by it is held subject to reasonable regulations by the state under the police power is not an open question . . . Nor can it be doubted that the state may delegate such power to a municipal corporation such as is the city of South Houston. Nor that it has been so delegated [by statute].²⁵⁵

244 *Id.* at 812.

245 *Id.* at 813.

246 *Helton v. City of Burkburnett*, 619 S.W.2d 23 (Tex. Civ. App.—Fort Worth 1981, writ ref’d n.r.e.).

247 *Id.*

248 *Id.* at 24.

249 *Id.*

250 *Id.*

251 *Unger v. State*, 629 S.W.2d 811,812 (Tex. App.—Fort Worth 1982, writ ref’d); *Klepak v. Humble Oil & Refining Co.*, 177 S.W.2d 215 (Tex. Civ. App.—Galveston 1944, writ ref’d n. r. e.).

252 *Klepak*, 177 S.W.2d at 216.

253 *Id.* at 216–17.

254 *Id.* at 218.

255 *Tysco Oil Co. v. Railroad Comm’n of Texas*, 12 F.Supp. 202 (S.D. Tex. 1935).

More recently, a court of appeals opinion addressed a challenge to a municipal ordinance requiring that a surface property owner consent to a well drilled within 500 feet of a building and affirmed that this remains the law in Texas, pronouncing:

The right of an oil and gas operator to conduct drilling activities is not an absolute right, but is subject to reasonable restriction by the state. A city may enact reasonable regulations to promote the health, safety, and general welfare of its people. The development of oil and gas within the city limits is clearly an area subject to regulation under the police powers of a municipality.²⁵⁶

In addition, most of the key cases on municipal regulation of oil and gas wells pursuant to a valid exercise of police power cite as authority a 1929 Eighth Circuit opinion from Kansas, *Marrs v. City of Oxford*.²⁵⁷ In *Marrs*, the plaintiffs—lot owners and oil and gas lessees—had been arrested and fined for not obtaining a drilling permit from the city and brought suit asking the court to enjoin enforcement of the ordinance on grounds that it denied constitutionally protected rights.²⁵⁸ The *Marrs* court, although addressing a claim that asserted the ordinance was void, expressly stated that this exercise of police power did not result in a compensable taking, announcing, “it is well settled that the enforcement of uncompensated obedience to a legitimate regulation established under the police power is not a taking of property without compensation.”²⁵⁹

2. KEY LEGAL ISSUES ADDRESSED IN OPINIONS ON MUNICIPAL REGULATION OF OIL AND GAS WELLS

a. NO CONFLICT WITH STATE LAW REGULATING SAME SUBJECT

Klepak makes clear that oil and gas drilling permit requirements by cities are not preempted by state law. As discussed, the surface owner and lessee in *Klepak* had actually obtained a drilling permit from the Railroad Commission as an exception to the Commission’s Rule 37 spacing rules.²⁶⁰ The fee simple owners and their lessee complained that the city ordinance “forbade the honoring of such subsequently granted permit by the Railroad Commission.”²⁶¹ The appeals court in response declared:

256 *Shelby Operating Co. v. City of Waskom*, 964 S.W.2d 75, 83 (Tex. App.—Texarkana 1997, pet. denied) (citations omitted).

257 See *Marrs v. City of Oxford*, 32 F.2d 134 (8th Cir. 1929).

258 *Marrs*, 32 F.2d at 134–35.

259 *Id.* at 138–39. In *Marrs*, the court found that the regulations protected the public welfare and safety and found this sufficient to determine that the city ordinance was not an arbitrary and unreasonable exercise of the city’s police power. *Id.* The court went further to state that the ordinance essentially protected other property owners’ rights in a state such as Kansas where at the time of the opinion there was “no property in oil and gas because of their migratory nature, until they have been captured, though each surface owner may take without limit, unless lawfully restrained.” *Id.* at 140. The Texas courts have relied on the public health and safety reasons for supporting the municipal ordinances’ exercise of police powers in regulating oil and gas wells rather than arguments regarding protection of other property owners’ interests.

260 *Klepak v. Humble Oil & Refining Co.*, 177 S.W.2d 215, 216 (Tex. Civ. App.—Galveston 1944, writ ref’d w.o.m).

261 *Id.* at 217.

There is no dispute—nor could there properly be under the settled law—that the Railroad Commission of Texas had authority under the statute conferring that duty upon it to regulate the production of oil and gas within this state, and to issue its permits accordingly.

However, it is held that the Legislature—in so delegating that authority to the Railroad Commission—did not thereby intend to nor accomplish the repeal of the fundamental law theretofore, as well as subsequently, existing, that municipalities in Texas have, under the police power, authority to regulate the drilling for and production of oil and gas within their corporate limits, when acting for the protection of their citizens and the property within their limits, looking to the preservation of good government, peace, and order therein.²⁶²

Thus, Texas courts have concluded that state regulation of oil and gas drilling does not preempt municipal police power regulation of the same activity, and it follows that courts could adhere to this same principle with regard to municipal regulation of groundwater.²⁶³

The court in *Unger* also held that “the subject ordinance [requiring a drilling permit from city] is not in conflict with a state law on the same subject,” noting this was the “gist of the opinion” in the federal case *Tysco I*.²⁶⁴ In *Tysco I*, lot owners in the City of South Houston, joined by Tysco Oil Company, which had obtained oil and gas leases for the lots, had sought exceptions to the Railroad Commission’s well spacing rules under Rule 37.²⁶⁵ The Railroad Commission denied the exceptions and instead adopted special field rules for South Houston that matched rules the city had enacted by ordinance for safety purposes that divided the city into four drilling districts of approximately sixteen acres and allowed only one well per drilling district.²⁶⁶ The lot owners and Tysco Oil Company (the lessee) challenged the Railroad Commission’s order as invalid under the U.S. Constitution, and the court held that the Commission orders, including spacing limits that conformed with but did not replace the city’s ordinance, were not unreasonable, arbitrary, or confiscatory.²⁶⁷ In *Tysco II*, against the City of South Houston, the court similarly held that considering the dangers of oil drilling in a residential area, the evidence failed to show the city’s ordinance to be arbitrary or unreasonable.²⁶⁸

262 *Id.* at 218 (citations omitted).

263 *See Dallas Merchant’s and Concessionaire’s Ass’n v. City of Dallas*, 852 S.W.2d 489, 491 (Tex.1993).

264 *Unger v. State*, 629 S.W.2d 811, 812–13 (Tex. App.—Fort Worth 1982, writ ref’d). The court divided the Tysco case and tried in separate proceedings the case against the Railroad Commission, *Tysco Oil Co. v. Railroad Commission of Texas*, 12 F.Supp. 195 (S.D. Tex. 1935) [hereinafter *Tysco I*], and the claim against the City of South Houston, *Tysco Oil Co. v. Railroad Commission of Texas*, 12 F.Supp. 202 (S.D. Tex. 1935) [hereinafter *Tysco II*].

265 *Tysco I*, 12 F.Supp. at 198–99.

266 *Id.* at 197, 200.

267 *Id.* at 201.

268 *Tysco II*, 12 F.Supp. at 203.

b. REGULATION OF VESTED RIGHTS UPHELD WITH REGARD TO MUNICIPAL REGULATION OF OIL AND GAS WELLS

As discussed above, the court in *Unger* held that the city, “under its police power has full authority to both regulate and *prohibit* the drilling of oil wells within its city limits.”²⁶⁹ In *Helton v. City of Burkburnett*, the court addressed constitutional challenges to a city’s authority not merely to regulate, but to prohibit, oil well drilling.²⁷⁰

The court—in response to Helton’s argument that the ordinance was invalid because the ordinance “presume[d] to grant the city the authority to take away or impair his vested right to reach the oil underlying his property”—held that “the deprivation of individual rights cannot prevent the operation of the police power, once it is shown that its exercise is within the meaning of due process of law.”²⁷¹ The court quoted portions of the city ordinance, which stated that the city could refuse any permit to drill a well for health and safety reasons, among several other reasons.²⁷² The court ultimately found that the ordinance overall did not prohibit the drilling of oil and gas wells (apparently meant in the broader sense since an individual permit could be denied) and that the ordinance “merely provides rules facilitating the orderly and harmonious development of both oil exploration and city growth.”²⁷³

Although an evaluation of a due process and equal protection claim, rather than a takings claim, the discussion of vested rights in *Helton* is still relevant to municipal regulation of groundwater wells in light of the *Day* opinion’s holding that property owners own groundwater in place. In this instance, the *Helton* court stated clearly that the deprivation of individual rights cannot prevent the exercise of the police power within the meaning of due process.²⁷⁴

Courts have recognized in these opinions relating to municipal regulation of oil and gas wells that a valid exercise of police power can regulate and even prohibit well drilling. Thus, cities have already regulated well drilling in the oil and gas context where

269 *Unger*, 629 S.W.2d at 812 (emphasis added). The Texas Supreme Court, in the zoning context in *Lombardo*, made it clear that police power may be used not only to regulate uses of private property but to prohibit them completely. The court held that “[u]ses of private property detrimental to the community’s welfare may be regulated or even prohibited.” *Lombardo v. City of Dallas*, 73 S.W.2d 475, 483 (Tex. 1934). The court further explained:

[T]he police power may be exerted to regulate the use, and where appropriate or necessary prohibit the use, of property for certain purposes in aid of the public health, morals, safety, and general welfare, and that the constitutional limitations form no impediment to its exertion where the enactment is reasonable and bears a fair relationship to the object sought to be attained.

Id. at 481.

270 *Helton v. City of Burkburnett*, 619 S.W.2d 23 (Tex. Civ. App.—Fort Worth 1981, writ ref’d n.r.e.).

271 *Id.* at 24. Relevant to this, the Texas Supreme Court, in *Brown v. Humble Oil & Refining Co.*, recognized the ownership of oil and gas in place and yet also clearly affirmed the right of the state legislature and the Railroad Commission to regulate oil and gas production as a valid exercise of the state’s police powers. *Brown v. Humble Oil & Refining Co.*, 83 S.W.2d 935, 940–41 (Tex. 1935).

272 *Helton*, 619 S.W.2d at 24.

273 *Id.*

274 *Id.*

courts expressly recognize that property owners have ownership of oil and gas in place.²⁷⁵ Should courts apply the same reasoning in the groundwater context, it appears that the same results could be expected.

C. STANDARD APPLIED BY COURTS IN OIL AND GAS CASES TO ASSESS CONSTITUTIONAL CHALLENGES

As discussed above, because many of the cases regarding municipal regulation of oil and gas drilling pre-date the *Mayhew* and *Sheffield* decisions, the standard used by courts in evaluating a constitutional challenge in these instances is typically based on an assessment of whether due process or equal protection rights have been violated. The court in *Helton*, for example, analyzing the constitutional challenge under a substantive due process standard, the court stated:

In determining the constitutionality of an ordinance passed pursuant to the police power of the city it must be borne in mind that the presumptions favor the ordinance. For a challenge to be successful the ordinance must clearly appear to be unreasonable and arbitrary. In making this determination this court is not entitled to substitute its judgment for that of the city and its officers.²⁷⁶

Concerning the constitutional challenges, the court found that the ordinance did not deprive Helton of his property rights without due process, stating that it was “neither unreasonable, arbitrary, nor discriminatory upon its face or as applied.”²⁷⁷ With regard to the equal protection claim, the court held that “[t]his ordinance applied to all person similarly situated within the city limits.”²⁷⁸

The *Unger* court dispensed in a cursory manner with similar constitutional challenges to those brought in *Helton*, stating that those challenges had already been rejected in *Helton*.²⁷⁹ The court went further to state that certain principles applied, including the presumption in favor of the constitutionality of enactments of all law-making bodies.²⁸⁰ The court found that the constitutionality with regard to due process and equal protection rested on a finding of reasonableness of regulation and that a city’s decision regarding reasonableness is controlling on the courts “unless the unreasonableness of the ordinance is fairly free from doubt.”²⁸¹

The court in *Klepak*, similarly to *Helton*, quickly dispensed with the due process challenges, stating that the ordinance was “neither unreasonable, arbitrary, nor discriminatory, upon its face,” and that the enforcement to protect citizens and their property and the preservation of good government “does not deprive any of its citizens (including these appellants) of their property, without due process of law.”²⁸² The court in *Tysco II* provided substantially the same reason as that found in *Helton* for rejecting a claim that

275 See, e.g., *Brown*, 83 S.W.2d at 940.

276 *Helton*, 619 S.W.2d at 24. (citations omitted).

277 *Id.*

278 *Id.*

279 *Unger v. State*, 629 S.W.2d 811, 13 (Tex. App.—Fort Worth 1982, writ ref’d). .

280 *Id.*

281 *Id.*

282 *Klepak v. Humble Oil & Refining Co.*, 177 S.W.2d 215, 218 (Tex. Civ. App.—Galveston 1944, writ ref’d w.o.m).

the city had unlawfully deprived plaintiff of its rights under the Constitution.²⁸³ The court, in relying on the U.S. Supreme Court decision in *Zahn*, noted that “whether the ordinance under consideration there was unreasonable or arbitrary was ‘fairly debatable,’ yet the ordinance was upheld.”²⁸⁴

Although the constitutional challenges in these municipal regulation of oil and gas cases were subject to a due process analysis, a constitutional challenge today regarding regulatory impacts to property rights in oil and gas—or groundwater—would likely be a takings claim analyzed under a balancing test as provided by the *Penn Central* factors. Considering the courts’ recognition of the significant public health and safety concerns behind the municipal regulation of oil drilling, if such a takings balancing test had been applied, it appears most likely that it would have yielded similar results.

d. EARLIER DECISIONS: NO COMPENSABLE TAKING FOR VALID EXERCISE OF POLICE POWER

On this issue the *Marrs* court, quoting the U.S. Supreme Court, held that:

[A]ll contract and property rights are held subject to “a fair exercise of the police power . . . And it is well settled that the enforcement of uncompensated obedience to a legitimate regulation established under the police power is not a taking of property without compensation, or without due process of law, in the sense of the Fourteenth Amendment . . . Necessarily these regulations will encroach, when the power is exercised, on private rights; but that does not render them void.”²⁸⁵

Similar language is also relied upon by the Texas Supreme Court in *Lombardo*.²⁸⁶ In *Marrs*, the court found that the regulations protected the public welfare and safety and found this sufficient to determine that the city ordinance was not an arbitrary and unreasonable exercise of the city’s police power.²⁸⁷ As mentioned, although courts now apply a balancing test, the health and safety considerations would no doubt factor in significantly when weighing the competing public and private rights and concerns. In addition, although not as developed as in current takings jurisprudence, there appears to be at least a rudimentary balancing involved in these earlier due process-based decisions in the courts’ consideration of the public health and safety dangers associated with this particular use of private property.

With regard to factors that may have influenced the *Marrs* court and others thinking about constitutional challenges, it is important to note that the discussed ordinances regulating oil and gas production generally contained a provision whereby the property

283 *Tysco II*, 12 F.Supp. 202, 203 (S.D. Tex. 1935).

284 *Id.*

285 *Marrs v. City of Oxford*, 32 F.2d 134, 138-39 (8th Cir. 1929).

286 *Lombardo v. City of Dallas*, 73 S.W.2d 475, 479 (Tex. 1934).

287 *Marrs*, 32 F.2d at 138–39. As mentioned, the *Marrs* court went further to state that the ordinance essentially protected other property owners’ rights in a state such as Kansas where at the time of the opinion there was “no property in oil and gas because of their migratory nature, until they have been captured, though each surface owner may take without limit . . .” *Id.* at 140. The Texas courts have relied on the public health and safety reasons for supporting the municipal ordinances’ exercise of police powers in regulating oil and gas wells rather than arguments regarding protection of other property owners’ interests.

owners who did not have a permit, or did not have a contract with the permittee, nonetheless could obtain a share of the proceeds from the well. Regarding the ordinance in the *Marrs* case, for example, the court explained that:

If one or more lot owners have given a lease for which no permit is obtainable their lessee may join a lessee who has a permit in the same block on terms that are fair to both lessor and lessee. If a lot owner has not given a lease he is protected by the asking in a fair proportion of the mineral produced by a permittee. The regulations make every effort to protect, rather than to destroy rights.²⁸⁸

Similarly, in *Tysco I*, the court provided excerpts of the municipal ordinance regulating oil wells, and these in part relate to the sharing arrangement established by the regulation, stating:

[I]n case a permit for the drilling of a well be issued to a person, persons, or corporation not owning or holding oil and gas leases, or drilling contracts with the owners of all the area in a drilling district, it shall be a condition of the permit that the permittee, its successors and assigns, shall deliver to the credit of each of such owners whose land shall not be under lease held by the permittee, free of cost, in the pipe line to which the well may be connected, a share of oil produced. . . .

[I]n case a permit be issued to persons or corporations who do not own or hold leases or other valid drilling contracts in writing from the owners of all of the land within the said district other than streets and alleys, any owner of unleased land in the said drilling district and any person or corporation other than the permittee, holding oil and gas leases on land in the drilling district, shall have the right to share in the ownership and benefits of such oil or gas well in the proportion that the area of his or its land or lease bears to the area of the drilling district . . .²⁸⁹

Again, such provisions may have influenced the courts' thinking about whether the ordinance effected a compensable taking. Note, however, that the court's description of the ordinance in *Helton* (the same ordinance at issue in *Unger*) does not mention any such sharing provision, as the general nature of the ordinance appeared to be different.²⁹⁰ Rather than dividing the city into districts, the ordinance required distance setbacks from residents unless the oil driller obtained a release from the property owner.²⁹¹ In addition, the ordinance allowed the city to refuse a permit in certain instances "where the drilling of such wells on such particular location might be injurious or be a disadvantage to the city or it's [sic] inhabitants . . ."²⁹² Also, the ordinance in the *Trail Enterprises* case discussed below does not have a sharing provision.²⁹³ Thus, Texas courts upholding

288 *Id.* at 140.

289 *Tysco I*, 12 F. Supp. 195, 197 (S.D. Tex. 1935).

290 *Helton v. City of Burkburnett*, 619 S.W.2d 23, 24 (Tex. Civ. App.—Fort Worth 1981, writ ref'd n.r.e.).

291 *Id.*

292 *Id.*

293 *Trail Enters., Inc. v. City of Houston*, 957 S.W.2d 625, 628 (Tex. App.—Houston [14th Dist] 1997, pet. denied) [hereinafter *Trail Enterprises II*].

municipal regulations of oil wells and not finding a compensable taking cannot be attributed in every case to such sharing provisions.

e. RECENT CASES—MAGUIRE, TRAIL ENTERPRISES

There are a few cases involving the City of Houston's attempt to protect its water supply through regulation of oil well drilling that, at first blush, may appear to reflect different thinking about the extent of municipal police power authority to regulate well drilling. However, one case turns on some unusual facts that distinguish it from the cases discussed, and the other has yet to be resolved. In *City of Houston v. Maguire Oil Co.*, Maguire Oil Co. ("Maguire") obtained oil and gas leases on five tracts near Lake Houston, a significant source of drinking water for the city.²⁹⁴ Maguire obtained a permit from the City of Houston to drill about 300 feet from Lake Houston.²⁹⁵ The City Code at the time prohibited drilling in areas that were both: (1) within 1000 feet of Lake Houston, and (2) within a "control area" defined by the ordinance.²⁹⁶ City employees who spotted preparations for drilling close to the lake mistakenly issued a stop work order, assuming that the city permit had been issued in error and that the location violated the ordinance.²⁹⁷ In subsequent meetings with Maguire, city officials continued to assert that the location violated the ordinance, although in subsequent litigation the city admitted that the ordinance did not apply because the well site was not within a defined control area.²⁹⁸

In terms of municipal regulation of oil and gas well takings litigation, the *Maguire* case seems to stand alone based on the peculiar facts of the mistaken enforcement of an inapplicable ordinance. In *Maguire*, the court held that "the ordinance's inapplicability to Maguire's drilling site supports the conclusion that the City's interference was unreasonable . . . the City effected a taking when it intentionally and unreasonably interfered with Maguire's right to use and enjoy its mineral estate."²⁹⁹

In essence, the *Maguire* court held that the City's action was not taken pursuant to the city's ordinance and therefore was not reasonable, ostensibly doing a *Penn Central* analysis but apparently only applying a test that a taking occurs when regulatory action unreasonably interferes with a property owner's right to use and enjoy his property.³⁰⁰ Although the *Maguire* court stated that all property is held subject to the valid exercise of police power, and "thus not every regulation is a compensable taking, although some are," this again is not an action that the court considered valid, nor can it be characterized as a valid exercise of police power.³⁰¹ As such, the *Maguire* case is not an example of

294 *City of Houston v. Maguire Oil Co.*, 342 S.W.3d 726 (Tex. App.—Houston [14th Dist.] 2011, pet. denied).

295 *Id.* at 729.

296 *Id.* at 729–30.

297 *Id.* at 730–31.

298 *Id.* at 729. The original control area in 1967 had been five miles from the lake, but a 1977 ordinance amended that area to be just the ETJ—a change that employees enforcing the ordinance apparently did not realize in the early enforcement of the ordinance. *Id.*

299 *Id.* at 747.

300 *See id.* at 737, 747 (stating that the examination of the merit of Maguire's claim would focus on the one theory the trial court clearly adopted: unreasonable interference with the right to use and enjoy one's property under the factors identified in *Penn Central*).

301 *Id.* at 735.

a valid police power action where a court nonetheless found that a compensable taking had occurred.

The same ordinance litigated in *Maguire*, when correctly applied by the City of Houston in another case, was upheld as a valid exercise of police power.³⁰² In *Trail Enterprises*, plaintiffs brought an inverse condemnation claim in response to the ordinance prohibiting oil and gas wells within a certain proximity of a lake serving as a primary source of municipal water supply for Houston.³⁰³ The appeals court in 1997 held that “the Ordinance is a valid exercise of the City’s police power as a matter of law.”³⁰⁴ It is noteworthy as well that the court in *Trail Enterprises I* concluded a more extensive discussion on the issue of compensation for a taking by stating, “[w]hen a government regulates a right, prohibits some noxious use, or if the public need outweighs the private loss, compensation should not be allowed.”³⁰⁵

When the City of Houston annexed Trail Enterprises’ proposed drilling site, the ordinance by its terms no longer applied; however, the City amended its ordinance so that it would again apply.³⁰⁶ As a result of this reapplication of the ordinance to their property, Trail Enterprises got another bite at the apple and sued again for inverse condemnation.³⁰⁷ The history of this matter is convoluted, but *Trail Enterprises II* resulted in a remand to the trial court.³⁰⁸ The matter ultimately returned to the appeals court, which reversed the trial court’s decision that plaintiff’s claim was not ripe due to failure to apply for a drilling permit, and the court rendered a money judgment imposing significant damages on the city.³⁰⁹ This resulted in a brief Texas Supreme Court opinion reversing the appeals court and remanding to the trial court so that it can reach final judgment and provide the parties an opportunity to challenge the judgment, as well as an opportunity further litigate the takings issue.³¹⁰

Subsequently, the matter was remanded to the trial court, which found that there was a taking and awarded the mineral interest owners \$17 million, but the trial court

302 *Trail Enterprises I*, 957 S.W.2d 625, 635 (Tex. App. – Houston [14th Dist.] 1997, pet. denied).

303 *Id.* at 629.

304 *Id.* at 635.

305 *Id.* at 631.

306 *Id.* at 628.

307 *Trail Enters., Inc. v. City of Houston*, No. 14-01-00441-CV, 2002 WL 389448, at *1 (Tex. App.—Houston [14th Dist.] March 14, 2002) [hereinafter *Trail Enterprises II*].

308 *Id.* at *3.

309 *Trail Enters., Inc. v. City of Houston*, 255 S.W.3d 155 (Tex. App.—Waco 2007), *rev’d* 300 S.W.3d 736 (Tex. 2009).

310 *City of Houston v. Trail Enters., Inc.*, 300 S.W.3d 736, 737–38 (Tex. 2009) (per curiam). The Texas Supreme Court stated:

Certainly the trial court should determine if additional exploration is warranted into whether the owners have met their burden of demonstrating a taking under the balancing test articulated in *Penn Central Transportation Co. v. City of New York*. Likewise, the trial court may consider other appropriate issues before entering its final judgment. However, we do not reach any such issues with our ruling today.

Id. at 737–38 (citations omitted).

also awarded certain mineral interests to the City of Houston.³¹¹ Both sides appealed.³¹² Based on a *Penn Central* analysis of a regulatory taking, the appeals court reversed and rendered judgment that Trail Enterprises take nothing.³¹³ The decision included reversal of the portion of the trial court's judgment giving a mineral interest to the City.³¹⁴

The appeals court, concluding that neither of the per se takings applied, conducted the *Penn Central* analysis, which indeed illustrated that a takings analysis turns on the unique facts of the case.³¹⁵ Taking up first the character of the governmental action, the court concluded that, “[g]iven the importance of protecting the community’s drinking water and possible pollution from new drilling near Lake Houston, we conclude that the first factor weighs heavily in favor of the City and against a finding of a compensable taking.”³¹⁶

Regarding the investment-backed expectations test, the court found only one instance where a property owner obtained an interest prior to the enactment of the regulation.³¹⁷ Although acknowledging the U.S. Supreme Court’s rejection in *Palazzolo v. Rhode Island* of a blanket rule of no taking whenever a purchaser should have been aware of land-use regulations reducing market value, the court nonetheless concluded that “[u]nder Sheffield, Mayhew, and the similar cases discussed above, such investment [after drilling prohibited by ordinance] does not relate to reasonable expectations of a recovery beyond that from the existing wells. The second factor heavily favors the City.”³¹⁸

Regarding the third factor of economic impact, although acknowledging that the mineral interest owners “produced evidence of fairly significant economic impact,” the court concluded that “given the degree to which the first two factors favor the City, we do not find the weight of the third factor sufficient to demonstrate that a compensable taking has occurred under *Penn Central* and *Sheffield*.”³¹⁹ Justice Frost dissented, noting that Article I, Section 17 of the Texas Constitution, unlike the Fifth Amendment of the U.S. Constitution, besides requiring compensation for a taking, allows compensation when property is damaged or destroyed.³²⁰ The dissent argued that the plaintiff’s inverse condemnation claim included claims for both a taking and damages, but that the City’s second issue on appeal, on which the majority based its opinion, only disputed the takings claim.³²¹ The dissent consequently disagreed that sustaining the City’s second issue (reversing the takings finding) was dispositive, however, Justice Frost did not appear to argue that a damages analysis be conducted under Article I, Section 17, but rather suggested that, “this court instead should address the City’s first and third issues, and if

311 *City of Houston v. Trail Enters., Inc.*, 377 S.W.3d 873, 877 (Tex. App.—Houston [14th Dist.] 2012, pet denied).

312 *Id.*

313 *Id.* at 884–85.

314 *Id.* at n. 20.

315 *Id.* at 878–84.

316 *Id.* at 880.

317 *Id.* at 873.

318 *Id.* at 883.

319 *Id.* at 884.

320 *Id.* at 885–86.

321 *Id.* at 889.

necessary the Mineral Interest Owner's cross-issue."³²² The first issue was whether "the City adversely possessed the mineral interests and appellees' claims are therefore barred by the applicable statute of limitations," and the third issue was whether the "appellees failed to present competent evidence of compensable damages," with property owners contesting in their cross appeal the award of an interest to the City.³²³ The majority countered the dissent's argument, stating that the trial court told the jury in the jury charge only that the City's ordinance has resulted in a taking.³²⁴ The majority concluded that, "we disagree with the dissent's conclusion that the judgment might be confirmable on the alternative damage-in-the-absence-of-a-taking theory."³²⁵ *Trail Enterprises* represents confirmation of municipal authority to significantly limit well production under its police powers for public health and safety purposes.

f. PARCEL-AS-A-WHOLE ISSUE

As stated, a *Lucas*-type takings analysis will examine whether a regulation has deprived a property owner of all economically beneficial or productive use of their land.³²⁶ Integral to this analysis in a potential groundwater or oil and gas takings claim is whether the court views the groundwater or the mineral rights as a portion of the surface estate affected by the regulation, such that significant value still remains in the estate as a whole despite restricted access to groundwater or the mineral estate.³²⁷

The U.S. Supreme Court has made the general pronouncement that:

'Taking' jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses rather both on the character of the action and on the nature and extent of the interference with rights in the parcel as a whole. . . .³²⁸

322 *Id.*

323 *Id.* at 877.

324 *Id.* at 888.

325 *Id.* at 885, n.21.

326 *Sheffield Dev. Co., Inc. v. City of Glenn Heights*, 140 S.W.3d 660, 671 (Tex. 2004).

327 One commentator, with regard to oil and gas regulations, termed this the "aggregate/disaggregate" issue and noted that the majority of opinions in the U.S. have considered the overall value of the property and not just the impact to the mineral estate. Bruce M. Kramer, *Local Land Use Regulation of Oil and Gas Development*, Surface Use for Mineral Development in the New West: Finding Good Ground, ROCKY MOUNTAIN MINERAL LAW FOUNDATION, at 23 (2008) ("[t]he predominant test now in use applies the 'aggregate' or 'parcel as a whole' theory, taking into consideration the economic expectations of the property owner."). Although the presentation did not appear to reference Texas cases on this point, it noted a Colorado Supreme Court opinion in which "[a] county zoning ordinance prohibited certain types of mining activities. . . .The court determined that there is neither a *Lucas* nor a *Penn Central* taking because the entire parcel owned by the plaintiff included areas where economically viable uses could take place." *Id.*

328 *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 130–31 (1978).

The U.S. Supreme Court affirmed this approach again in *Tahoe-Sierra*, stating that, “where an owner possesses a full bundle of property rights, the destruction of one strand of the bundle is not a taking.”³²⁹

Groundwater, unless severed, is part of the surface estate.³³⁰ Although it is possible that a groundwater lease may be affected by a municipal regulation of groundwater, in a municipal setting where groundwater leases are generally uncommon, that appears to be less likely of a concern. For a residential lot within a city that has not leased its groundwater rights, whatever property interest the lot owner has in groundwater, the groundwater will be considered part of the surface estate.

In sum, it appears much more likely that a city regulating groundwater use would end up defending any takings claim against a *Penn Central*-type analysis, taking into consideration the value of the land parcel as a whole, rather than against a *Lucas*-type analysis, in which the groundwater is considered as separate property and where a denial of access might be characterized as a deprivation of all economically beneficial use.³³¹

C. TAKINGS ANALYSIS SUMMARY

For non-exaction regulatory takings claims, particularly regarding regulations that address threats to public health and safety, when neither a physical nor *Lucas*-type taking applies, then Texas courts apply the balancing test set forth in the *Penn Central* factors. This test looks at: (1) the economic impact of the regulation on the claimant; (2) the extent to which the regulation interferes with reasonable investment-backed expectations; and (3) the character of the governmental action.³³² These factors are not formulaic, but serve as guideposts that Texas courts use to consider all of the surrounding circumstances in applying a fact-sensitive test of reasonableness. Applying the *Penn Central* balancing test to police power actions that are for the purpose of protecting public health and safety, as in the several cases examined concerning municipal regulation of oil and gas drilling, courts are unlikely to conclude that the municipal regulation effects a compensable taking. As previously mentioned, one commentator concluded, “[e]xercises of the police power that directly protect public health and safety remain unlikely, even after *Lingle*, to be a taking under *Penn Central*.”³³³

329 *Tahoe-Sierra Pres. Council, Inc., v. Tahoe Reg'l Planning Agency*, 535 U.S. 302, 327 (2002). See also *Estate of Scott v. Victoria County*, 778 S.W.2d 585, 590 (Tex. App.—Corpus Christi 1989, no writ).

330 *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972).

331 With regard to a *Penn Central*-type analysis, in terms of reasonable investment-backed expectations, when a person purchases a residential lot that is already served or readily served by a public water system, purchasers are generally not thinking of drilling a groundwater well and often have no idea whether groundwater is even available.

332 *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 125 (1978).

333 Robert Meltz, *Substantive Takings Law: A Primer*, THE 14TH ANNUAL CONFERENCE ON LITIGATING TAKINGS CHALLENGES TO LAND USE AND ENVIRONMENTAL REGULATIONS, Georgetown University Law Center, November 18, 2011, at 26, available at <http://www.vermontlaw.edu/Documents/2011TakingsConference/3%20Meltz-%20Substantive%20Takings%20Law%20Primer.pdf>.

D. APPLICATION OF TAKINGS LAW TO MUNICIPAL REGULATION OF GROUNDWATER

To the extent it is shown, for example, that a municipality with private water wells within its jurisdiction may create numerous pathways for pollutants to reach a shared public water supply or a protected habitat for endangered species or otherwise environmentally sensitive waters, then a municipal regulation that limits or prohibits the drilling of private water wells to prevent such hazards may be upheld against a takings claim and not requiring compensation. Another reason for regulating private water wells may include protecting the public water supply from dangerous cross connections between private wells and the public distribution system by which contaminants or pathogens could be introduced into the drinking water supply of a large population. Regulations reasonably aimed at conserving public water supply in severe drought also have a good prospect of being held not to be a taking. Municipal regulations that protect both the quantity and quality of water in an aquifer that serves as a significant municipal water supply are also good candidates for regulations that a court would conclude are a valid exercise of police power not effecting a taking. In addition, private water well regulations that create a buffer zone around a municipal groundwater well field are likely to be held reasonable and not a taking.

Regulations may also be designed to avoid possible disruptions and dangers that might result within established neighborhoods with typical residential sized lots when private water wells are drilled. Although regulated by the state, the potential in private water well drilling for hitting or disturbing existing infrastructure exists, such as the drilling rig hitting high voltage electric lines or drilling into or near existing sewer or water lines multiplies with the number of wells drilled.

If a public water system might fail financially and leave a significant portion of a city without water service because a large number of residents drilled private water wells, then a court may not find a taking. As discussed earlier, one test for considering whether a compensable taking has occurred is “when the government’s action against an economic interest of an owner is for its own advantage.”³³⁴ Although a prohibition on drilling water wells where municipal water service is available may appear to be to the city’s advantage, in the larger picture it would be for the purpose of protecting the health and safety of the city’s citizens by maintaining a viable public water supply. Of course, as discussed above, maintaining the financial viability of a municipal water utility may be only one of several reasons that a city has for regulating private water wells.

Ultimately, only a takings analysis that takes into account all of the circumstance can determine whether a regulation of groundwater wells by a city has gone too far such that compensation would be required.

IX. EXAMPLES OF MUNICIPAL ORDINANCES

This article does not aim to provide a comprehensive report of Texas cities that have groundwater well regulations, but instead studies a few ordinances as examples.

334 *City of Austin v. Teague*, 570 S.W.2d 389, 393 (Tex. 1978).

A. SAN ANTONIO

It appears that the largest major city in Texas with a private groundwater well ordinance is the City of San Antonio.³³⁵ The ordinance requires a permit both in the city and the service area of San Antonio Water System (“SAWS”) (with exceptions for certain wells such as monitoring and test wells).³³⁶ However, the ordinance also requires that the permit be refused if water service is available from SAWS or another water purveyor.³³⁷ Specifically, with regard to the requirement to obtain a permit, the ordinance states that:

It shall be unlawful for anyone to drill, maintain, or otherwise construct or have constructed, any new water well, or any other artificial excavation to explore for or produce groundwater . . . within the City of San Antonio or SAWS service area, without first applying for and securing a well drilling permit from the SAWS Water Quality Division.³³⁸

Permits are generally refused for a variety of reasons—including available service—which would include most residential lots. As the ordinance states, “[i]t shall be the duty of the SAWS Water Quality Division . . . to refuse issuance of a permit when: . . . (b) The proposed well would be located on property to which water service is currently available from SAWS or any other recognized water purveyor. . . .”³³⁹ This provision also requires refusal of a permit when:

(c) Water service from existing SAWS water mains or service lines could be established to the property on which the proposed well is located at a cost equal to or less than the cost of drilling the well.

(d) The intended use of the water to be produced by the proposed well could be accomplished using reuse water, and reuse water service is available to the property or could be made available at a cost equal to or less than the cost of drilling the proposed well.³⁴⁰

The ordinance provides a variance process for a property owner denied a permit; however, variances have a limited term of three years.³⁴¹ When considering the San Antonio ordinance, it should be kept in mind that the aquifer is the primary source of municipal water supply for the City of San Antonio.³⁴²

B. VICTORIA

Another example of a Texas city with a water well ordinance is Victoria. Already discussed above is the provision of Victoria’s ordinance that declares private ground-

335 See San Antonio, Tex., CODE OF ORDINANCES ch. 34, art. VI, §§ 34-566–34-582 (2011).

336 *Id.* § 34-567.

337 *Id.* §§ 34-567, 34-570.

338 *Id.* at § 34-567.

339 *Id.* at § 34-570.

340 *Id.*

341 *Id.* at § 34-576.

342 *Source Water & Wellhead Protection Program*, SAN ANTONIO WATER SYSTEM, http://www.saws.org/environment/ResourceProtComp/groundwater_protection/source_water_program/ (last visited Feb. 23, 2014) (describing San Antonio’s reliance on the Edwards Aquifer and the aquifer’s 1975 designation by the EPA as the first sole-source aquifer in the nation).

water wells a nuisance if they either pollute or tend to pollute the city's water supply in a manner that cannot be corrected.³⁴³ The Victoria ordinance requires a permit within the city, which "shall be granted" to a person who applies, pays the fees, and meets all the requirements in that division of Victoria's city code.

X. CONCLUSION

The cases supporting municipal police power regulation of oil and gas drilling provide valuable precedent for analyzing potential claims concerning municipal regulation of groundwater wells. Although in addressing a regulatory takings claim, a Texas court would in most instances apply the *Penn Central/Sheffield* factors, the third of these factors in particular—which examines the character of the government action— includes a weighing of the public health and safety purpose of a regulation. The public health and safety factor weighs strongly in the courts' decisions concerning municipal authority to regulate oil and gas drilling and would similarly be expected to be important to assessment of municipal authority to regulate groundwater.

In assessing a takings claim, a factor courts will likely weigh is whether a municipal regulation constitutes a total prohibition on accessing groundwater or merely restricts access to some degree. The more stringent the regulation, the more a court will be looking for a justifying police power objective supporting the regulation. Circumstances can vary significantly from one locality to another in this regard. Because the determination of a taking is a "fact-sensitive" test, there is not a blanket answer to what may or may not constitute a taking. Regarding the restriction on groundwater well drilling, courts are apt to consider whether the land owner has another reasonable source of water in terms of factors such as affordability, quality, quantity, and convenience.

The more apparent it is that the regulation aims at protecting public health and safety, the more likely a court will find that a municipal exercise of police power does not effect a taking and does not require compensation. As courts have said, police powers are not static. What is considered an invalid exercise of police power today may be considered valid in the future and vice versa. As the takings analysis is fact-driven, the facts can vary greatly from time to time and place to place.

In summary, in light of the *Penn Central* factors for assessing a takings claim, cities regulating or contemplating regulation of groundwater as a practical matter are advised to: (1) consider the extent to which a regulation impacts a property right and property owners' reasonable investment-backed expectations; (2) weigh that against the counterbalancing purposes for the police power regulation causing the impact; and (3) assess whether they believe a court would find that regulation results in a regulatory taking in light of all of the facts.

Ross Crow is an Assistant City Attorney with the City of Austin Law Department where he has supported the Austin Water Utility on a variety of water supply and water utility matters for nine years. Ross is a graduate of the University of Texas School of Law (1987) and is an Austin native.

343 Victoria, Tex., CODE OF ORDINANCES ch. 13, art. II, § 13-74.

THE CURIOUS PROBLEM OF EAGLES

BY BROOKE WAHLBERG

I.	The Genesis of Eagle Protection: Bald and Golden Eagle Protection Act.....	52
II.	What Permitting Mechanism? The Eagle Rule	56
	A. Eagle Permitting: Incidental Take of Eagles.....	56
	B. Eagle Permitting: Nesting Permits	57
	C. The Eagle Rule: Issues Raised	58
III.	An Aside: BGEPA Versus the ESA	60
IV.	Draft Eagle Conservation Plan Guidance Module 1: Wind Energy Development.....	62
V.	An Aside: The Wind Energy Guidelines	64
VI.	April 2012: Notices of Rulemaking	65
VII.	Eagle Conservation Plan Guidance Module 1: Land-based Wind Energy Guidelines, Version 2	69
VIII.	December 2013: Revision to Eagle Rule	70
IX.	Practical Implications.....	71
	A. Administrative Issues	72
	B. Mitigation Issues	72
X.	Collateral Issues: The Clean Water Act	73
XI.	Enforcement and Eagles in the News: Is Wind Really Getting a Pass?	74
XII.	Conclusion	78

Although one would think that the removal of the bald eagle from the Endangered Species Act (ESA) list of threatened and endangered wildlife in 2007 would mean that eagles are now subject to less regulation, the result has been the exact opposite. The 1940 Bald and Golden Eagle Protection Act (BGEPA) has seen a whirlwind of activity in the last five years after being relatively dormant for its first sixty-nine years of existence.¹ In 2009, the U.S. Fish and Wildlife Service (“Service”) promulgated the Final Rule for Eagle Permits (the “Eagle Rule”) under the authority delegated to the Service in BGEPA.² While the discussion in the Federal Register notice of the Eagle Rule purports to propose a permitting scheme that is less onerous than the ESA, the practical effect of the Eagle Rule is that eagle permits are much more difficult to obtain than incidental take permits (ITPs) for threatened and endangered species under ESA Section 10.³ Subsequent to the Eagle Rule, the Service has issued guidance and revised guidance directed at the wind industry, as well as two proposed rulemakings, and an

1 See Eagle Permits; Take Necessary to Protect Interest in Particular Localities, 74 Fed. Reg. 46,836 (Sept. 11, 2009) (codified at 50 C.F.R. §§ 13, 22) [hereinafter Eagle Rule].

2 *Id.*; 16 U.S.C. § 668 (delegating authority to the Service).

3 See Eagle Rule, *supra* note 1, at 46,847 (“The typical permit-application process will be less burdensome for the applicant than the permit process under the ESA, since an HCP is not required.”).

amendment to the Eagle Rule.⁴ Eagle issues associated with wind and other development projects are regularly appearing in the news.⁵ The proliferation of regulations and guidance addressing eagles has created a confusing regulatory scheme for those seeking permits under BGEPA. In an effort to untangle the issues surrounding eagles, this article examines the following:

- History of the BGEPA
- The Eagle Rule
- Eagle Conservation Plan Guidance: Module 1 Land-based Wind Energy Version 1
- The Proposed Rulemakings of April 2012
- Eagle Conservation Plan Guidance: Module 1 Land-based Wind Energy Version 2
- December 2013: Revision to Eagle Rule Practical Issues
- Collateral Issues
- Enforcement and Eagles in the News

I. THE GENESIS OF EAGLE PROTECTION: AND GOLDEN EAGLE PROTECTION ACT

Enacted in 1940, Congress' express intent was that the BGEPA would protect the bald eagle as a symbol of the United States.⁶ Congress chose the bald eagle as the official symbol of the United States in 1782.⁷ By the 1930's however, bald eagle populations had

-
- 4 See U.S. Fish & Wildlife Service, Migratory Birds; Draft Eagle Conservation Plan Guidance, 76 Fed. Reg. 9529 (Feb. 18, 2011) [hereinafter 2011 Draft Guidance]; see also U.S. Fish & Wildlife Service, Migratory Birds; Eagle Conservation Plan Guidance, Module 1 – Land-based Wind Energy, Version 2, 78 Fed. Reg. 25,728 (May 2, 2013) [hereinafter Guidance Version 2]; see also Eagle Permits; Changes in the Regulations Governing Eagle Permitting, 77 Fed. Reg. 22,267 (April 13, 2012) (first proposed rulemaking); see also Eagle Permits; Revisions to Regulations Governing Take Necessary to Protect Interests in Particular Localities, 77 Fed. Reg. 22,278 (April 13, 2012) (second proposed rulemaking); Eagle Permits; Changes in the Regulations Governing Eagle Permitting, 78 Fed. Reg. 73,704 (Dec. 9, 2013).
- 5 See, e.g., Jesse Greenspan, *PacifiCorp to Pay \$10.5M Over Illegal Eagle Kills*, Law360, July 13, 2009, available at <http://www.ens-newswire.com/ens/jul2009/2009-07-14-092.html>, Dan Frosch, *A Struggle to Balance Wind Energy With Wildlife*, N.Y. TIMES, Dec. 16, 2013, at A18, available at <http://www.nytimes.com/2013/12/17/science/earth/a-struggle-to-balance-wind-energy-with-wildlife.html>; *Wind Farms that Kill Bald Eagles are Now Protected from Prosecution*, PBS NEWSHOUR (Dec. 6, 2013), <http://www.pbs.org/newshour/rundown/2013/12/wind-farms-that-kill-bald-eagles-are-now-protected-from-prosecution.html>; Robert Bryce, Op-Ed., *Fighting Climate Change by Killing Eagles*, WALL STREET JOURNAL, Oct. 10, 2013, <http://online.wsj.com/news/articles/SB10001424052702303342104579099060830782406>; *Obama Administration Gives Wind Farms a Pass on Eagle Deaths, Prosecutes Oil Companies*, FOX NEWS (May 14, 2013), <http://www.foxnews.com/politics/2013/05/14/obama-administration-gives-wind-farms-pass-on-eagle-deaths-prosecutes-oil/>.
- 6 Act of June 8, 1940, c. 278 §1, 54 Stat. 250 (the legislation was then known as the Bald Eagle Protection Act).
- 7 See *Fact Sheet: Natural History, Ecology, and History of Recovery*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/midwest/eagle/recovery/biologue.html> (last visited Jan. 5,

diminished due to hunting, power line electrocutions, and pesticides, among other causes.⁸ The insecticide DDT (Dichloro-Diphenyl-Trichloroethane) came into widespread use in the 1940's and 50's to prevent malaria and soon became the number one cause of mortality for bald eagles until its ban in 1972.⁹

In 1962, Congress amended the BGEPA to include golden eagles.¹⁰ Not only was the golden eagle facing threats similar to the bald eagle, but juveniles of both species are virtually indistinguishable.¹¹ The enacting language of the 1962 amendment noted:

Whereas the population of the golden eagle has declined at such an alarming rate that it is now threatened with extinction; and . . . Whereas protection of the golden eagle will afford greater protection for the bald eagle, the national symbol of the United States of America, because the bald eagle is often killed by persons mistaking it for the golden eagle. . .¹²

Thereafter, golden eagles received the same protections as bald eagles pursuant to the BGEPA.¹³ The BGEPA take prohibition is similar to the ESA Section 9 take prohibition, but it is not identical. Under the BGEPA, no one may:

knowingly, or with wanton disregard for the consequences of his act take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or any golden eagle, alive or dead, or any part, nest, or egg thereof of the foregoing eagles, or whoever violates any permit or regulation issued pursuant to this subchapter. . .¹⁴

The BGEPA defines “take” to include: “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb; “transport” includes also ship, convey, carry, or transport by any means whatever, and deliver or receive or cause to be delivered or received for such shipment, conveyance, carriage, or transportation.”¹⁵

Whereas the buzzwords of the ESA's take definition are “harm” and “harass,”¹⁶ the BGEPA's take definition introduces “disturb.”¹⁷ In 2007, the Service, through regulation, defined “disturb” as:

To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on best scientific information available, (1) injury to an eagle, (2) a

2014); *The American Bald Eagle*, U.S. DEPARTMENT OF VETERAN AFFAIRS, <http://www.va.gov/opa/publications/celebrate/eagle.pdf> (last visited Jan. 5, 2014).

8 See *Fact Sheet: Natural History, Ecology, and History of Recovery*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/midwest/eagle/recovery/biologue.html> (last visited Jan. 5, 2014).

9 *Id.*

10 Act of October 24, 1962, Pub.L. No. 87-884, 76 Stat. 1246.

11 *Id.*

12 *Id.*

13 16 U.S.C. § 668 (2013).

14 *Id.*

15 *Id.* § 668c.

16 See Endangered Species Act of 1973 § 3(19), 16 U.S.C. § 1532(19) (2013); see also 50 C.F.R. § 17.3 (2013).

17 See 16 U.S.C. § 668c (2013).

decrease in its productivity, by substantially interfering with normal breeding, feeding or sheltering behavior, or (3) nest abandonment by substantially interfering with normal breeding, feeding or sheltering behavior.¹⁸

It is noteworthy that the ESA's definitions of harm and harass require actual death or injury,¹⁹ whereas the BGEPA's "disturb" requires only a likelihood of causing injury.²⁰ The BGEPA arguably establishes a lower threshold to demonstrate that an activity has risen to the level of take under the BGEPA, which is surprising considering that neither species is protected under the ESA.

Perhaps most notably, the BGEPA also authorizes the Secretary of the Interior to promulgate regulations to create a permitting scheme by which a permittee can obtain authorization to take an eagle.²¹ Section 668a provides that:

Whenever, after investigation, the Secretary of the Interior shall determine that it is compatible with the preservation of the bald eagle or the golden eagle to permit the taking, possession, and transportation of specimens thereof for the scientific or exhibition purposes of public museums, scientific societies, and zoological parks, or for the religious purposes of Indian tribes, or that it is necessary to permit the taking of such eagles for the protection of wildlife or of agricultural or other interests in any particular locality, he may authorize the taking of such eagles pursuant to regulations which he is hereby authorized to prescribe.²²

The authorization appears to authorize two types of take. First, if "compatible with the preservation of the bald eagle or the golden eagle," the Secretary may "permit the taking, possession and transportation of specimens thereof for the scientific or exhibition purposes of public museums, scientific societies and zoological parks, or for the religious purposes of Indian tribes."²³ Second, it allows the Secretary to establish permitting as "necessary to permit the taking of such eagles for the protection of wildlife or of agriculture or other interests in any particular locality."²⁴ Despite having this authorization since the BGEPA's enactment in 1940, the Service did not implement this authority until 2009.²⁵

The BGEPA is a criminal statute.²⁶ It provides for civil penalties of up to \$5,000 per take.²⁷ Its criminal penalties allow for up to \$250,000 per take by an individual and one to two years of imprisonment.²⁸ Corporate violators can receive penalties up to \$500,000

18 50 C.F.R. § 22.3 (2011).

19 See Endangered Species Act of 1973 § 3(19), 16 U.S.C. §§1532(19) (2013); see also *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687 (1995).

20 50 C.F.R. § 22.3 (2013).

21 16 U.S.C. § 668a (2013).

22 *Id.*

23 *Id.*

24 *Id.*

25 See generally Eagle Rule, *supra* note 1.

26 16 U.S.C. § 668(a) (2013).

27 *Id.* § 668(b).

28 The BGEPA's criminal penalties are affected by the Sentencing Reform Act. The BGEPA's maximum term of imprisonment of one year is a "Class A misdemeanor," and the maximum fine is: (1) for an individual, \$250,000 "for a misdemeanor resulting in death" and \$100,000 for a "Class A misdemeanor that does not result in death"; and (2) for an organization,

per take.²⁹ Unlike the ESA, the BGEPA has no citizen suit provisions.³⁰ Therefore, unlike the ESA, a third party cannot sue the Service to enforce the BGEPA. However, third parties could potentially bring suit under the Administrative Procedure Act.³¹

In 1967, the Service determined that the bald eagle qualified for listing as an endangered species under the ESA.³² Once listed, the bald eagle received all the protections of the ESA in addition to the BGEPA. Those engaging in activities that were likely to result in the “take” of the bald eagle (under the ESA definition) needed an ITP under Section 10 of the ESA before lawfully continuing such activity.³³ For example, in the Woodlands development in Houston, Texas halted construction to obtain a Section 10(a)(1)(B) Incidental Take Permit for authorization of potential take of a pair of bald eagles that had established a home in the Woodlands area in the midst of construction.³⁴ The golden eagle has never been proposed for listing as threatened or endangered under the ESA.³⁵

In 2007, the Service determined that the bald eagle met the criteria for de-listing and removed it from protection under the ESA.³⁶ Populations of bald eagles have been steadily increasing.³⁷

\$500,000 “for a misdemeanor resulting in death” and \$200,000 for a “Class A misdemeanor that does not result in death.” 18 U.S.C. §§ 3559(a)(6), 3571(b)(4)–(5), (c)(4)–(5).

29 *Id.*

30 See Endangered Species Act of 1973 § 11(g), 16 U.S.C. § 1540 (2013) (citizen suit provision).

31 See Administrative Procedure Act of 1946, 5 U.S.C. §§ 551–559 (2013). Note, however, that a claim under the Administrative Procedure Act can only be brought challenging a final agency action. 5 U.S.C. § 704 (2013). Without a permit decision or similar final action by the Service, a claim will not be ripe.

32 See Native Fish and Wildlife, Endangered Species, 32 Fed. Reg. 4001 (March 11, 1967) (determining that the bald eagle was a threatened species).

33 See Endangered Species Act of 1973 § 10(a)(1)(B), 16 U.S.C. § 1540 (2013) (establishing incidental take permits).

34 See Availability of an Environmental Assessment/Habitat Conservation Plan for Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit for the Incidental Take of the Bald Eagle (*Haliaeetus leucocephalus*) During the Continued Development of the East Lake Area, The Woodlands, Montgomery County, TX, 66 Fed. Reg. 52,445 (Oct. 15, 2001) (notice of request for permit); Permit TE-048649-0 issued to The Woodlands Land Development Co., L.P. on Aug. 23, 2002, *Conservation Plans*, U.S. FISH & WILDLIFE SERVICE, available at http://ecos.fws.gov/conserv_plans/PlanReportSelect?region=2&type=HCP (select “The Woodlands Land Development Co., L.P.” from pull-down menu, then click “Individual Report”) (last visited Jan. 5, 2014).

35 See *Species Profile: Golden Eagle*, U.S. FISH & WILDLIFE SERVICE, <http://ecos.fws.gov/species-profile/profile/speciesProfile.action?spcode=BODV> (last visited Jan. 5, 2014).

36 Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States from the List of Endangered and Threatened Wildlife, 72 Fed. Reg. 37,346 (July 9, 2007).

37 Endangered and Threatened Wildlife and Plants; Post-Delisting Monitoring Plan for Bald Eagle (*Haliaeetus leucocephalus*), 75 Fed. Reg. 31,811 (June 4, 2010) (notice of availability of post-delisting monitoring plan); see *Fact Sheet: Natural History, Ecology, and History of Recovery*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/midwest/eagle/recovery/biologue.html> (last visited Jan. 5, 2014).

II. WHAT PERMITTING MECHANISM? THE EAGLE RULE

In 2009, the Service promulgated the “Eagle Rule,” which established the permitting regulations authorized by Section 668a of the BGEPA.³⁸ The Eagle Rule sets forth a permitting scheme for the incidental take of eagles.³⁹ It also provides for nest removal permits.⁴⁰

A. EAGLE PERMITTING: INCIDENTAL TAKE OF EAGLES

The Eagle Rule recognizes two types of incidental take: (1) individual instances of take (“standard take,” for scientific or research purposes, etc.); and (2) programmatic take.⁴¹ Standard take includes single-instance takes of an eagle or eagles.⁴² Programmatic take includes take that may recur over time, such as a railroad that routinely strikes eagles, utilities that may cause eagle deaths through electrocutions by power lines, ongoing disturbance at a port through vessel traffic, or construction and maintenance of highways that results in regular disturbance of eagles.⁴³ Programmatic take is best understood as comparable to incidental take under the ESA.

The Service, in setting forth the standard for both types of take permits, wrote that permits authorize the take of eagles:

where the take is compatible with the preservation of the bald eagle and the golden eagle; necessary to protect an interest in a particular locality; associated with but not the purpose of the activity; and (1) For incidental instances of take, the take cannot be practicably avoided; or (2) For programmatic take: the take is unavoidable even though advanced conservation practices are being implemented.⁴⁴

The BGEPA permit authorization speaks of take:

[(1)] that it is compatible with the preservation of the bald eagle or the golden eagle to permit the taking, possession, and transportation of specimens thereof for the scientific or exhibition purposes of public museums, scientific societies, and zoological parks, or for the religious purposes of Indian tribes, or [(2)] that it is necessary to permit the taking of such eagles for the protection of wildlife or of agricultural or other interests in any particular locality.”⁴⁵

These are two separate types of take with two different standards. On the one hand, compatible with the preservation of eagles for purposes of science, exhibition, religion

38 Eagle Permits; Take Necessary to Protect Interests in Particular Localities, 74 Fed. Reg. 46,836 (Sept. 11, 2009).

39 50 C.F.R. § 22.26 (2013).

40 *Id.* § 22.27.

41 *Id.* § 22.26.

42 Eagle Rule, *supra* note 1, at 46,841.

43 *Id.* at 46,842.

44 *Id.* at 46,877. “Practicable” is defined in the Eagle Rule as “capable of being done after taking into consideration, relative to the magnitude of the impacts to eagles (1) the cost of remedy compared to proponent resources; (2) existing technology; and (3) logistics in light of overall project purposes.” *Id.* at 46,838.

45 50 U.S.C. § 668a (2013).

etc., and on the other, take that is necessary for wildlife protection, agriculture, or other interests.

However, the Eagle Rule does not treat these two clauses as separate. Rather, it conflates these two standards into one so that the permit standard requires that take be compatible with the preservation of eagles *and* necessary to protect an interest in a particular locality. Practically, this means that the Eagle Rule imposes upon programmatic take permits a requirement that it be compatible with the preservation of eagles, where arguably that requirement does not exist in the statute itself. This “Preservation Standard” then creates a domino effect on the realities of obtaining a programmatic take permit.

Let us unpack this point. To qualify for a standard take permit, one must demonstrate that the take requested: (1) is compatible with the preservation of the bald eagle and the golden eagle; (2) is necessary to protect an interest in a particular locality; and (3) that the take cannot be practicably avoided.⁴⁶ To meet the issuance criteria for a programmatic take permit, an applicant must demonstrate that the requested take: (1) is compatible with the preservation of the bald eagle and the golden eagle; (2) is necessary to protect an interest in a particular locality; and (3) unavoidable even though Advanced Conservation Practices (ACPs) are being implemented.⁴⁷

Note that, unlike the standard take permit issuance criteria that are qualified by the phrase “cannot be practicably avoided,” programmatic take permits have no such qualification. Reasonableness, practicability, and economics are not considered when determining whether an activity meets the issuance criteria for a programmatic take permit. Moreover, no sideboards exist with regard to ACPs by which an applicant can evaluate the feasibility of its project. That is, when does the Service deem an ACP as too onerous or costly to be considered for implementation to render take is unavoidable? The answer may be never. The Service defines its expectations for programmatic permittee as “we expect . . . that the permittee fully implement the ACPs agreed to by the Service as conditions of the permit, which are measures designed to reduce take to the maximum degree achievable . . . a programmatic take permit will be available only if the applicant can implement all available, technically-achievable measures to reduce take.”⁴⁸

Finally, and perhaps most critical for the functionality of programmatic take permits, the Eagle Rule limited programmatic take permits to five-year terms.⁴⁹ In reality, the examples given by the Eagle Rule for projects that might need a programmatic take permit—such as railroad operations, utility lines, ports, etc.—are projects whose potential impacts will be ongoing for 20 or 30 years. The “Amended Rule” described in Section VIII partially addresses this issue.

B. EAGLE PERMITTING: NESTING PERMITS

The Eagle Rule also addresses circumstances where eagle nests may be intentionally removed where they endanger eagles or humans.⁵⁰ An “Eagle Nest Take Permit” is avail-

46 See *id.*

47 See *id.*

48 Eagle Rule, *supra* note 1, at 46,842.

49 50 C.F.R. § 22.23 (2013); Eagle Rule, *supra* note 1, at 46,877; *but see* discussion of the Proposed Rulemaking *infra* Section VI.

50 Eagle Rule, *supra* note 1, at 46,845.

able for the take of inactive nests where the take is necessary to ensure public health and safety, where there is a functional hazard on a human-engineered structure that renders the structure inoperable, or where the nest must be removed for an activity that will provide a net benefit to eagles.⁵¹ Compensatory mitigation may, but will not always, be required.⁵²

Where a nest take authorization is requested for purposes other than to alleviate an immediate threat to safety, two additional criteria must be met: (1) a permit will not be issued unless alternative suitable nesting and foraging habitat is available; and (2) compensatory mitigation will be required.⁵³ Prior to nest removal, the area will be reviewed for the availability of potential alternative suitable habitat and the distance to those areas to reasonably assess the likelihood of total loss of the territory.⁵⁴ The areas considered are 43 miles for bald eagles and 140 miles for golden eagles, however, the Service only requires that applicants provide data within a 10-mile radius of the nest.⁵⁵

The Service may also issue “Programmatic Eagle Nest Permits” where there is an ongoing need to remove nests.⁵⁶ For example, airports and transmission providers may frequently discover nests and seek to protect both eagles and humans and avoid emergency nest removal.⁵⁷ A “Programmatic Eagle Nest Permit” requires ACPs, just as programmatic take permits do, and a demonstration that nest take cannot be completely avoided.⁵⁸

C. THE EAGLE RULE: ISSUES RAISED

Because the Eagle Rule sets the permitting standard for both types of incidental take as “compatible with the preservation of the bald eagle or the golden eagle” (a.k.a. the “Preservation Standard”), it was necessary for the Service to describe what exactly is compatible with the Preservation Standard. In the Eagle Rule, the Service explained that the “compatible with Preservation Standard” means “consistent with the goal of stable or increasing breeding populations.”⁵⁹ Because the population characteristics and behavioral patterns are vastly different between the two eagle species, the Service used two different approaches in ascertaining what populations needed to be maintained.⁶⁰ Golden eagles, while not listed as endangered for purposes of the ESA, are not increasing in population like the bald eagle.⁶¹ Current data, however, suggests that their populations are stable.⁶² For bald eagles, the Service “used natal populations (eagles within the median natal dispersal range of each other, estimated at 43 miles)” to look at population

51 50 C.F.R. § 22.27(a) (2013).

52 Eagle Rule, *supra* note 1, at 46,845.

53 50 C.F.R. § 22.27 (2013); *see also* Eagle Rule, *supra* note 1, at 46,845 (discussing when compensatory mitigation will be required for nest removal permits).

54 Eagle Rule, *supra* note 1, at 46,845.

55 *Id.*

56 *Id.*

57 *Id.*

58 *Id.*

59 *Id.* at 46,836.

60 *Id.* at 46,839.

61 *Id.*

62 Brian A. Millsap et. al., Golden Eagle Population Trends in the Western United States: 1968-2010, 8 J. WILDLIFE MGMT., (May 3 2013).

distributions.⁶³ The Service found that the management populations demonstrated by this approach matched up roughly with the Service's organization structure of its eight Regional offices.⁶⁴ For golden eagles, however, population data was not as easy to ascertain.⁶⁵ Available data was not as spatially precise, and the Service chose to set take thresholds per Bird Conservation Region (BCR) levels.⁶⁶ "BCRs are ecologically distinct regions in North America with similar bird communities, habitats, and resource management issues."⁶⁷ Looking at BCRs, the Service concluded that the golden eagle has had modest declines in the four BCRs that constitute 80% of the golden eagle's range in the lower 48 states.⁶⁸

Based on this data, the Service concluded that, for bald eagles, the initial cap of permitted take of the bald eagles will be at five percent of the estimated annual productivity.⁶⁹ However, as a result of both the unavailability of data for golden eagles and modest declines in BCRs, the Service concluded that "until we have additional data to show that populations can withstand additional take, we are deferring implementation of the new permit types for golden eagles, except for safety emergencies and programmatic permits."⁷⁰ The Service distinguished between golden eagles west of 100 degrees West longitude and those east of 100 degrees West longitude.⁷¹ Additionally, the Service further caveated the availability of permits:

[The Service] will initially implement this rule only insofar as issuing take permits based on levels of historically authorized take, safety emergencies, and take permits designed to reduce ongoing mortalities and/or disturbance. Future projects seeking programmatic permits would need to minimize their own take of golden eagles to the point that it is unavoidable and also reduce take from another source to completely offset any new take from the new activity.⁷²

This "complete offset" approach for eagles west of 100 degrees West longitude is more commonly known as the "no net loss standard."⁷³ For golden eagles east of 100

63 Eagle Rule, *supra* note 1, at 46,839.

64 *Id.*

65 *Id.*

66 *Id.*

67 *Id.*

68 *Id.*

69 *Id.*

70 *Id.*

71 *Id.* at 46,840. The 100th degree West longitude, or 100th meridian, passes through six states: North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas. See *Along the 100th Meridian*, U.S. Geological Survey, <http://www.usgs.gov/newsroom/article.asp?ID=2847> (stating that this longitudinal line "emerged as a widely-recognized line that represented the boundary in the central United States between the moist east and the arid west").

72 Eagle Rule, *supra* note 1, at 46,840.

73 See, e.g., News Release, U.S. Fish & Wildlife Service, Permit Request Considered for West Butte Wind Project (Jan. 3, 2012), available at <http://www.fws.gov/pacific/news/news.cfm?id=2144374933>; see also Migratory Birds; Eagle Conservation Plan Guidance: Module 1—Land-Based Wind Energy, Version 2, 78 Fed. Reg. 25,758 (May 2, 2013).

degrees West longitude, the Service announced it would not issue any take permits unless necessary to alleviate an immediate safety emergency.⁷⁴

To manage the scenario in which take authorization requests exceed the take thresholds described above, the Service devised a priority system for its permits.⁷⁵ Permits necessary to alleviate safety emergencies receive top priority.⁷⁶ Second are requests from Native Americans where absolutely necessary to meet religious purposes.⁷⁷ Third in the priority line is renewal of existing programmatic take permits.⁷⁸ Fourth priority is given to projects that promote and maintain public health and safety.⁷⁹ Finally, resource development and recovery operations have fifth priority.⁸⁰ Notably, though, the Service says that, “[b]ecause the requirements for obtaining programmatic take authorization are designed to reduce take, the take authorized by programmatic permits for ongoing activities will not be subtracted from regional thresholds, nor would they be subject to the prioritization criteria.”⁸¹

In summary, for bald eagles, permits can be issued so long as total take does not surpass five percent of the estimated annual productivity for the regional bald eagle population.⁸² For golden eagles, the prioritization criteria will be used for all golden eagle permits until data shows that golden eagles can withstand additional take, and until then, the Service will issue permits at historically-authorized take levels under existing permits, for emergency take, and for programmatic take (west of 100th meridian only).⁸³ Any programmatic take permits for a golden eagle will have to demonstrate no net loss of golden eagles.⁸⁴

III. AN ASIDE: BGEPA VERSUS THE ESA

Throughout this article, the differences between the BGEPA permitting scheme for incidental take and the ESA permitting scheme for incidental take are highlighted. Recognizing these differences is important; it is important to recall that the Service determined that the bald eagle no longer qualified as endangered or threatened, and the golden eagle has never been listed and is not currently being considered for listing as endangered. Despite the two eagle species being arguably in better circumstances than species listed under the ESA in numerous ways, the Eagle Rule and the Guidance (discussed in Sections II, IV-VIII) impose requirements and costs that go beyond what is

74 Eagle Rule, *supra* note 1, at 46,840.

75 50 C.F.R. § 22.26(e)(4) (2013).

76 *Id.*

77 *Id.*

78 *Id.* It is unclear how relevant this priority system will be with the 2013 amendments to the Eagle Rule, *infra* Section VIII.

79 *Id.*

80 *Id.*

81 Eagle Rule, *supra* note 1, at 46,842.

82 *Id.* at 46,840.

83 *Id.*

84 *Id.*

required by the ESA and without regulatory assurances or cost certainty. Below are a few examples demonstrating this point:

1. ESA ITPs have the regulatory assurances of the “No Surprises Rule.”⁸⁵ Adopted by Interior Secretary Babbitt in the 1990s, the No Surprises Rule provides that ITP holders have regulatory assurance that, as long as they are abiding by the terms and conditions of their ITP, the permittee will not be asked by the Service to commit any additional compensatory resources nor impose any additional restrictions in the event of unforeseen circumstances.⁸⁶ The Eagle Rule is completely lacking in any comparable mechanism.
2. The BGEPA take prohibition is broader than that of the ESA. “Disturb” includes actions “likely to cause” take.⁸⁷ The Supreme Court has held that the ESA’s “harm” definition means “actual death or injury.”⁸⁸
3. ESA ITPs can be issued where the impacts of the take have been minimized and mitigated to the maximum extent practicable.⁸⁹ Under the BGEPA, the Service cannot issue a programmatic take permit unless take is shown to be unavoidable.⁹⁰
4. ESA ITPs have terms lasting several decades with adaptive management triggers limited by the No Surprises Rule so that a permittee can reasonably gauge what Year 30 may cost to remain in compliance.⁹¹ The Service extended the BGEPA programmatic take permits term to thirty years in December 2013, however, permits are subject to intensive review every five years with no assurances that allow the permittee to gauge the costs of remaining in compliance in Year 30.⁹²
5. The cumulative effects analysis under the ESA is limited to that which must be reasonably certain to occur.⁹³ No similar limitation is provided for in a BGEPA permit.⁹⁴
6. ESA requires that take authorization be assessed according to a jeopardy standard, which means that the Service must evaluate whether the proposed amount of take will appreciably reduce the likelihood of the survival and recovery of the species in the wild.⁹⁵ For golden eagles, the Service has implemented a “no net loss” standard requiring a complete offset of impacts.⁹⁶

85 Habitat Conservation Plan Assurances (“No Surprises”) Rule, 63 Fed. Reg. 8859 (Feb. 23, 1998).

86 *Id.*

87 50 C.F.R. § 22.3 (2013).

88 See Endangered Species Act of 1973 § 3(19), 16 U.S.C. §§ 1532(19), 1538(a)(1) (2013); see also *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687 (1995).

89 Endangered Species Act of 1973 §10(a)(2)(B), 16 U.S.C. § 1539 (2013).

90 50 C.F.R. § 22.26 (2013).

91 U.S. Fish & Wildlife Service, Habitat Conservation Planning and Incidental Take Permit Processing Handbook 6–13 (1996).

92 50 C.F.R. § 22.26(i) (2013).

93 *Id.* § 402.02.

94 See Eagle Rule, *supra* note 1, at 46,866–67.

95 U.S. Fish & Wildlife Service, Habitat Conservation Planning and Incidental Take Permit Processing Handbook 6–14 (1996); 50 C.F.R. § 402.02 (2013).

96 2011 Draft Guidance, *supra* note 4.

IV. DRAFT EAGLE CONSERVATION PLAN GUIDANCE MODULE 1: WIND ENERGY DEVELOPMENT

In February 2011, the Service announced the availability of the draft Eagle Conservation Plan Guidance (“Guidance”) for land-based wind energy facilities.⁹⁷ The stated purpose of the Guidance is to provide recommendations for the development of Eagle Conservation Plans (“ECPs”) to support issuance of programmatic take permits for wind facilities.⁹⁸ Essentially, the Guidance, through its introduction of ECPs, creates a “Habitat Conservation Plan” requirement in the programmatic take permit process (à la ESA Section 10) despite there not being any such requirement in the BGEPA or the Eagle Rule.

The Eagle Rule provides several examples of projects foreseeably needing programmatic take permits.⁹⁹ While several industries are addressed in these examples, the Service’s preliminary focus is on the wind industry because, “since finalization of the Eagle Permit Rule, the development and planned development of wind facilities (developments for the generation of electricity from wind turbines) has increased dramatically in the range of the Golden Eagle in the western United States.”¹⁰⁰ The Guidance continues:

Because of the urgent need for guidance on permitting eagle take at wind facilities, this initial module focuses on this issue. Many of the concepts and approaches outlined in this module can be readily exported to other situations, and we expect to release other modules in the near future specifically addressing other forms of eagle take.¹⁰¹

The Guidance alone does not impose any additional regulatory requirements.¹⁰² However, wind projects (and likely other industry projects) seeking programmatic take permits will be required to follow the procedure set forth in the Guidance.

The Guidance breaks down into five stages:

- Stage 1** – Identify potential wind facility locations with manageable risk to eagles at the landscape level;
- Stage 2** – Obtain site-specific data to predict eagle fatality rates and disturbance take at wind-facility sites that pass Stage 1 assessment;
- Stage 3** – Conduct turbine-based risk assessment and estimate the fatality rate of eagles for the facility evaluated in Stage 2, excluding possible ACPs;
- Stage 4** – Identify and evaluate ACPs that might avoid or minimize fatalities identified in Stage 3. When required, identify compensatory mitigation necessary to reduce any remaining fatality effect to a no net loss standard; and
- Stage 5** – Document annual eagle fatality rate and disturbance effects. Identify additional ACPs to reduce observed level of mortality, and determine if

97 2011 Draft Guidance, *supra* note 4, 76 Fed. Reg. at 9529.

98 2011 Draft Guidance, *supra* note 4, at 5.

99 Eagle Rule, *supra* note 1, at 46,842.

100 2011 Draft Guidance, *supra* note 4, at 7.

101 *Id.* at 8.

102 *Id.*

initial ACPs are working and should be continued. When appropriate, monitor the effectiveness of compensatory mitigation.¹⁰³

After stages 1 through 4, the Guidance calls for the project proponents to determine whether the project is: (1) high risk to eagles, with little opportunity to minimize effects; (2) high to moderate risk to eagles, but with an opportunity to minimize effects; (3) minimal risk to eagles; or (4) uncertain.¹⁰⁴ The Service opines that projects falling into Category 1 should be abandoned, moved, or significantly modified because they would likely not meet the issuance criteria for a programmatic take permit.¹⁰⁵ The Guidance instructs that projects falling in Categories 2, 3, and, in certain circumstances, 4 are candidates for permits and should consider the development of ECPs.¹⁰⁶

The Guidance creates more issues than it solves. First and foremost, it introduces the concept of the ECP, an onerous document required by statute.¹⁰⁷ While technically voluntary, a wind developer (and arguably anyone seeking a programmatic take permit) will now be hard-pressed to demonstrate BGEPA compliance without following the Guidance and developing an ECP.

Second, given that the Eagle Rule allows only a 5-year term for a programmatic take permit, and most projects seeking programmatic take permits will be longer term projects (utility lines, wind farms, ports, etc.), the Guidance requires substantial effort and expense for a regulatory assurance whose duration does not even approach the lifespan of a project. In contrast, again, the Service regularly issues ITPs under the ESA for 30-year terms for the lifespan of the covered activity.¹⁰⁸

Third, after five years, with the recent extension of the permit term (discussed in Section VIII), a permit is subject to intensive review as if being submitted for the first time, and there are no regulatory assurances that the required measures will remain the same.¹⁰⁹ This is in direct contrast to the No Surprises assurances afforded under the ESA's ITP scheme, which authorizes take for species considered more imperiled than eagles.¹¹⁰

Fourth, the Guidance calls for three to four years of site-specific eagle surveys in Stage 2 alone, irrespective of risk.¹¹¹ This does not include review pursuant to the National Environmental Policy Act (NEPA), consideration of ACPs, negotiation of the ECP, etc.¹¹² The Guidance also calls for post-construction fatality monitoring for at least three years, potentially followed by two additional years, again irrespective of risk.¹¹³

103 *Id.* at 6.

104 *Id.* at 5.

105 *Id.* at 6.

106 *Id.*

107 In contrast, ESA Section 10(a)(2) expressly calls for a conservation plan as a contingency to meeting permit issuance criteria. See 16 U.S.C. § 1539 (2013).

108 See, e.g., Permit No. TE46542A issued to Lower Colorado River Authority on June 5, 2012; see also Permit No. TE66315A-0 issued to Buckeye Wind LLC on July 18, 2013; see also Permit No. TE034255-0 issued to Plum Creek Timber Co. on October 16, 2001.

109 See *infra* Section VIII (discussion of Amended Rule).

110 See *supra* Section III (discussion of the ESA No Surprises Policy).

111 2011 Draft Guidance, *supra* note 4, at 6.

112 See *id.* at 10.

113 *Id.* at 96–101.

Fifth, the Guidance creates a presumption, through its stringent avoidance standard, that siting will avoid “important eagle use areas” by up to a 10-mile radius.¹¹⁴ This alone is so onerous that it turns the complex exercise of siting infrastructure projects into primarily an eagle issue. Moreover, the Guidance expands the definition of “important eagle use areas” to include migration corridors and migration stopover sites.¹¹⁵ This directly contradicts the Eagle Rule. In response to comments made to the Eagle Rule regarding whether migration corridors should be included, the Service responded, “we agree that take of eagles within migratory corridors is a significant concern with regard to certain activities, particularly wind-power facilities. However, we think the majority of applicants for individual permits will not be engaging in activities that are likely to take eagles in migration corridors, so have left them out of the definition of “important eagle-use areas.”¹¹⁶ The Guidance, however, includes them.

Finally, while the term ACPs is defined, workable Service-approved ACPs are not defined. This creates a major cost uncertainty for those seeking programmatic take permits. As mentioned above, the ACPs are required without any sideboards to constrain how much can be asked of a project proponent. A proponent seeking a programmatic take permit must demonstrate that take is unavoidable even after implementation of ACPs to fulfill the issuance criteria. Without any constraints on ACPs, when is an ACP enough for purposes of the issuance criteria? Neither the Eagle Rule nor the Guidance provides any sort of cost certainty or regulatory assurance for a prospective programmatic take permittee.

V. AN ASIDE: THE WIND ENERGY GUIDELINES

Within days of the Service publishing notice of the availability of the Guidance, the Service also issued notice of availability for the Final Land-Based Wind Energy Guidelines (“WEG”).¹¹⁷ The Service and the Wind Turbines Guidelines Advisory Committee collaborated to develop a tiered approach for assessing potential adverse effects to species of concern and their habitats.¹¹⁸ This analysis goes beyond eagles. It includes endangered species, species listed, proposed or candidate species that may be listed as endangered or threatened, eagles, migratory birds, and bats.¹¹⁹ The WEG establishes five tiers: (1) preliminary site evaluation, (2) site characterization, (3) field Studies to predict impacts, (4) post-construction studies to estimate impacts, and (5) other post-construction studies and research.¹²⁰ Unlike the Guidance with four pre-construction tiers, the WEG has

114 *Id.* at 13, 20–21.

115 *Id.* at 13.

116 Eagle Rule, *supra* note 1, at 46,863.

117 Fishes and Habitat Conservation and Migratory Birds Programs; Final Land-Based Wind Energy Guidelines, 77 Fed Reg. 17, 496 (Mar. 26, 2012) [hereinafter WEG].

118 *Id.*

119 *Id.*

120 *Id.* at vi.

three pre-construction tiers.¹²¹ A project proponent moves from tier to tier with increasing levels of study as the project moves through the tiers.¹²²

Notably, the WEG recommends the preparation of a Bird and Bat Conservation Strategy (BBCS).¹²³ BBCSs were formerly known as Avian and Bat Protection Plans (ABPPs), which originated in the utility industry through the Avian Power Line Interaction Committee.¹²⁴ ABPPs had grown increasingly common across several industries, especially for purposes of the Migratory Bird Treaty Act (MBTA).¹²⁵ The growing trend for projects anticipating avian impacts, had been to develop an ABPP as documentation of its best efforts to avoid migratory bird fatalities. Given that the MBTA is a strict liability statute that does not allow for permitting, the fatality of a migratory bird is an instant violation.¹²⁶ The Service increasingly looked to the establishment of ABPPs to gauge whether the Service would recommend a certain project for prosecution under the MBTA.¹²⁷ It is unclear why the Service chose to develop the Guidance specific to wind energy concurrently with the WEG (instead of, say, developing a utility module first and evaluating the effectiveness of the WEG). Nor is it clear why the two processes were not reconciled in a way that allowed for consistency across the two sets of documents.

VI. APRIL 2012: NOTICES OF RULEMAKING

In April 2012, the Service issued two notices of proposed rulemaking.¹²⁸ The first was a proposed rulemaking to revise the Eagle Rule to increase the maximum term for programmatic take permits to 30 years and make related changes to permitting fees.¹²⁹ The Service also indicated, however, that it would incorporate into the terms and conditions of a programmatic take permit a commitment from an applicant to implement specified mitigation measures should the level of take be exceeded.¹³⁰ Stated another way, the permit terms would be longer, but the Service would add new mitigation requirements to the permit conditions should take estimates be exceeded during the permit term.

This proposed rulemaking creates as many issues as it solves. On the one hand, a 30-year permit term for programmatic take permits aligns much more suitably with the types

121 *Id.*

122 *Id.* at vii.

123 *Id.* at 55.

124 *Id.*

125 *See, e.g.,* U.S. Fish and Wildlife Service Pacific Southwest Region, Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities (2010).

126 16 U.S.C. § 703 (2013).

127 *See* WEG, *supra* note 117, at 55.

128 *See* Eagle Permits; Changes in the Regulations Governing Eagle Permitting, 77 Fed. Reg. 22,267 (April 13, 2012); *see also* Eagle Permits; Revisions to Regulations Governing Take Necessary to Protect Interests in Particular Localities, 77 Fed. Reg. 22,278 (April 13, 2012).

129 Eagle Permits; Changes in the Regulations Governing Eagle Permitting, 77 Fed. Reg. 22,267 (April 13, 2012).

130 *Id.* at 22,268.

of activities seeking programmatic take permits. However, it creates additional cost uncertainty for a project. The Service attempts to address cost uncertainty by stating that:

In light of the much longer permit durations that would be possible under the proposed regulations, we intend to incorporate into the terms and conditions of the permit a commitment from the applicant to implement additional specified mitigation measures that would be triggered if the level of take anticipated is exceeded or if new scientific information demonstrates that the additional mitigation measures are necessary for the preservation of eagles. These additional specified mitigation measures could be described in detail in the permit so as to reduce uncertainty with respect to costs.¹³¹

However, the proposed rulemaking continues to state that:

[I]f such conditions prove inadequate to meet the Eagle Act's preservation standard, the regulations at § 22.26(c)(7) allow the Service to further amend programmatic permits if necessary to safeguard eagle populations. The last option would be permit revocation if the activity is not compatible with the preservation of the eagle.¹³²

Essentially, a permittee must commit to future mitigation based on the eagle population at the time of the permitting should take be exceeded in Year X. However, if the Service decides in Year Y that the conditions negotiated at the outset do not meet the Preservation Standard (the application of which to programmatic take permits is already questionable), then the Service can either require more mitigation via a permit amendment or revoke the permit altogether. How does a new project obtain financing with that sort of uncertainty built into the permitting terms? Again, the pervasive refrain is that eagles are not endangered and their populations have not been characterized as endangered or threatened under the ESA. Yet, the ESA follows the No Surprises Rule to provide permittees with regulatory assurances, whereas similar regulatory assurances remain lacking in the BGEPA regulatory scheme.

The second proposed rulemaking of April 2012 is the Advance Notice of Proposed Rulemaking (ANOR) announcing Revisions to Regulations Governing Take Necessary To Protect Interests in Particular Localities.¹³³ In this ANOR, the Service sought input on:

1. Clarifying the criteria for issuance of programmatic and standard permits. Under the criteria, "take that cannot practicably be avoided" can be authorized with a standard permit; however, a take permit requires that the take be "unavoidable." The preamble accompanying the 2009 rule states, however, that "applicants for both types of permits must take all practicable steps to avoid and minimize take" (74 FR 46838). Should the regulations be revised so that the issuance criterion for programmatic take permits is the same as for standard permits: That the project proponent has reduced take to the maximum degree practicable?
2. Compensatory mitigation. Under what circumstances should permittees be required to provide compensatory mitigation? To what degree should any required

131 *Id.*

132 *Id.*

133 Revisions to Regulations Governing Take Necessary to Protect Interests in Particular Localities, 77 Fed. Reg. 22,278 (April 13, 2012).

mitigation offset the detrimental impacts to eagles? We also welcome input regarding what types of specific compensatory mitigation measures may be appropriate.

3. Eagle Act preservation standard. The Eagle Act requires the Service to determine that any take of eagles it authorizes is “compatible with the preservation of bald eagles or golden eagles.” In the preamble to the final regulations for eagle nonpurposeful take permits, and in the Final Environmental Assessment of the regulations, we defined that standard to mean “consistent with the goal of stable or increasing breeding populations.” We seek public input as to whether this standard is appropriate or whether it should be further refined or otherwise modified.¹³⁴

From a business perspective, these three areas all merit serious consideration. The Preservation Standard alone is an unworkable standard and results in eagles becoming a heavily weighted factor in project development. For the programmatic permitting scheme to be valuable, those parties needing the permit must be able to use it. The likely candidates for take permits are large infrastructure projects such as airports, transmission lines, transportation infrastructure, and wind energy projects. These permits should be modeled after ESA take permits and based on a commercially reasonable standard or “practicable” standard.

Moreover, the “practicable” standard applicable to “standard permits” should not take into account the project proponent’s resources. As currently defined, one of the three factors to determine whether avoiding take is “practicable” is “the cost of remedy compared to proponent resources.”¹³⁵ Having every applicant’s resources measured against whether or not take is practicable creates disparities between projects and creates financial situations that could render projects infeasible just because the applicant has the financial means to go “whole hog.” Practicability should be tied to the cost of the remedy as commensurate with impacts and include consideration of public interest factors. Both the ESA and Clean Water Act rely on practicability standards during their permitting processes.¹³⁶ Under ESA Section 10, for example, impacts to listed species must be minimized and mitigated to the maximum extent practicable.¹³⁷ The Service’s HCP Handbook instructs:

This finding typically requires consideration of two factors: adequacy of the minimization and mitigation program, and whether it is the maximum that can be practically implemented by the applicant. To the extent maximum that the minimization and mitigation program can be demonstrated to provide substantial benefits to the species, less emphasis can be placed on the second factor. However, particularly where the adequacy of the mitigation is a close call, the record must contain some basis to conclude that the proposed program is the maximum that can be reasonably required by that applicant. This may require weighing the costs of implementing additional mitigation, benefits and costs of implementing

134 *Id.* at 22,279–80.

135 50 C.F.R. § 22.3 (2013).

136 *See* Endangered Species Act of 1973 §10(a)(2)(B), 16 U.S.C. § 1539(a)(2)(B) (2013) (establishing the ESA practicability standard); *see also* 40 CFR § 230.10 (2013) (establishing the Clean Water Act practicability standard).

137 Endangered Species Act of 1973 §10(a)(2)(B), 16 U.S.C. § 1539(a)(2)(B) (2013).

additional mitigation, the amount of mitigation provided by other applicants in similar situations, and the abilities of that particular applicant.¹³⁸

Even though the ESA's treatment of "practicable" includes the capabilities of the applicant, it is weighed against similar circumstances and benefits are weighed against costs.¹³⁹

Similarly, the Clean Water Act § 404 permitting program requires an applicant to demonstrate that its project is the least environmentally-damaging practicable alternative.¹⁴⁰ An alternative is considered practicable under the § 404 program "if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes."¹⁴¹ The Environmental Protection Agency and U.S. Army Corps of Engineers (USACE) issued guidance on how the practicable standard is to be applied.¹⁴² Under the § 404 program, "it is important to emphasize, however, that it is not a particular applicant's financial standing that is the primary consideration for determining practicability, but rather characteristics of the project and what constitutes a reasonable expense for these projects that are most relevant to practicability determinations."¹⁴³

Although the ESA and Clean Water Act practicability definitions may have their fair share of controversy in case-by-case applications, they are several steps ahead of the Eagle Rule's definition in terms of workability.

All of that being said, practicability does not even apply to programmatic take permits, only individual "standard permits." Programmatic take permits are subject to "unavoidable even with the implementation of ACPs" which is further described in the Eagle Rule as "all available,

technically-achievable measures to reduce take."¹⁴⁴ It is also noteworthy that in the ESA, practicable comes into play in the minimization and mitigation phases as described above. Under BGEPA, all of the discussion provided above regarding practicability (or lack thereof in the case of programmatic take permits) is applied in the context of avoidance of take altogether. The underlying refrain is that the Eagle Rule is commercially unreasonable as written, which is unfortunate given that industry is the one that must use the Eagle Rule.

138 U.S. Fish & Wildlife Service, *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* 6–13 (1996).

139 *Id.*

140 40 C.F.R. § 230.10.

141 *Id.* § 230.10(a)(2).

142 U.S. Army Corps of Eng'r & U.S. Envtl. Prot. Agency, *Regulatory Guidance Letter 93-02, Guidance on Flexibility of the 404(b)(1) Guidelines and Mitigation Banking* (Aug. 23, 1993); *see also* U.S. Army Corps of Engineers & Environmental Protection Agency, *Memo-randum: Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements*; *see also* The Environmental Law Institute, *The Federal Wetland Permitting Program: Avoidance and Minimization Requirements* 9–11 (2008).

143 U.S. Army Corps of Eng'r & U.S. Envtl. Prot. Agency, *Regulatory Guidance Letter 93-02, Guidance on Flexibility of the 404(b)(1) Guidelines and Mitigation Banking* 6 (Aug. 23, 1993).

144 Eagle Rule, *supra* note 1, at 46,862.

**VII. EAGLE CONSERVATION PLAN GUIDANCE MODULE 1: LAND-BASED
WIND ENERGY GUIDELINES, VERSION 2**

In May 2013, the Service reissued the Guidance (“Guidance Version 2”).¹⁴⁵ Some key changes in Guidance Version 2 are listed below:

1. The appendices have been expanded and some of the probability calculations have been adjusted.¹⁴⁶
2. Mitigation is now required upfront. If compensatory mitigation is deemed necessary, the mitigation or a verifiable legal commitment to such mitigation is required before operations commence.¹⁴⁷ This means that, should a project estimate the take of 10 eagles over the permit term, it must pay for that mitigation upfront (to an 80% confidence interval), even if, in reality only half of the anticipated impacts actually occur.¹⁴⁸ There is no opportunity to phase in mitigation costs over several years. If actual take is lower than what was mitigated for upfront, the permittee will receive a credit for the excess compensation and that can be applied to other take by either the permittee at other projects, or other permittees within the same eagle management unit.¹⁴⁹ Guidance Version 2 does not provide details on how this credit scheme would actually work.
3. Guidance Version 2 acknowledges that approved ACPs do not yet exist.¹⁵⁰ It advises permittees to implement experimental ACPs after an eagle take has occurred and advises the permittee to negotiate a cost cap for the ACPs during the permit application process.¹⁵¹ Note that, should the Service issue a programmatic take permit on this advice (i.e., with no ACPs), the programmatic take permit would be in direct conflict with the Eagle Rule, which requires take to be unavoidable even after implementation of ACPs.¹⁵²
4. If a project proponent has obtained an ITP for potential take of endangered species and an unpermitted eagle take occurs, the Service now states that it can revoke the ITP permit.¹⁵³
5. Risk categories have been revamped. The Service softened language for projects falling within Risk Category 1 and removed Risk Category 4.¹⁵⁴
6. Acknowledges that an ECP can be a stand-alone document or serve as a part of a greater compliance document (e.g. as part of a greater WEG file document).¹⁵⁵

145 Guidance Version 2, *supra* note 4.

146 See generally *id.*

147 *Id.* at 21.

148 See *id.*

149 *Id.*

150 *Id.* at iv.

151 *Id.* at iv–v.

152 See 50 C.F.R. § 22.26 (2013) (requiring that programmatic take be unavoidable under an eagle take permit).

153 Guidance Version 2, *supra* note 4, at 7.

154 *Id.* at 25–26.

155 *Id.* at iii.

7. Guidance Version 2 calls for revisiting the permit every five years.¹⁵⁶ No regulatory assurances or “No Surprises” assurances are provided in the Guidance or Guidance Version 2.
8. Reverts the definition of Important Eagle Use Area back to the regulatory definition (i.e., without migratory corridors).¹⁵⁷

VIII. DECEMBER 2013: REVISION TO EAGLE RULE

On December 9, 2013, the Service published its final rule amending the Eagle Rule to allow for thirty-year programmatic take permits terms (“Amended Rule”).¹⁵⁸ The Amended Rule requires, however, that the Service review a programmatic take permit every five years.¹⁵⁹ This five-year review “will be comparable to the initial review of the permit application,” and, “the Service will make eagle-mortality information compiled in the five-year review reports available to the public.¹⁶⁰ After conducting its assessment, the Amended Rule provides that the Service may change the programmatic take permit to, “(i) update fatality predictions for the facility; (ii) require implementation of additional conservation measures as described in the permit; (iii) update monitoring requirements; (iv) revise compensatory mitigation requirements in accordance with the permit, or (v) suspend or revoke the permit.”¹⁶¹ The discussion prefacing the Amended Rule describes permit revocation as a “final option” and that the Service anticipates that implementation of additional mitigation will reduce the number of instances in which revocation is necessary. While the Amended Rule does extend programmatic take permit terms to a more workable length, the cost uncertainties outlined in Section IV above remain. With each five-year review, the permittee is potentially subject to additional conservation measures and compensatory mitigation or risks losing its permit.

There were several other noteworthy items included in this Amended Rule:

1. The Service confirms again that it has not identified ACPs for wind energy projects. Until ACPs are determined to be effective, “ACPs will be implemented at operating wind facilities with eagle take permits on an “experimental” basis.”¹⁶² Experimental ACPs will not be required at the outset and instead only after the occurrence of a pre-defined trigger set forth in the programmatic take permit.¹⁶³ That trigger could be an eagle fatality or frequency of eagle use in the project area.¹⁶⁴

156 *Id.* at 24.

157 The discussion quoted in Section IV *supra* notes 114-116 and accompanying text, no longer appears in Guidance Version 2.

158 Eagle Permits; Changes in the Regulations Governing Eagle Permitting, 78 Fed. Reg. 73,704 (Dec. 9, 2013).

159 *Id.* at 73,725

160 *Id.*

161 *Id.*

162 *Id.* at 73,706.

163 *Id.*

164 *Id.*

2. Monitoring plans will be site-specific. The Amended Rule discusses that, the objective, duration, or extent of post-construction monitoring will be tailored to the specific conditions at each site.”¹⁶⁵
3. Programmatic take permits are expressly transferrable and restrictions on transfer have been revised to better accommodate longer term permits. The Amended Rule provides that a programmatic take permit can be transferred to the new owner of a project if the transferee can demonstrate to the Service that it has sufficient funding to carry out the terms of the programmatic take permit, a willingness to implement the terms and conditions of the programmatic take permit, and provides any other information the Service requires for processing the transfer request.¹⁶⁶
4. Expanding beyond the BGEPA context, the Amended Rule explains that the revisions to the transfer provisions are intended to allow permits under BGEPA and three types of ESA permits (including ITPs) to be transferred to one or more transferees, therefore making possible “multi-participant or programmatic arrangements in which [the Service] can issue an ESA or [BGEPA] permit to a signal permittee who can then transfer the authority of that permit to one or more transferees with the approval of the [Service].”¹⁶⁷ This revision could be useful to the ongoing efforts to obtain multi-participant participation in regional HCPs and similar efforts.¹⁶⁸
5. The Service press release accompanying the Amended Rule announces that it anticipates a proposed rulemaking in response to the April 2012 ANOR to be available for public comment in fall of 2014.¹⁶⁹ It will be very interesting to see how the Service addresses the Preservation Standard and the lack of practicability (among other aspects).

IX. PRACTICAL IMPLICATIONS

Now that the regulatory scheme for eagles has been mapped, what does this mean for project proponents? The Eagle Rule as currently written, along with the guidance module for the wind industry, are creating cascading effects. First and foremost, the wind industry is held to a standard that is both commercially unreasonable and disparately applied by virtue of having the first module guidance. Not only does the Eagle Rule lack commercially reasonable standards at the outset—because there is no “practicable” qual-

165 *Id.*

166 *Id.* at 73,725.

167 *Id.* at 73,707.

168 *See, e.g.*, The Great Plains Wind Energy HCP *available at* <http://www.greatplainswindhcp.org/> (last visited Mar. 23, 2014) and the Midwest Wind Energy Multi-Species HCP, *available at* <http://www.midwestwindhcp.com/> (last visited Mar. 23, 2014).

169 Interior Department Releases Revised Rule to Ensure Long-term Monitoring and Protection of Eagles While Facilitating Renewable Energy Development: Additional Changes to 2009 Eagle Permitting Rule to be Explored through Public Process, *available at* <http://www.fws.gov/news/ShowNews.cfm?ID=C89793DD-9A58-2AC0-D6AB01D20FA91C99> (Dec. 6, 2013, 0 (last visited March 23, 2014)).

ification to take being unavoidable in the issuance criteria for programmatic take permits—the Guidance further complicates how one may obtain authorization under BGEPA by establishing the need for an ECP, which is not required by BGEPA. Not to mention, and as described above, Guidance Version 2 directly contradicts the Eagle Rule standard. Therefore, the project proponent's decision to spend time and money on obtaining a permit could be problematic. The permit will likely be a lightning rod for litigation given that the Service would have to issue permits without ACPs (per Guidance Version 2) and the Eagle Rule expressly requires ACPs as part of the issuance criteria. Other industries that are as susceptible to eagle take are stuck in two camps: (1) they go about their business because their industry is without guidance and no permits have been successful in the only industry that has guidance; or (2) they forge an expensive and lengthy path to obtain a permit without much in the way of sideboards or regulatory certainty.

A. ADMINISTRATIVE ISSUES

As of March 21, 2014 the Service has yet to issue a programmatic take permit. Part of the delay and uncertainty comes from the administrative side of the permit process. Eagles are under the purview of the Service Regional Offices' Migratory Birds Division.¹⁷⁰ This is a new type of permit for the Migratory Birds Division. Therefore, the timing, staffing, and processing of ECP review, NEPA analysis, and intra-Service consultation (where listed species are an issue) is still a work in progress.¹⁷¹ The Eagle Rule alludes to cooperation between the Service's Ecological Services offices and Migratory Birds Division, and while certain Service regions are attempting to collaborate, a permit has still not been issued.¹⁷²

B. MITIGATION ISSUES

Another tough issue is mitigation under the Preservation Standard. As described in the Eagle Rule section above, due to the data (or lack thereof) on golden eagle populations, take will only be authorized where mitigation offsets the take to achieve "no net loss."¹⁷³ The catch is that available, proven mitigation options are scarce. The go-to mitigation option has been retrofitting utility poles to prevent eagle electrocution.¹⁷⁴ While effective, this option presents myriad problems. For example, if a wind company is

170 See Eagle Rule, *supra* note 1, at 46,858.

171 In one instance, a story was relayed to the author that the Service staff tasked with processing the programmatic take permit application told the applicant that Section 7 consultation was not a part of the permit process and that the Service would not consult with itself. Given the Service consults with itself via intra-Service consultation in both the ITP and refuges divisions, one can see how learning the ropes of the administrative end of permitting process is another challenge in and of itself.

172 See Eagle Rule, *supra* note 1, at 46,858–59 (discussing regional collaboration).

173 See 2011 Draft Guidance, *supra* note 4 (discussing the "no net loss" preservation standard).

174 See, e.g., *id.* at 32; see also U.S. Fish & Wildlife Service, Draft Environmental Assessment to Permit Take as Provided Under the Bald and Golden Eagle Protection Act for the West Butte Wind Project, Oregon (2011), available at <http://www.fws.gov/pacific/migratorybirds/pdf/west%20butte%20dea.pdf>. The fact that utility pole retrofitting is the go-to method of compensatory mitigation at this time highlights another disparity in the focus on the wind industry. Throughout the Eagle Rule, the Service discusses potential impacts from utilities,

seeking a programmatic take permit to take golden eagles incidental to the operation of its wind farm, it must broker a deal with a utility to gain access and permission to retrofit its utility poles. Who is responsible for maintaining the retrofit once completed? How will those access rights be granted? What if the utility wants to preserve its poles to offset its own potential future take that may require authorization in the future? Do the poles need monitoring to determine efficacy? How will access rights be granted? Guidance Version 2 introduces some other options such as carcass removal, prey-base, etc., but actual implementation of these methods is still in early stages.¹⁷⁵

X. COLLATERAL ISSUES: THE CLEAN WATER ACT

In February 2012, the USACE re-issued its nationwide permit (NWP) program.¹⁷⁶ The NWP program provides an expedited authorization process under Section 404 of the Clean Water Act (CWA) for impacts below certain thresholds and that otherwise meet prescribed conditions called “General Conditions.”¹⁷⁷ If a proposed activity exceeds the impacts threshold or cannot meet a General Condition, it must obtain 404 authorization through the individual permit process, which requires NEPA analysis and an ESA Section 7 consultation if the activity “may affect” listed species.¹⁷⁸ The NWP program added General Condition 19, “Migratory Bird and Bald and Golden Eagle Permits,” in 2012.¹⁷⁹ This General Condition requires that, for an activity to be authorized under a NWP, the permittee must obtain “any ‘take’ permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act.”¹⁸⁰ Therefore, projects seeking NWP authorization must consider eagle impacts when determining whether it can be authorized under the NWP program.

In November 2012, the Friends of the Boundary Mountains filed a lawsuit against the USACE for violations of Clean Water Act Section 404(b)(1).¹⁸¹ Specifically, the Friends of the Boundary Mountain alleged that the USACE violated CWA Section 404(b)(1) because it failed to take into account impacts to golden eagles and the Bicknell’s thrush under the BGEPA and MBTA respectively.¹⁸² The case remains in the beginning stages of assembling the administrative record. It is yet to be seen whether this case will go anywhere or be dismissed at summary judgment, but it is an important reminder that the BGEPA can be an exposure risk in other environmental permitting processes.

transportation (airports, trains, etc.) and that programmatic take permits will be particularly useful for those industries.

175 Guidance Version 2, *supra* note 4, at 93.

176 Reissuance of Nationwide Permits; Notice, 77 Fed. Reg. 10,184 (Feb. 21, 2012).

177 *Id.*

178 Clean Water Act § 404, 33 U.S.C. § 1344 (2012).

179 Reissuance of Nationwide Permits; Notice, 77 Fed. Reg. 10,184, 10,236 (Feb. 21, 2012).

180 *Id.*

181 Friends of the Boundary Mountains v. U.S. Army Corps of Engineers, Cause No. 1:12-cv-00357-GZS (D. Me. Filed Nov. 26, 2012) (on file with author).

182 *Id.*

XI. ENFORCEMENT AND EAGLES IN THE NEWS: IS WIND REALLY GETTING A PASS?

First, it is important to understand the history of BGEPA enforcement in case law. By and large, BGEPA cases involve Native American religion issues and/or intentional eagle take. However, a 1999 District of Colorado case, often cited for its position on incidental take under the MBTA, also involved incidental take under BGEPA.¹⁸³ In that case, the Moon Lake Electric Association (“Moon Lake”) argued that electrocution does not fall within the ambit of take for both the MBTA and the BGEPA.¹⁸⁴ Moon Lake had been the subject of enforcement action for seven violations of the BGEPA and six violations of the MBTA related to the electrocution of 12 golden eagles and other raptors. The court evaluated the legislative history of the BGEPA and its amendments and concluded that the BGEPA was clearly intended to extend to deaths from electrocution by power lines, where there is a wanton disregard for the consequences of the activity.¹⁸⁵ The court, with mention that its conclusion was at least in part influenced by the availability of measures that could have prevented the electrocutions, held that the electrocutions met the definition of take under the BGEPA.¹⁸⁶

BGEPA enforcement has become a more frequent news topic over the past few years. PacifiCorp was the subject of an enforcement action in 2009 for eagle deaths due to power-line electrocution.¹⁸⁷ Records indicated that the charge was for 34 counts of unlawfully taking golden eagles, but that 232 eagles had been killed between January 2007 and July 2009 from PacifiCorp’s Wyoming utility system.¹⁸⁸ Per the Service’s News Release, PacifiCorp had failed to implement measures to address electrocutions in Wyoming.¹⁸⁹ PacifiCorp pled guilty, spent at least \$9.1 million retrofitting its system, paid a \$510,000 fine and \$900,000 in restitution to fund research, and was put on probation for five years.¹⁹⁰ A Resident Agent from U.S. Fish and Wildlife Service’s enforcement operations in Wyoming was quoted as saying, “[w]hen companies refuse to be proactive, and don’t undertake readily available measures to prevent the deaths of eagles and other migratory birds, we’ll seek criminal charges.”¹⁹¹

In August 2011, the Los Angeles Times reported that an investigation had been launched at the Los Angeles Department of Water and Power’s Pine Tree Wind Project in the Tehachapi Mountains (Kern County).¹⁹² An internal report allegedly reported relatively high bird fatality rates, and the Department of Water and Power’s officials had

183 U.S. v. Moon Lake Elec. Ass’n, 45 F.Supp.2d 1070 (D. Colo. 1999).

184 *Id.* at 1071.

185 *Id.* at 1074.

186 *Id.* at 1072.

187 *See, e.g.*, Press Release, U.S. Fish & Wildlife Service, Utility Giant to Pay Millions for Eagle Protection (July 10, 2009), available at <http://www.fws.gov/mountain-prairie/pressrel/09-47.html> (last visited Jan. 5, 2014). Note that the plea agreement settled on MBTA claims rather than BGEPA claims.

188 *Id.*

189 *Id.*

190 *Id.*

191 *Id.*

192 *Eagle Deaths Investigated at LADWP Wind Power Generation Site*, L.A. TIMES, Aug. 2, 2011, available at <http://latimesblogs.latimes.com/greenspace/2011/08/an-investigation-has-been->

acknowledged that as many as six golden eagles had been killed in the three years of operation.¹⁹³ Six months later, a February 2012 article reported two additional golden eagle deaths at the Pine Tree site.¹⁹⁴ The article also stated that the investigation was ongoing and that DWP was preparing an avian and bat protection plan to minimize and mitigate eagle fatalities.¹⁹⁵

Similarly, in March 2013, another wind project made the news for eagle fatalities.¹⁹⁶ Also in Kern County, the North Sky River wind facility reported a golden eagle fatality within one month after the facility started operation.¹⁹⁷ The Service released a statement asking for assistance in investigating eagle deaths in the area due to wind turbine blades.¹⁹⁸ A Service law enforcement official for California stated:

We want power companies or any company involved in planning to build wind generation facilities in the Tehachapi range, where a significant golden eagle population exists, to contact the Service well in advance of construction and work with our biologists to develop conservation plans that will avoid take of eagles to the extent practical and serve as the basis for an application to lawfully take eagles for companies who proceed with wind development in this area.¹⁹⁹

This particular wind farm, and a neighboring wind farm yet to be constructed, had already been the subject of two lawsuits brought by Defenders of Wildlife, Center for Biological Diversity, and the Sierra Club against state and federal agencies for approving the projects.²⁰⁰ The lawsuits were partially based on fatality monitoring results from the Pine Tree wind facility nearby (and described above), which reported some of the highest avian fatalities in the nation.²⁰¹

In April 2013, a biologist pleaded guilty to criminal charges under BGEPA for the unlawful taking of golden eagles.²⁰² The biologist had a federal bird banding permit that

launched-into-the-deaths-of-migratory-birds-including-several-federally-protected-golden-eagles-at.html.

193 *Id.*

194 Louis Sahagun, *U.S. Probes Golden Eagles' Deaths at DWP Wind Farm*, L.A. TIMES, Feb. 16, 2012, available at <http://articles.latimes.com/2012/feb/16/local/la-me-eagles-20120216>.

195 *Id.*

196 Todd Woody, *Green Groups Sue To Stop California Wind Project That Threatens Condor*, FORBES (Apr. 13, 2012), <http://www.forbes.com/sites/toddwoody/2012/04/13/green-groups-sue-to-stop-california-wind-project-that-threatens-condor/>.

197 *Id.*

198 Press Release, U.S. Fish & Wildlife Service Pacific Southwest Region, Service Seeks Information on Eagle Deaths at Tehachapi Range Wind Farms (March 11, 2013), available at <http://www.fws.gov/cno/press/release.cfm?rid=468>.

199 *Id.*

200 Press Release, Center for Biological Diversity, Wind-energy Project Proposed in California Threatens Thousands of Birds (October 20, 2011), available at http://www.biologicaldiversity.org/news/press_releases/2011/wind-energy-project-10-20-2011.html.

201 See Rebekah Kearn, *Wind Farm Won't Buckle Amid Concern for Birds*, Courthouse News Service (Apr. 11, 2013), <http://www.courthousenews.com/2013/04/11/56604.htm>.

202 Press Release, U.S. Department of Justice, Wildlife Researcher Pleads Guilty to Unlawful Taking of Golden Eagle, News Release (Apr. 18, 2013), available at <http://www.justice.gov/usaoc/cas/press/2013/cas13-0418-BittnerPR.pdf>.

had expired in January 2010.²⁰³ His renewal efforts were denied due to his lack of reporting for the birds he had had banded since 2006.²⁰⁴ Between January 2010 and August 2010, the biologist continued to band migratory birds, including at least one female golden eagle, without a permit.²⁰⁵ Banding falls within the “disturb” definition under BGEPA and therefore cannot legally be done without BGEPA permitting.²⁰⁶ In August 2013, U.S. Magistrate Judge David Bartick sentenced Bittner to three years probation and a \$7,500 fine.²⁰⁷

In May of 2013, Duke Energy Renewables, Inc. (“Duke Energy”) wind facilities made the news as federal investigators continue to evaluate the avoidance and minimization measures at its sites.²⁰⁸ Duke Energy’s Top of the World wind farm in Converse County, Wyoming reported ten eagle deaths since it opened in 2010. The eagle fatalities had been reported to the Service, prompting the investigation. Another nearby Duke Energy project, Campbell Hill, reported three eagle fatalities since 2009. In late 2012, in response to the eagle fatalities and investigation, Duke Energy adjusted its curtailment practices.²⁰⁹ Duke Energy also implemented spotters that notify the Duke Energy control room to shut down turbines should an eagle be spotted in the vicinity.²¹⁰ Duke Energy also stated that it is testing the effectiveness of radar monitoring to better spot eagles entering into the vicinity of the wind farm.²¹¹ The Associated Press criticized the Obama administration for not bringing an enforcement action against wind companies.²¹² The AP article notes that Interior officials responded to their inquiries by stating that criminal prosecution is a last resort.²¹³ On November 7, 2013, the U.S. Attorney’s office and Duke Energy filed a settlement agreement in the United States District Court for the District of Wyoming.²¹⁴ In the settlement agreement, Duke Energy was charged with two Class “B” Misdemeanor violations of the MBTA. The terms of the settlement agreement included sixty months probation, the development and implementation of a Migratory Compliance Plan at a cost of up to \$600,000 annually, a commitment to

203 *Id.*

204 *Id.*

205 *Id.*

206 *See supra* text accompanying notes 15-20.

207 Tony Perry, *Biologist sentenced for ignoring laws on golden eagles*, LOS ANGELES TIMES (Aug. 13, 2013), at <http://articles.latimes.com/print/2013/aug/13/local/la-me-ln-biologist-eagles-20130813>.

208 Dina Cappiello, *AP Impact: Wind Farms Get Pass on Eagle Deaths*, ASSOCIATED PRESS (May 14, 2013, 3:25 AM), <http://bigstory.ap.org/article/ap-impact-wind-farms-gets-pass-eagle-deaths>.

209 John Downey, *Duke Energy Seeks to Cut Eagle Deaths at Wind Farms as Feds Investigate*, CHARLOTTE BUSINESS J., May 14, 2013, available at http://www.bizjournals.com/charlotte/blog/bank_notes/2013/05/duke-energy-seeks-to-cut-eagle-deaths.html?page=all.

210 *Id.*

211 *Id.*

212 Dina Cappiello, *AP Impact: Wind Farms Get Pass on Eagle Deaths*, ASSOC. PRESS (May 14, 2013, 3:25 AM), <http://bigstory.ap.org/article/ap-impact-wind-farms-gets-pass-eagle-deaths>.

213 *Id.*

214 Plea Agreement, U.S. v. Duke Energy Renewables, Inc., No. CR13-CR 268R (D. Wyo. Nov. 7, 2013).

develop an ECP and pursue an ETP, and \$1,000,000 in financial contributions to various wildlife non-profit and state entities.²¹⁵

The news media has focused on what it sees as discrepancies in the treatment of wind farms compared to other industries.²¹⁶ However, in this author's opinion, they fail to see the bigger picture. Going back to Moon Lake and continuing through the Duke Energy settlement, there are comments made throughout as to the effort the alleged violator took to minimize impacts. The Moon Lake court mentions the availability of reasonable measures that the utility did not implement.²¹⁷ In the PacifiCorp news reports, a Service staff member was quoted as mentioning a failure on PacifiCorp's part to take proactive measures.²¹⁸ The articles above note that the proponents of the Wyoming and California projects are developing ABPPs.²¹⁹ Several of the news releases note that prosecution is a last resort.

With eagle deaths predicted from both the wind and utility industries due to the increasing eagle populations and overlap in development corridors,²²⁰ perhaps the focus should shift away from which industry is or is not getting a pass. Enforcement appears to turn not on which industry is involved, but rather on whether the Service perceives a project proponent proactively coordinated with the Service. Between the WEGs and Guidance aimed at wind energy projects, the wind industry has both the pressure and procedural framework to be proactive. From an enforcement perspective, this might explain why wind farms have found themselves under investigation but not the subject of enforcement actions. It is not hard to imagine a transportation or other utility project that is proactive in its coordination with the Service and therefore avoids penalties. Nor is it hard to imagine a wind energy facility that eschews the WEGs or Guidance facing stiff penalties. The key seems to be front-end coordination with the Service and Service-perceived adherence to "voluntary" guidelines, not favoritism, when it comes to the wind industry. Given that the "voluntary guidelines" are ever-changing and oftentimes not subject to the same public input as a formal rulemaking (such input can help ensure commercially reasonable and functional standards), it can be difficult for companies to demonstrate adherence to a degree that satisfies the Service in order to avail themselves to the enforcement discretion that serves as the "carrot" for following the voluntary guidelines.²²¹

215 *Id.*

216 *Id.*

217 *U.S. v. Moon Lake Elec. Ass'n*, 45 F.Supp.2d 1070 (D. Colo. 1999).

218 Press Release, U.S. Fish & Wildlife Service, Utility Giant to Pay Millions for Eagle Protection (July 10, 2009), available at <http://www.fws.gov/mountain-prairie/pressrel/09-47.html> (last visited Jan. 5, 2014).

219 See *supra* text accompanying notes 195-203, 211-218.

220 Matthew Tresauge, *Bald Eagle Deaths May be on the Rise With Population*, HOUSTON CHRONICLE, April 2, 2012, available at <http://www.chron.com/news/houston-texas/article/Bald-eagle-deaths-may-be-on-the-rise-with-3454010.php>.

221 See *e.g.* WEG, *supra* note 117, at 6 (explaining that, "The Chief of Law Enforcement or more senior official of the Service will make any decision whether to refer for prosecution any alleged take of such species, and will take such adherence and communication fully into account when exercising discretion with respect to such potential referral.")

To put one more twist on the issue of favoritism, major sources of eagle fatalities such as lead bullets and slugs,²²² or train and vehicle collisions²²³ do not seem to be a focal point of the Service's eagle policies. The reason for this is unclear.²²⁴

XII. CONCLUSION

The good news is that bald eagle populations are growing rapidly throughout the nation.²²⁵ The bad news is that their proliferation will create a higher likelihood of interaction with anthropogenic structures. It is fair to say that the Eagle Rule has created major issues for projects that may take eagles. That is not to say that these projects should be subject to no regulation, but the Eagle Rule as written is not commercially reasonable. The industries and projects that the Service expressly identifies as potential programmatic take permit recipients are left between a rock and a hard place. On the one hand, these projects need financing, and the lenders need to feel secure that the project will not be shut down for lack of compliance with regulatory laws. On the other hand, the standards set forth in the Eagle Rule create such cost uncertainties that it is difficult for a project proponent to obtain financing and maintain the economics of the project. This is not just a wind industry issue, this is an issue that affects all industries with potential eagle impacts.

The issuance criteria for programmatic take permits are a major time and resource drain to demonstrate unavoidable take despite the implementation of ACPs. The introduction of the ECP is also a major undertaking with no basis in law. Given that ACPs are currently unknown (including cost and extent), if the Service were to issue a

-
- 222 *Wildlife Center Admits Lead-Poisoned Bald Eagle from Chesapeake*, WILDLIFE CENTER OF VIRGINIA, http://wildlifecenter.org/news_events/news/wildlife-center-admits-lead-poisoned-bald-eagle-chesapeake (last visited Jan. 5, 2014); see also *Fact Sheet: Bald Eagles and Lead Poisoning*, IOWA DEPT. OF NATURAL RES., available at http://www.iowadnr.gov/portals/idnr/uploads/wildlife/eagles_lead.pdf (last visited Jan. 5, 2014).
- 223 Lily Oberman, *Bald Eagle That Died After Portland Freeway Accident Will Live On in Other Ways*, THE OREGONIAN (March 4, 2013), available at http://www.oregonlive.com/portland/index.ssf/2013/03/bald_eagle_that_died_after_por.html.
- 224 Paul Kerlinger, *Hypocrisy Over Bald Eagle Protection From Wind Turbines Begins at the Federal Level*, N. AM. WINDPOWER (Aug. 1, 2013), available at http://nawindpower.com/e107_plugins/content/content.php?content.11846.
- 225 See, e.g., *North Texas Seeing Higher Number of Bald Eagles*, KHOU.COM (Jan. 31, 2011), <http://www.khou.com/video/featured-videos/North-Texas-seeing-high-number-of-bald-eagles-114978924.html>; see also *Once Endangered, Now Flourishing - Time to Count Bald Eagles*, 89.3 KPCC SOUTHERN CALIFORNIA PUBLIC RADIO (Jan. 10, 2013), <http://www.scpr.org/blogs/environment/2013/01/10/11957/once-endangered-now-flourishing-time-count-bald-ea/>; see also *Eagle Pairs Along James River Skyrocketing*, RICHMOND TIMES-DISPATCH (July 26, 2013), available at http://www.timesdispatch.com/news/state-regional/eagle-pairs-along-james-river-skyrocketing/article_8b1ba63c-26b5-56ca-8d1e-daed51a609b3.html; Kathleen Conti, *Bald Eagle Population on the Rise*, THE BOSTON GLOBE (May 16, 2013), available at <http://www.bostonglobe.com/metro/regionals/north/2013/05/15/bald-eagle-population-rise-survey-finds-more-bald-eagles-settling-area-suburbs-nests-found-suburbs-near-boston-bald-eagle-population/A3JM15CALc1Kk8FYdjBFvN/story.html>.

programmatic take permit, the only likely assurance a permittee receives is that its permit will be the subject of a lawsuit under the Administrative Procedure Act because, per the Eagle Rule, the Service cannot issue programmatic take permits without the implementation of ACPs. If eagle populations are such that the Service believes they are not warranted for listing as threatened or endangered species, then it is illogical to regulate them more heavily than they would be regulated under the ESA. The Eagle Rule needs a major revamping and any guidance that accompanies such a revamping should not go beyond the requirements set forth in law and regulations. Until then, project proponents with risk of eagle take should consider coordinating with the Service on the frontend to better avoid a criminal or civil penalty under BGEPA.

Brooke Wahlberg is an associate with the Austin office of the Sedgwick, LLP law firm. Her practice focuses on various areas of environmental law, including the Clean Water Act, the Endangered Species Act, the National Environmental Policy Act (NEPA), the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. She also advises a wide range of clients on issues related to compliance with state and local environmental and land use regulations. Ms. Wahlberg is a graduate of The George Washington University School of Law and Colorado College. Special thanks to Steven P. Quarles, Esq. (Sedgwick, LLP) for being her eagle guru and to Laura Evans, Esq. for her eagle eyes in helping her edit this article.

THE TWENTY-FIRST CENTURY OFFSHORE WIND BOOM: WHY TEXAS IS LEADING THE WAY

BY BEN DENINGER

I.	Introduction	81
II.	New England Offshore Wind – Cape Wind	83
	A. Cape Wind Regulatory Timeline	84
	B. Cape Wind Litigation Timeline	85
	1. <i>Ten Taxpayers Citizens Group</i> - Part I	86
	2. <i>Alliance to Protect Nantucket Sound, Inc.</i> – Part I	87
	3. <i>Alliance to Protect Nantucket Sound, Inc.</i> – Part II	88
	4. <i>Ten Taxpayers Citizens Group</i> – Part II	88
	5. <i>Town of Barnstable, Massachusetts</i>	89
	6. <i>Alliance to Protect Nantucket Sound, Inc.</i> – Part III & IV	90
	7. <i>Melone</i>	90
III.	Texas Offshore Wind – Gulf Coast Potential	91
IV.	Offshore Wind Regulatory Structure in Texas	93
	A. The Primary Landlord: The Texas General Land Office	93
	1. What is Being Leased?	94
	2. Who Controls the Lands Being Leased?	94
	3. What Type of Action is the Developer Requesting?	94
	4. Where Should Projects on Submerged Lands be Sited?	95
	5. What is the Procedure for Granting Leases of Submerged Lands? ..	96
	B. Federal Involvement in Texas Offshore Wind	96
	1. Potential Jurisdiction of the Minerals Management Service (MMS)	96
	2. The U.S. Army Corps of Engineers Permit Process	97
	3. The FAA Determination of No Hazard	99
V.	The Future of Offshore Wind in the United States	100
VI.	Conclusion	102

I. INTRODUCTION

Most of the major population centers in the United States and the world are located near large bodies of water.¹ This puts our society in a unique position to distribute the benefits of coastal resources to a large percentage of our population. Offshore wind potential has benefits other than simply reducing cost; reducing air pollution so close to

1 Liz Creel, *Ripple Effects: Populations and Coastal Regions*, POPULATION REFERENCE BUREAU (Sept. 2003), available at http://www.prb.org/pdf/RippleEffects_Eng.pdf.

large populations also has the potential to improve health and quality of life for those living in the area.² Because “[w]ind speeds over water are stronger and more consistent than over land. . . the net capacity factor for offshore turbines is greater than standard land-based turbines, and their blade-tip speeds are higher than their land-based counterparts.”³ The average difference in wind speed is so great that “the power output of two identical turbines will be approximately 50% greater for a turbine sited offshore than a turbine sited onshore.”⁴ The further from shore, the greater the average wind speed, leading potential offshore wind developers to envision projects located in “deep water” (water with a depth greater than 60 meters), “transitional water” (water with a depth between 30 meters and 60 meters), or “shallow water” (water with a depth under 30 meters).⁵ However, despite the potential for higher yield, greater depths present unique structural problems for development. Because it is difficult and costly to build a support structure for a turbine that extends 60 meters below the water surface, a majority of the world’s offshore wind farms (which are mostly located in Europe) are built in shallow or transitional waters.⁶ Some technology currently envisions floating platforms tied to the sea floor rather than permanently fixed to the sea floor.⁷

Despite the potential for offshore wind development in the United States, the struggle faced by the nation’s first project, Cape Wind, has added a certain degree of doubt to market perceptions regarding the economic viability of offshore wind projects. For more than 12 years, the project has been forced to deal with multiple state and federal regulatory agencies and numerous Not in My Back Yard (NIMBY) lawsuits from wealthy landowner coalitions in the area and has still not begun construction.⁸ The main source of delay for the Cape Wind Project has been compliance with federal environmental assessment (EA) requirements under the National Environmental Policy Act (NEPA).⁹ Federal agencies have jurisdiction over territory located more than three nautical miles from shore, subjecting most offshore wind projects to federal regulation.¹⁰ Not only does this involve more federal regulators, they also have the potential to change as often as the political tides, which can significantly stall project development. However, Texas has a

2 Dorothy W. Bisbee, *NEPA Review of Offshore Wind Farms: Ensuring Emission Reduction Benefits Outweigh Visual Impacts*, 42 B.C. ENVTL. AFF. L. REV. 349, 352-56 (2004).

3 Jeffrey Thaler, *Fiddling As the World Floods and Burns: How Climate Change Urgently Requires A Paradigm Shift in the Permitting of Renewable Energy Projects*, 42 ENVTL. L. 1101, 1128-29 (2012).

4 Bent Ole Gram Mortensen, *International Experiences of Wind Energy*, 2 ENVTL. & ENERGY L. & POL’Y J. 179, 207 (2008).

5 See Thaler, *supra* note 3, 1129-30.

6 See *European Offshore Wind Industry Key Trends and Statistics*, EUR. WIND ENERGY ASS’N (Jan. 2013), available at http://www.ewea.org/fileadmin/files/library/publications/statistics/European_offshore_statistics_2012.pdf.

7 Thaler, *supra* note 3, at 1129.

8 *Mass Court Rejects Latest Suit Against Cape Wind Facility*, 4052 PUR UTIL. REG. NEWS 1,1 (Jan. 6, 2012); see also Jared Keller, *Can Wind Power Survive the NIMBY Syndrome?*, ATLANTIC (Apr. 20, 2010), <http://www.theatlantic.com/personal/archive/2010/04/can-wind-power-survive-the-nimby-syndrome/39251>.

9 See generally 42 U.S.C.A. ch. 55 (West 2013)(outlining environmental assessment requirements).

10 43 U.S.C.A. § 1301(a)(2) (West 2013).

unique advantage over the rest of the country because Texas' jurisdiction extends outward for nine nautical miles.¹¹ If Texas, which is already "the state producing the most wind energy since 2006 and one of the 'top ten states for wind energy potential,'" can use its streamlined state permit approval process and create a market perception that Texas is wind friendly, it will lead the way in offshore as well as onshore wind power.¹²

II. NEW ENGLAND OFFSHORE WIND – CAPE WIND ENERGY PROJECT

The Cape Wind Energy Project, located off the coast of Nantucket Sound, is projected to include 130 turbines by completion and is being developed by Energy Management Inc. (EMI).¹³ The reasons spurring the development of the Cape Wind Energy ("Cape Wind") Project are similar to those behind wind development throughout the United States, such as reducing reliance on fossil fuels and lowering the cost of electricity nationwide.¹⁴ In the 2008 Biological Assessment of the project, the U.S. Department of the Interior (DOI) projected that New England's regional consumption of natural gas for electricity will rise from 18% to 31.6% by 2024.¹⁵ The same report also details the concerns of the New England Independent System Operator (commonly known as ISO-NE) that "over-reliance on natural gas subjects the New England region to substantial price fluctuations that are influenced by a variety of market-based factors (i.e., exercising of natural gas contractual rights, tight gas spot-market trading), and physical factors (i.e., pipeline maintenance requirements and limited pipeline capacity)."¹⁶ Despite reports that "natural gas baseload power generation has a life cycle global warming potential (GWP) 55% lower than coal," many regulators, both state and federal, maintain that diversification of America's energy portfolio is a necessary step forward.¹⁷ To that end, Massachusetts set a renewable energy portfolio standard (RPS) that implements diversification of the state energy portfolio by requiring that certain amounts of electricity come from renewable sources such as wind and solar power.¹⁸ A growing number of states are

11 *Id.* § 1301(a)(2), (b); NAT'L OCEANIC & ATMOSPHERIC ADMIN., <http://coastalmanagement.noaa.gov/mystate/tx.html> (last updated Nov. 14, 2012).

12 Michael J. Stephan, *Wind Severance*, 40 TEX. ENVTL. L.J. 73, 75 (2010)(citing Shane Thin Elk, *The Answer is Blowing in the Wind*, 6 GREAT PLAINS NAT. RESOURCES J. 110, 113 (2001)).

13 *Project at a Glance*, CAPE WIND, www.capewind.org/article24.htm (last visited Sep. 15, 2013).

14 *Id.*

15 *Cape Wind Energy Project: Biological Assessment*, U.S. DEP'T OF THE INTERIOR MINERALS MGMT. SERV., 1-1 (May 2008), available at http://energy.gov/sites/prod/files/EIS-0470-FEIS-Appendix_G-Biological_Assessment.pdf.

16 *Id.* at 1-2.

17 Timothy J. Skone, *Life Cycle Greenhouse Gas Analysis of Natural Gas Extraction & Delivery in the United States*, U.S. DEPT. OF ENERGY NAT'L ENERGY TECH. LAB. (May 12, 2011), available at http://cce.cornell.edu/EnergyClimateChange/NaturalGasDev/Documents/PDFs/SKONE_NG_LC_GHG_Profile_Cornell_12MAY11_Final.pdf.

18 225 MASS. CODE REGS. 14, 15 (2012).

following this trend and, as early as 2004, “over twenty-five percent of the states have established” their own RPS.¹⁹

The idea of an offshore wind farm seems like a perfect way to comply with the Massachusetts RPS; however, nearly 12 years after the projects’ initial phases, no turbines have been erected.²⁰ Despite wide ranging support from environmental groups like the Sierra Club, as well as expressions of political support from both sides of the aisle, the project has flowed through various regulatory bodies and lawsuits incredibly slowly. Perhaps some of this is to be expected for the first offshore wind farm in America, but according to Jim Gordon of EMI “most projects and most developers that would get involved in a process like that would probably throw up their arms and walk away.”²¹ The project occupies about 25 square miles with turbines 258 feet tall and blades reaching 440 feet at the peak of their rotation, with a projected average capacity of 30%-40% of their maximum capacity of 468 MW.²²

What is perhaps most troubling about the slow process faced by Cape Wind is that the rest of the world is already far ahead of the United States. During 2012 alone, 293 turbines were erected in Europe on nine offshore wind farms and 1,166 MW of new power was connected to the European power grid.²³ In China, the National Energy Administration projects that new development plus existing offshore wind farms will exceed five million KW of wind capacity by 2015.²⁴ However, after examining the chronology of the regulatory and litigation-based hoops Cape Wind has had to jump through, it is not surprising that the market is hesitant to invest in offshore wind development in the United States.

A. CAPE WIND REGULATORY TIMELINE

Initially, critics attributed the lengthy review process to the novelty of permitting an offshore wind farm, as there was no established procedure.²⁵ However, what followed has been mocked by pundits across the board. In a 2010 editorial, the Wall Street Journal compared the five years it took to *construct* the Hoover Dam (over six million tons) to the ten plus years it took to *get final approval* for 130 turbines from the DOI.²⁶ The Cape

19 Carolyn S. Kaplan, *Congress, the Courts, and the Army Corps: Siting the First Offshore Wind Farm in the United States*, 31 B.C. ENVTL. AFF. L. REV. 177, 187 (2004).

20 Michelle R. Smith, *U.S. Offshore Wind Farms Still Years Away, But Leases Finally Auctioned Off*, HUFFINGTON POST (Aug. 4, 2013), available at http://www.huffingtonpost.com/2013/08/04/us-offshore-wind-farms_n_3703570.html.

21 Tom Zeller, *Cape Wind: Regulation, Litigation And The Struggle To Develop Offshore Wind Power In The U.S.*, HUFFINGTON POST (Feb. 23, 2013), available at http://www.huffingtonpost.com/2013/02/23/cape-wind-regulation-liti_n_2736008.html.

22 *Id.*

23 See EUR. WIND ENERGY ASS'N, *supra* note 6, at 3.

24 *New Offshore Wind Licenses to Go Live in 2013*, RENEWABLE ENERGY TECH. (Feb. 28, 2013), <http://www.renewable-energy-technology.net/wind-energy-news/new-china-offshore-wind-licenses-go-live-2013>.

25 See Jay Wickersham, *Sacred Landscapes and Profane Structures: How Offshore Wind Power Changes the Environmental Impact Review Process*, 31 B.C. ENVTL. AFF. L. REV. 325, 328 (2004).

26 *Cape Windbags*, Wall Street Journal (Apr. 30, 2010), available at <http://online.wsj.com/article/SB10001424052748704302304575214621106961304.html>.

Wind Energy Project was first proposed in 2001 and has been forced to wade through a regulatory minefield ever since.²⁷ On November 8, 2004, more than three years after its proposal, the U.S. Army Corps of Engineers (Corps) released a 3,800-page draft environmental impact statement (EIS) that it composed along with 16 other state and federal agencies.²⁸ The completed EIS was supposed to be the completion of the review process required of projects permitted by federal agencies under NEPA.²⁹ However, after receiving more than five thousand comments during the public comment period, the entire landscape changed in 2005 with the passage of the Energy Policy Act of 2005.³⁰ Section 388 of the Act amended the Outer Continental Shelf Lands Act to give permitting authority over offshore wind facilities to the Secretary of the Interior.³¹ This change required the DOI to complete its own EIS, which took an additional three years for the release of a draft.³² The final EIS was released in 2009—four years after the passage of the Energy Policy Act.³³

After another year, the Minerals Management Service (MMS), a subdivision of the DOI, continued the NEPA process by issuing an Environmental Assessment (EA) and a finding of no significant impact (FONSI).³⁴ The NEPA process was finally completed on June 16, 2010, when the MMS issued the Record of Decision (ROD), which allowed the DOI to issue Cape Wind Associates LLC (Cape Wind Associates) a lease of the offshore federal lands it needed to build the project.³⁵ Cape Wind Associates submitted a modified construction and operation plan (COP), which was approved with modifications by the DOI on April 22, 2011.³⁶ The DOI also issued another ROD, which authorized Cape Wind Associates to construct and operate the project.³⁷

B. CAPE WIND LITIGATION TIMELINE

As well as dealing with different regulatory agencies and procedures, Cape Wind has also been mired by “NIMBY-litigation”³⁸ brought by various landowners whose main

27 Abby Goodnough, *Wind Farm Off Cape Cod Clears Hurdles*, NY Times (Jan. 16, 2009), available at http://www.nytimes.com/2009/01/17/us/17wind.html?_r=0.

28 *Army Corps of Engineers Releases Cape Wind Draft Environmental Impact Statement to Public*, CAPE WIND (Nov. 8, 2004), available at <http://www.capewind.org/news280.htm>.

29 42 U.S.C.A. ch. 55 (2012).

30 Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

31 43 U.S.C.A. 1337 (2013), amended by Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 § 388 (2005).

32 Cape Wind Energy Project, 73 Fed. Reg. 3,482-01 (Jan. 18, 2008).

33 Cape Wind Energy Project, 74 Fed. Reg. 3,635-01 (Jan. 21, 2009).

34 Environmental Assessment Prepared for Proposed Cape Wind Energy Project in Nantucket Sound, Offshore Massachusetts, 75 Fed. Reg. 23,798-02 (May 4, 2010).

35 Record of Decision for the Cape Wind Energy Project; Notice of the Secretary of the Interior's Response to Comments From the Advisory Council on Historic Preservation, 75 Fed. Reg. 34,152-02, 34,153-02 (June 16, 2010).

36 Cape Wind Energy Project, 76 Fed. Reg. 22,719-02, 22,720-02 (Apr. 22, 2011).

37 Record of Decision Cape Wind Energy Project, U.S. DEP'T OF THE INTERIOR MINERALS MGMT. SERV. (Apr. 28, 2010), available at http://www.boem.gov/uploadedFiles/BOEM/Renewable_Energy_Program/Studies/CapeWindROD.pdf.

38 NIMBY stands for “Not in My Back Yard.”

concern is that the project will destroy the scenic ocean view from their properties.³⁹ Despite all the challenges the project has faced in the area, support in the court of public opinion seems to be growing. A 2005 study conducted by the University of Delaware surveyed residents of Cape Cod to gauge public support for the project found approximately 36% of residents supported the project, 44% opposed it, and 20% declined to answer.⁴⁰ However, when researchers conducted another survey in 2009 using the same procedures they “found 57 percent now support the project with 41 percent opposing it.”⁴¹ In 2010, a more general poll of Massachusetts residents conducted by the Boston Globe and the University of New Hampshire Survey Center showed approximately “69% of Massachusetts residents supported Cape Wind while only approximately 20% opposed it.”⁴² Regardless of overall public opinion, many cases have attacked the project in various ways. The various kinds of litigation filed are briefly summarized below. The plaintiffs range from individual landowners, groups of landowners, and even small municipalities. While many are hopeful this type of litigation will not haunt future offshore projects, prospective developers would be well-advised to be mindful of the type of litigants and their anti-wind arguments.

1. TEN TAXPAYERS CITIZENS GROUP - PART I

The first attack-by-litigation on the Cape Wind project came in 2003 when the Cape Cod Marine Trades Association, Inc., Ten Taxpayers Citizens Group, Mr. Raoul D. Ross, and the Massachusetts Boating and Yacht Club Association challenged the original permit granted to Cape Wind Associates by the Corps allowing them to put scientific a measurement devices station (SMDS) on the seabed of Nantucket Sound.⁴³ The tenacity of both sides must have been apparent from the beginning, as District Judge Tauro began his opinion by observing that this “case may well be the first skirmish in an eventual battle over the construction by [Cape Wind] of a windmill farm in Nantucket Sound.”⁴⁴ In hindsight, the Judge proved quite prescient even though he was only charged with resolving the first salvo of opposition to the project. The Plaintiffs received a temporary restraining order from the Barnstable Superior Court on September 24, 2002, restraining Cape Wind Associates from constructing the SMDS.⁴⁵ Cape Wind Associates then removed the case to federal court, where plaintiffs argued that the permit was improper because it did not comply with Massachusetts’s fisheries regulations.⁴⁶ As the location of both the proposed wind farm and the SMDS were more than three miles offshore, they fell under federal jurisdiction.⁴⁷ The court thus found that “no li-

39 Keller, *supra* note 8.

40 Willett Kempton et. al., *The Offshore Wind Power Debate: Views from Cape Cod*, 33 COASTAL MGMT. 119, 128 (2005).

41 *Wind Power Survey Shows Shift in opinion*, UDAILY (Dec. 2, 2009), <http://www.udel.edu/udaily/2010/dec/survey120209.html>.

42 Andrew Smith, *Boston Globe Poll #27 MA 2010 Gubernatorial Election*, SURVEY CENTER (Sept. 23, 2010), available at http://www.unh.edu/survey-center/news/pdf/bg_2012-sept26.pdf (last visited Mar. 17, 2013).

43 *Ten Taxpayers Citizen Grp. v. Cape Wind Assocs.*, 278 F. Supp. 2d 98, 99 (D. Mass. 2003).

44 *Id.*

45 *Id.*

46 *Id.*

47 *Id.* at 101.

cense from the Commonwealth was required,” and dismissed the case.⁴⁸ Despite this favorable ruling for Cape Wind Associates, Judge Tauro’s predictions were fulfilled as the plaintiffs appealed the case first to the U.S. Court of Appeals for the First Circuit in 2004 and then to the U.S. Supreme Court in 2005, which denied certiorari⁴⁹

2. *ALLIANCE TO PROTECT NANTUCKET SOUND, INC. – PART I*

In 2003, while Cape Wind Associates was involved with the Ten Taxpayer Citizens Group litigation, the Alliance to Protect Nantucket Sound (Alliance) took action against the U.S. Department of the Army (i.e., the Army Corps of Engineers).⁵⁰ Alliance challenged the decision of the Corps to grant the permit authorizing construction of the SMDS, and Cape Wind Associates intervened.⁵¹ Judge Tauro was again called upon to decide the issue and ruled in favor of construction as he did in *Ten Taxpayer Citizens Group*.⁵² Tauro held that the Corps had authority to issue permits such as the one it issued to Cape Wind Associates, and thus did not *have to* (a) circulate its draft EA or FONSI, nor (b) consider the environmental impacts of a *possible* wind energy plant.⁵³ Again, attesting to the resilience of the Cape Wind opposition, the case was appealed to the U.S. Court of Appeals for the First Circuit in 2005, which affirmed Judge Tauro’s decision.⁵⁴ Mr. Donelan invoked the Fifth Amendment and refused to answer questions during his deposition.⁵⁵ Judge Van Vangestel ordered Mr. Donelan “to answer those question[s] propounded to him at his deposition” or face sanctions in the form of “an order refusing to allow John Donelan to oppose the claims brought against him in the complaint, thereby establishing liability and setting the matter down for an assessment of damages.”⁵⁶ Mr. Donelan later admitted to sending a defamatory email and resigned from his position as the technical and research director for the Alliance.⁵⁷ In 2006, the two sides reached a settlement for \$15,000 that Cape Wind Associates donated to help local low-income families pay their energy bills.⁵⁸

48 *Ten Taxpayers Citizen Grp. v. Cape Wind Assocs.*, 278 F. Supp. 2d 98, 101 (D. Mass. 2003).

49 *Ten Taxpayer Citizens Grp. v. Cape Wind Assocs.*, 373 F.3d 183 (1st Cir. 2004); *Ten Taxpayer Citizens Grp v. Cape Wind Assocs.*, 543 U.S. 1121 (2005).

50 *Alliance to Protect Nantucket Sound, Inc. v. U.S. Dep’t of Army*, 288 F. Supp. 2d 64 (D. Mass. 2003), *aff’d* 398 F.3d 105 (1st Cir. 2005).

51 *Id.* at 66-67.

52 *Id.*; *see also Ten Taxpayer Citizens Grp.*, 373 F.3d 183.

53 *Alliance to Protect Nantucket Sound, Inc.*, 288 F. Supp. 2d at 79.

54 *Alliance to Protect Nantucket Sound, Inc. v. U.S. Dep’t of Army*, 398 F.3d 105 (1st Cir. 2005), *aff’g* 288 F. Supp. 2d 64 (D. Mass. 2003).

55 *Cape Wind Assocs. v. Donelan*, 2004 WL 1194739, at *1 (Mass. Super. Ct. Apr. 29, 2004).

56 *Id.* at *2.

57 John Leaning, *Wind Farm Foe Quits Post over E-mail Flap*, CAPE COD TIMES, Mar. 3, 2004, available at <http://www.capecodonline.com/apps/pbcs.dll/article?AID=/20040303/NEWS01/303039944&cid=sitesearch>.

58 Press Release, Settlement Reached in Cape Wind’s Defamation Lawsuit Against Alliance to Protect Nantucket Sound’s Former Research Director (Feb. 13, 2006), available at <http://www.capewind.org/news562.htm>.

3. *ALLIANCE TO PROTECT NANTUCKET SOUND, INC. – PART II*

Despite earlier defeats with the SMDS permit and the defamation scandal, Alliance remained a stalwart opponent of the Cape Wind project. In 2006, Alliance challenged the decision of the Energy Facilities Siting Board (the Board) to allow Cape Wind Associates to construct and operate underwater transmission lines.⁵⁹ Transmission is a necessary part of the Cape Wind project; and Cape Wind Associates, along with NSTAR Electric (NSTAR), filed a petition to the Board “to build and operate two 115 kilovolt underground and undersea electric transmission lines approximately eighteen miles in length.”⁶⁰ Due to the proposed lines beginning on Massachusetts land in the towns of Barnstable and Yarmouth and then extending through Massachusetts waters before entering federal waters, the consent of the Board—a state governmental entity—was required in addition to federal permits.⁶¹ The original legislative mandate of the Board was to “provide a necessary energy supply for the [C]ommonwealth with a minimum impact on the environment at the lowest possible cost.”⁶² In an effort to comply with this charge, the Board developed what was referred to as the Turner Falls standard for “determining the ‘need’ for transmission lines that connect to generating facilities that fall outside the board’s jurisdiction.”⁶³ However, the 1997 Restructuring Act changed this standard by disallowing consideration of the need for the proposed power by the Board.⁶⁴ In light of this change, Alliance challenged the Board’s decision to change the Turner Falls standard. The Court held that the Board had discretion “to announce a new approach by which it would henceforth determine the need for proposed transmission lines” and that the Board’s decision to issue a conditional permit “was an effective method to accomplish its statutory obligation to determine whether there was a need for proposed transmission lines” not an improper delegation of its statutory duty.⁶⁵

4. *TEN TAXPAYER CITIZENS GROUP – PART II*

Showing similar resilience to Alliance, the Ten Taxpayer Citizens Group filed a lawsuit again in 2007 challenging the issuance of a final environmental impact report (FEIR) certificate to Cape Wind Associates by the Secretary Office of Environmental Affairs (the Secretary).⁶⁶ Pursuant to the Massachusetts Environmental Policy Act (MEPA), the Secretary published a FEIR on the Cape Wind project on February 20, 2007.⁶⁷ Despite comments made by the Ten Taxpayers Group, the Secretary issued a FEIR certificate on March 29, 2007, concluding that Cape Wind Associates “had adequately and properly complied with MEPA and its implementing regulations.”⁶⁸ The

59 *Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd.*, 858 N.E.2d 294, 295 (Mass. 2006).

60 *Id.*

61 *Id.* at 297.

62 MASS. GEN. LAWS ch. 164, § 69H (1992)(amended 1997).

63 *Alliance to Protect Nantucket Sound, Inc.*, 858 N.E. 2d at 296.

64 MASS. GEN. LAWS ch. 164, §§ 69J 1/4 (2013).

65 *Alliance to Protect Nantucket Sound, Inc.*, 858 N.E. 2d at 299-301.

66 *See Ten Taxpayer Citizens Grp. v. Sec’y Office of Env’tl. Affairs*, 2008 WL 4739555, at *1 (Mass. Super. Sept. 10, 2008).

67 *Id.* at *2.

68 *Id.*

Ten Taxpayers Group argued that the court should strike the FEIR certificate due to “various deficiencies under MEPA.”⁶⁹ Cape Wind Associates alternatively filed a motion to dismiss.⁷⁰ The court showed deference to the Secretary’s determination on the MEPA requirements and granted Cape Wind Associates’ motion to dismiss the complaint.⁷¹

5. *TOWN OF BARNSTABLE, MASSACHUSETTS*

In 2010, while the project had already jumped several regulatory hurdles and emerged victorious from several battles in the courtroom, the Town of Barnstable and several non-profit organizations of pilots asserted a creative challenge to the project.⁷² Because of the height of the proposed turbines (440 feet), Cape Wind Associates was required to notify the Federal Aviation Administration (FAA) and get a “no hazard determination” for each turbine.⁷³ The petitioners challenged the no hazard determinations on the grounds that “the FAA violated its governing statute, misread its own regulations, and arbitrarily and capriciously failed to calculate the dangers posed to local aviation.”⁷⁴ Despite the arguments that petitioners lacked standing, the court held they did have standing and that the FAA did indeed misread—and therefore misapplied—its own regulations.⁷⁵ Under the FAA Procedures for Handling Airspace Matters (the Handbook), “the FAA can find a hazard if the proposed structure would have a ‘substantial adverse effect,’” which is defined as “one that would have an ‘adverse effect’ on a ‘significant volume of aeronautical operations.’”⁷⁶ The court noted that the FAA “relied solely” on § 6–3–8(c)1 of the Handbook in determining that each of the 130 proposed turbines would have no significant adverse effects.⁷⁷ This section of the Handbook states: “a structure would have an adverse [aeronautical] effect upon VFR air navigation if its height is greater than 500 feet above the surface at its site, and within 2 statute miles of any regularly used VFR route.”⁷⁸ The court reasoned that this height limit was just one possible circumstance that would constitute an adverse effect and vacated all 130 determinations of no hazard.⁷⁹ Unfortunately for the Cape Wind opposition, this victory simply amounted to another time delay. In 2012, after completing an aeronautical study, the FAA ultimately “determined that the proposed construction of the 130 wind turbines, individually and as a group, has no effect on aeronautical operations.”⁸⁰

69 *Id.*

70 *Id.*

71 *Id.* at *6.

72 *Town of Barnstable, Mass. v. F.A.A.*, 659 F.3d 28, 34 (D.C. Cir. 2011).

73 *See id.* at 30.

74 *Id.* at 31.

75 *Id.*

76 *Id.* at 34.

77 *Id.* at 35.

78 *Id.*

79 *Id.* at 35-36.

80 Press Release, FAA Issues Cape Wind Determination, FAA (Aug. 15, 2012), available at http://www.faa.gov/news/press_releases/news_story.cfm?newsId=13819&omniRss=press_releasesAoc&cid=102_P_R&utm_source=twitterfeed&utm_medium=twitter.

6. *ALLIANCE TO PROTECT NANTUCKET SOUND, INC. – PART III & IV*

In 2010, Alliance lost two challenges to decisions by the Department of Public Utilities (the Department).⁸¹ Alliance had previously made three motions for the Department to reopen the administrative record for the approval of two power-purchase agreements (PPAs) between the Massachusetts Electric Company and the Nantucket Electric Company and Cape Wind Associates.⁸² The department issued its decision and final order on November 22, 2010, approving the first of the two proposed PPAs between National Grid and Cape Wind.⁸³ On March 3, 2011, Alliance sought to re-open the administrative record to introduce un-redacted documents from NSTAR as additional evidence.⁸⁴ The court held that the Department did not abuse its discretion in declining to reopen the administrative record on the grounds that Alliance had failed to demonstrate compelling circumstances or good cause, as required by the Department's regulations.⁸⁵

Concerning the PPA approved by the Department, Alliance claimed:

[T]he department violated the commerce clause of the United States Constitution; the department improperly found that the PPA was cost effective and in the public interest; the contract should have been solicited through competitive bidding and subject to a cap on its size; and the department erroneously both approved a method for recovering costs from all distribution customers and required that the contract facilitate financing of a renewable energy generation source.⁸⁶

Observing that “the burden of proof is on the appealing part[ies] to show that the order appealed from is invalid,” the court gave “deference to the department’s expertise and experience in areas where the Legislature has delegated to it decision-making authority, pursuant to G.L. c. 30A, § 14.”⁸⁷ Concluding that Alliance had not met its burden, the court remanded the case to the county court to affirm the department’s decision.⁸⁸

7. *MELONE*

In addition to the attempts to challenge the PPAs by Alliance, there was at least one individual citizen opposed to the project dedicated enough to challenge the Department’s decision to approve the PPAs.⁸⁹ Thomas Melone, operating pro se, unsuccessfully attempted to intervene in the Department’s proceedings regarding the PPAs between the Massachusetts Electric Company, the Nantucket Electric Company, and Cape Wind

81 *Alliance to Protect Nantucket Sound, Inc. v. Dep’t of Pub. Utils.* (No. 2), 959 N.E.2d 408, 409 (Mass. 2011).

82 *Id.*

83 *Id.*

84 *Id.*

85 *Id.* at 410, 412.

86 *Alliance to Protect Nantucket Sound, Inc.* (No. 2), 959 N.E.2d at 410.

87 *Alliance to Protect Nantucket Sound, Inc. v. Dep’t of Pub. Utils.* (No. 1), 959 N.E.2d 413, 420 (Mass. 2011) (quoting *DSCI Corp. v. Dep’t of Telecomm. & Energy*, 870 N.E.2d 1096, 1102 (Mass. 2007)).

88 *Alliance to Protect Nantucket Sound, Inc.* (No. 2), 959 N.E.2d at 433.

89 *Melone v. Dep’t of Pub. Utils.*, 967 N.E.2d 596, 597 (Mass. 2012).

Associates.⁹⁰ Melone, who owned property on Martha's Vineyard, "argued that the wind farm would alter the view from his property, that the wind farm would diminish the value of his property, that oil or other contaminants spilled at the turbines could find their way to his property, and that he had standing as a ratepayer and as an abutter to the proposed project."⁹¹ The court upheld the Department's decision to deny Melone's intervention, noting the Department's "'wide discretion to grant, limit, or deny a person leave to intervene.'"⁹²

III. TEXAS OFFSHORE WIND – GULF COAST POTENTIAL

At approximately 624 miles long, the Texas Gulf Coast, like the rest of the state, has enormous wind potential as well as the jurisdictional good fortune to take advantage of such potential.⁹³ The main advantage of wind development in Texas comes from state control over coastal waters extending three marine leagues (approximately 10.3 miles) from shore.⁹⁴ After the jurisdictional struggle between the United States government and the Gulf States (Texas, Louisiana, Mississippi, Alabama, and Florida), the United States Supreme Court held that only Texas and Florida's gulf coasts were entitled to control over coastal waters extending three marine leagues.⁹⁵ This means that federal regulators like the Federal Energy Regulatory Commission (FERC) and the DOI do not have jurisdiction over Texas' coastal waters like they do in Massachusetts. All of Cape Wind's struggles have been highly publicized and have not done much to encourage investment in offshore wind projects.⁹⁶ However, due to its extended control over coastal waters, Texas could develop a simple and streamlined approach to permitting offshore wind facilities. The Texas Gulf Coast is home to several major population centers; therefore, shorter distances between potential offshore wind farms and end users would allow more efficient and less costly transmission infrastructure.⁹⁷

Recent statements from Jerry Patterson, the Commissioner of the Texas General Land Office (GLO), signal that Texas is adopting a pro-offshore wind attitude. When discussing the possibility of working with the Department of Energy (DOE) in develop-

90 *Id.*

91 *Id.*

92 *Id.* (quoting *KES Brockton, Inc. v. Dep't of Pub. Utils.*, 618 N.E.2d 1352, 1355 (Mass. 1993)).

93 Robert Weddle, *Gulf of Mexico*, TEX. STATE HISTORICAL ASS'N, <http://www.tshaonline.org/handbook/online/articles/trg07> (last visited Sept. 26, 2013); see also Drew Thornley, *Texas Wind Energy: Past, Present, and Future*, 4 ENV'T'L & ENERGY L. & POL'Y J. 68 (2009).

94 TEX. NAT. RES. CODE § 11.013 (West 2013).

95 *United States v. States of La., Tex., Miss., Ala. & Fla.*, 363 U.S. 1, 118, 128 (1960), *supplemented sub nom. United States v. Louisiana*, 382 U.S. 288 (1965).

96 See, e.g., Todd Sperry, *Wind Farm Gets US Approval Despite Controversy*, CNN (Aug. 16, 2012), <http://www.cnn.com/2012/08/16/us/wind-farm-faa/index.html>; Jay Lindsay, *Mass. Fisherman Drop Suit Aimed at Cape Wind*, BUS. WEEK (June 27, 2012), available at <http://www.businessweek.com/ap/2012-06-27/mass-dot-fishermen-drop-suit-aimed-at-cape-wind>.

97 Hanna Conger, Comment, *A Lesson from Cape Wind: Implementation of Offshore Wind Energy in the Great Lakes Should Occur Through Multi-State Cooperation*, 42 LOY. U. CHI. L.J. 741, 751-52 (2011).

ing offshore wind energy testing facilities, Commissioner Patterson stated “[i]n Texas, we welcome wind power and the money that comes with it.”⁹⁸ Patterson further commented that he was “confident the Department of Energy will appreciate what we have to offer.”⁹⁹ Baryonyx Corporation from Austin, Texas is already acting “to install three 6-megawatt direct-drive wind turbines in state waters” near Port Isabel, Texas.¹⁰⁰ Baryonyx was one of the first companies to sign leases with the GLO for offshore wind development of submerged state lands along the Texas Gulf Coast.¹⁰¹ The first leases were signed by the GLO in 2007, and now there are seven: two with Baryonyx, and the other five with Coastal Point Energy, LLC, which total more than 84,000 acres.¹⁰² Baryonyx has not shied away from offshore wind despite the Cape Wind experience because Texas has a history of offshore industry and there is “‘already an existing engineering infrastructure with good ports and a good landing area.’”¹⁰³ Baryonyx’s vice president of energy project development further commented that “[i]t’s not as though it’s virgin land that’s not used to dealing with industry.”¹⁰⁴

Coastal Wind, LLC echoed similar sentiments to *The Offshore Wind Wire* when discussing its planned 300 MW wind farm approximately 8.5 miles off Galveston, Texas.¹⁰⁵ The project has moved forward with virtually no opposition since signing the lease with the GLO in 2007. In 2008, the Corps granted the company a permit “to place meteorological instruments on a platform of the company’s design,” and the data collected during the next two years supports the wind potential of the site.¹⁰⁶ According to Herman Schellstede of Coastal Wind, the company is now in the process of putting “a 3-MW test turbine on the same platform” pursuant to the 2008 permit.¹⁰⁷ Electricity produced from the test turbine will go to powering an offshore oil rig as it cannot be sold onshore without authorization from the Corps.¹⁰⁸

98 *Texas, Massachusetts Compete for Grant*, UNITED PRESS INT’L (Mar. 12, 2007), http://www.upi.com/Business_News/Energy-Resources/2007/03/12/Texas-Massachusetts-compete-for-grant/UPI-83081173720707.

99 *Id.*

100 *Energy Department Invests in Pioneering U.S. Offshore Wind Projects*, DEP’T OF ENERGY (Dec. 19, 2012), available at http://apps1.eere.energy.gov/news/m/news_detail.cfm?news_id=18849.

101 Jennifer Bogo, *Texas to Cape Wind: You’re Not First Yet*, POPULAR MECHS. (May 3, 2010), available at <http://www.popularmechanics.com/science/energy/solar-wind/texas-to-cape-wind>.

102 *Id.*

103 *Id.*

104 *Id.*

105 Tim Breen, *Texas Offshore Wind Project Eyes Test Turbine by End of 2011*, OFFSHORE WIND WIRE (May 17, 2011), <http://archive.is/h8jqn>.

106 *Id.*

107 *Id.*

108 *Id.*

IV. OFFSHORE WIND REGULATORY STRUCTURE IN TEXAS

Some wind leases have simply been granted by the GLO while others have been subject to a competitive bidding process.¹⁰⁹ “Typically the GLO issues leases through a competitive bidding process, such as the one won by Baryonyx for its Texas offshore projects.”¹¹⁰ Due to the lack of a permitting framework for offshore wind farms in Texas, a prospective developer only has three concerns: (i) obtaining financing for the project, (ii) signing a lease with the GLO, and (iii) getting navigational approval of the project from the Corps (and possibly the FAA). The first concern should be addressed by the developer and prospective lenders willing to finance the development of energy projects, while the other two issues must be addressed with state and federal agencies. Although developers of Texas offshore wind must interact with state and federal regulators, the process is much simpler than in other areas of the United States.¹¹¹ The most efficient way to proceed is to first focus on obtaining a lease of state land from the GLO and then seek necessary federal approvals.

A. THE PRIMARY LANDLORD: THE TEXAS GENERAL LAND OFFICE

Before a developer can seek financing for an offshore wind project, it is important to have a good idea of the costs. Turbine parts and construction costs typically account for almost two thirds of total costs, while the lease price constitutes the rest.¹¹² What does a developer need to do to obtain a lease with the GLO? What kinds of forms are necessary? How long will the process take and what is the most efficient approach? These are all questions a developer will want to answer before it can seek financing or begin ordering turbine parts. A review of Texas law is integral in answering these questions.

The GLO has simply referred to its existing procedures: the method “designed for leasing submerged lands for mineral interests, has already been applied to offshore leases for construction of meteorological towers and buoys for preliminary data gathering for proposed offshore wind projects.”¹¹³ When examining Texas law, one will encounter several key issues whose solutions will yield a precise understanding of the GLO’s jurisdiction, procedures, and goals. Understanding the GLO (the landlord of offshore wind projects) allows prospective developers (the lessees) to move quickly through the leasing phase and more promptly on to financing concerns. The following discussion identifies the key questions a developer needs to answer to understand how to lease state-owned offshore lands in Texas.

109 See Margaret Bryant, *Wind Energy in Texas: An Argument for Developing Offshore Wind Farms*, 4 ENV’T & ENERGY L. & POL’Y J. 127, 135 (2009). See also Texas Offshore Energy, TEX. GEN. LAND. OFFICE, http://www.glo.texas.gov/glo_news/hot_topics/articles/offshore-wind-energy.html (last visited Oct. 20, 2013); *Texas Awards Rights for Offshore Wind Farm*, NBCC (Oct. 3, 2007), available at <http://www.nbcnews.com/id/21113169/#.UVZXMRzFV8#>.

110 Ernest E. Smith, Steve K. DeWolf, Roderick E. Wetsel & Becky H. Duffen, TEXAS WIND LAW § 9.02 (Lexis Nexis 2011).

111 See Bryant, *supra* note 109, at 135.

112 Michaela D. Platzer, *U.S. Wind Turbine Manufacturing*, CONG. RESEARCH SERV., available at <http://www.fas.org/sgp/crs/misc/R42023.pdf>.

113 Katherine A. Roek, *Offshore Wind Energy in the United States: A Legal and Policy Patchwork*, 25 NAT. RESOURCES & ENV’T 24, 24-25 (2011).

1. WHAT IS BEING LEASED?

Before addressing anything else, it is important to know what exactly is being leased. Under Texas law, “submerged land” is that which is “located under waters under tidal influence or under waters of the open Gulf of Mexico, without regard to whether the land is owned by the state or a person other than the state.”¹¹⁴ As such, all state-owned submerged land is part of a coastal natural resource area (CNRA).¹¹⁵ Texas law requires that any state action that may adversely affect a CNRA be consistent with the policies and goals of the Texas Coastal Management Program (CMP).¹¹⁶ Fortunately, the Texas legislature has provided “an exclusive list of proposed individual agency actions that may adversely affect a CNRA.”¹¹⁷ Unfortunately, however, coastal leases granted by the GLO are on that list.¹¹⁸

2. WHO CONTROLS THE LANDS BEING LEASED?

Although the coastal lands of Texas are owned by the state, a developer needs to know which agency controls them. Since actions affecting CNRAs must be consistent with the CMP, developers need to know what the CMP is and what is different about state lands that are a part of it.¹¹⁹ The purpose of a CMP is to “make more effective and efficient use of public funds and to more effectively and efficiently manage [CNRAs] and the activities that may affect them.”¹²⁰ The GLO must assist the Coastal Coordination Council (CCC) in fulfilling the requirements of the CMP and prepare an annual report reviewing the effectiveness of the program.¹²¹ The CMP extends seaward to the “line marking the seaward limit of Texas title and ownership.”¹²² This seaward boundary was recognized in the Submerged Lands Act and by the United States Supreme Court in *United States v. Louisiana*.¹²³

3. WHAT TYPE OF ACTION IS THE DEVELOPER REQUESTING?

Agency actions are often grouped into different classifications (most commonly major and non-major) requiring various steps before approval. The definition of “major action” under Texas law includes those actions relating to the CMP, federal actions subject to the CMP, local government actions relating to the CMP, and activities for which an EIS would be required by NEPA.¹²⁴ This definition includes all actions taken

114 TEX. NAT. RES. CODE § 33.203 (West 2013).

115 31 TEX. ADMIN. CODE § 16.1 (2013)(Tex. Gen. Land Office, Definitions and Scope).

116 *Id.* § 505.11 (2013)(Coastal Coordination Council, Actions and Rules Subject to the Coastal Management Program).

117 *Id.*

118 *Id.*

119 TEX. NAT. RES. CODE § 33.205(a) (West 2013).

120 31 TEX. ADMIN. CODE § 501.1(a) (West 2013) (Coastal Coordination Council, Program for Special Management of Coastal Natural Resource Areas); *see also* TEX. NAT. RES. CODE § 33.203(22).

121 31 TEX. ADMIN. CODE § 501.1(a).

122 *Id.* § 503.1(c) (Coastal Coordination Council, Coastal Management Program Boundary).

123 43 U.S.C.A. §§ 1301-1356(a) (West 2013); *United States v. Louisiana et al.*, 364 U.S. 502 (1960).

124 31 TEX. ADMIN. CODE § 501.15(a) (2013) (Coastal Coordination Council, Policy for Major Actions).

by the GLO relating to the CMP, such as offshore land leases.¹²⁵ This action requires coordination between regulatory agencies and encourages regulatory efficiency. Specifically, the statute requires:

Prior to taking a major action, the agencies and subdivisions having jurisdiction over the activity shall meet and coordinate their major actions relating to the activity. The agencies and subdivisions shall, to the greatest extent practicable, consider the cumulative and secondary adverse effects, as described in the federal environmental impact assessment process, of each major action relating to the activity.¹²⁶

4. WHERE SHOULD PROJECTS ON SUBMERGED LANDS BE SITED?

Texas law requires the GLO to conform to policies relating to “Construction, Operation, and Maintenance of Oil and Gas Exploration and Production Facilities,” “Development in Critical Areas,” and “Construction of Waterfront Facilities and Other Structures on Submerged Lands.”¹²⁷ Careful developers can avoid these regulations by not siting projects in “critical areas,” defined as a “coastal wetland, an oyster reef, a hard substrate reef, submerged aquatic vegetation, or a tidal sand or mud flat.”¹²⁸ Currently, projects in Texas simply need to conform to the requirements for “other structures on submerged lands.”¹²⁹ Most of these requirements pertain to dredging of channels involved in construction of docks, marinas, and piers—an issue offshore wind developers can avoid by building projects in locations a few miles offshore where there are no channels to dredge.¹³⁰ The rest of the requirements are best summarized by the agency’s own rules: “Activities on submerged land shall avoid and otherwise minimize any significant interference with the public’s use of and access to such lands.”¹³¹ Developers in Texas can comply by siting offshore wind projects at locations greater than four miles offshore and away from marine sanctuaries where they will have little, if any, effect on the public use. A tangential issue also addressed by the law is the location of transmission lines. The rule requires transmission lines to be “located in existing rights-of-way or previously disturbed areas,” wherever feasible.¹³²

125 See *id.* § 505.11.

126 *Id.* § 501.15(b).

127 31 TEX. ADMIN. CODE § 16.3 (2013) (Tex. Gen. Land Office, Policies for Specific Activities and Coastal Natural Resource Areas).

128 TEX. NAT. RES. CODE § 33.203(8) (West 2013).

129 31 TEX. ADMIN. CODE § 501.24 (2013) (Tex. Gen. Land Office, Policies for Construction of Waterfront Facilities and Other Structures on Submerged Land).

130 *Id.*

131 *Id.* § 501.24 (a)(16).

132 *Id.* § 501.24 (a)(8).

5. WHAT IS THE PROCEDURE FOR GRANTING LEASES OF SUBMERGED LANDS?

For the GLO to grant a coastal lease, it must also make “either a consistency determination or a determination of no adverse effect.”¹³³ A “consistency determination” requires the GLO to review the “proposed action for consistency with the [CMP] goals and policies, in accordance with the regulations of the Coastal Coordination Council, and [determine] that the proposed action is consistent with the [CMP] goals and policies applicable to the proposed action.”¹³⁴ A “determination of no adverse effect” requires the GLO to review the “proposed action for consistency with the [CMP] goals and policies, in accordance with the regulations of the Coastal Coordination Council, and [find] that the proposed action will not have a direct and significant adverse effect on the [CNRA]s identified in the applicable policies.”¹³⁵ Because a coastal lease may adversely affect a CNRA, the GLO must also refer any leases of more than forty acres of submerged lands to the CCC for review of consistency with the CMP.¹³⁶ However, as coastal lease grants are a “major action,” Texas law requires the GLO and CCC to meet and decide how to take action together.¹³⁷

B. FEDERAL INVOLVEMENT IN TEXAS OFFSHORE WIND

After answering the questions above and using those answers to determine a project site far away from the shoreline and any protected wildlife areas, a developer should have little trouble procuring a lease from the GLO—provided their overall bid is competitive. In fact, after several wind leases were awarded in 2007, Texas GLO Commissioner Jerry Patterson commented that “if you’re in the wind business, whether it’s onshore or offshore, Texas is the place to be.”¹³⁸ Whether or not his statement will prove entirely true remains to be seen; however, it is true that the GLO is not *entirely* in control of Texas’ submerged lands. Jurisdiction of the MMS, the U.S. Corps of Engineers, and the FAA may also be triggered.

1. POTENTIAL JURISDICTION OF THE MINERALS MANAGEMENT SERVICE (MMS)

Wind projects further off Texas’s shore may have a different—federal—landlord. As mentioned earlier, the state waters of all other states besides Texas (except the gulf coast of Florida) only extend seaward approximately three miles.¹³⁹ The rest of the submerged

133 *Id.* § 505.11(a)(1)(G) (Tex. Gen. Land Office, Actions and Rules Subject to the Coastal Management Program); *Id.* § 16.2(d) (2013)(Tex. Gen. Land Office, Goals and Administrative Policies).

134 *Id.* § 16.2(d)(1).

135 *Id.* § 16.2(d)(2).

136 *Id.* § 505.11(a)(1)(G) (Coastal Coordination Council, Actions and Rules Subject to the Coastal Management Program); *Id.* § 16.4(c) (Tex. Gen. Land Office, Thresholds for Referral).

137 *Id.* § 501.15.

138 *Texas Awards Rights for Offshore Wind Farm*, NBC NEWS (Oct. 3, 2007), available at <http://www.nbcnews.com/id/21113169/#.UVZXMRzFV8E>.

139 43 U.S.C.A. § 1301(a)(2),(b) (2006); *United States v. States of La., Tex., Miss., Ala. & Fla.*, 363 U.S. 1, 118, 128 (1960), *supplemented sub nom.* *United States v. Louisiana*, 382 U.S. 288 (1965).

land controlled by the United States is referred to as the outer continental shelf (OCS).¹⁴⁰ After examining the regulatory timeline of the Cape Wind project, it is clear that the complexities of federal regulation can lead to delays in project completion—much like too many cooks in the kitchen leads to delays in a timely meal.

Under federal law, OCS “means all submerged lands lying seaward and outside of the area of lands beneath navigable waters [of each of the respective states] and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.”¹⁴¹ As such, projects located on submerged land of the OCS, like Cape Wind, are under federal jurisdiction.¹⁴² After a complex history of shifting federal regulatory authority, the permitting authority was finally vested in the MMS (a branch of the DOI).¹⁴³ The agencies involved “drew a functional line between their respective jurisdictions,” which “placed regulatory authority over offshore wind projects squarely in MMS’s jurisdiction.”¹⁴⁴ Another wrinkle was added in 2010 when the DOI decided to divide the MMS into three separate entities.¹⁴⁵ The entity created to “exercise the conventional (e.g., oil and gas) and renewable energy-related management functions formerly exercised by MMS” is called the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE).¹⁴⁶

2. THE U.S. ARMY CORPS OF ENGINEERS PERMIT PROCESS

Fortunately, offshore wind projects in Texas often only have to deal with one federal regulator: the U.S. Army Corps of Engineers (Corps). The Corps gets its jurisdiction from section 10 of the Rivers and Harbors Appropriations Act of 1899 (RHA).¹⁴⁷ The RHA prohibits the building of “any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States,” including any other structure in “any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army.”¹⁴⁸

Despite one view that the Corps is primarily concerned with navigation in America’s waters rather than energy regulation, courts continue to uphold the Corps’ jurisdiction under the RHA.¹⁴⁹ Depending on the type of project, a developer may also need a permit from the Corps under the Corps’ Clean Water Act jurisdiction. If the

140 43 U.S.C.A. § 1331(a) (West 2013).

141 *Id.*

142 *See e.g.*, *Ten Taxpayer Citizens Grp. v. Cape Wind Assocs.*, 373 F.3d 183, 192 (1st Cir. 2004).

143 Memorandum of Understanding between the U.S. Dep’t of the Interior and Fed. Energy Regulatory Comm’n (Apr. 9, 2009), *available at* <http://www.ferc.gov/legal/maj-ord-reg/mou/mou-doi.pdf>.

144 Todd J. Griset, *Harnessing the Ocean’s Power*, 16 OCEAN & COASTAL L.J. 395, 411 (2011).

145 U.S. DEP’T INTERIOR, Order No.3299 (2010), *available at* <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=32475>.

146 Griset, *supra* note 144, at 412.

147 33 C.F.R. § 320.2 (2013).

148 33 U.S.C.A. § 403 (West 2013).

149 *See Alliance To Protect Nantucket Sound, Inc. v. U.S. Dept. of Army*, 398 F.3d 105, 107 (1st Cir. 2005).

project requires wind turbines to be permanently affixed to the sea floor, construction will most likely involve the use of at least some fill material.¹⁵⁰ A permit from the Corps is required for authorization of “any discharge of dredged or fill material into the navigable waters incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not previously subject.”¹⁵¹

Regardless of how many permits are needed, the Corps issues all Department of the Army permits (DA permits) pursuant to the same procedures.¹⁵² There are many factors involved in the analysis performed by the Corps when deciding whether or not to issue a DA permit.¹⁵³ Although some of these factors are likely inconsequential to an offshore wind project, developers should be mindful to carefully consider all of them when assembling a DA permit application to the Corps.

1. *Public interest review*: “The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.”¹⁵⁴ The Corps will evaluate each project based on the extent of public/private need, the existence of alternative locations, and the benefits versus detriments the proposed use will have on the public/private uses to which the area is suited.
2. *Fish and wildlife*: The Corps “will consult with the Regional Director, U.S. Fish and Wildlife Service, the Regional Director, National Marine Fisheries Service, and the head of the agency responsible for fish and wildlife for the state in which work is to be performed, with a view to the conservation of wildlife resources by prevention of their direct and indirect loss and damage due to the activity proposed in a permit application.”¹⁵⁵ Offshore wind projects that are not located in or near marine sanctuaries should not have any issues regarding their effect on fish and wildlife.
3. *Historic, cultural, scenic, and recreational values*: “Full evaluation of the general public interest requires that due consideration be given to the effect which the proposed structure or activity may have” on national parks, monuments, and recreational areas. To avoid these and other similar concerns, developers should consider siting projects several miles from the Texas coastline.
4. *Activities affecting coastal zones*: “Applications for DA permits for activities affecting the coastal zones of those states having a coastal zone management program approved by the Secretary of Commerce will be evaluated with respect to compliance with that program.”¹⁵⁶ Assuming the GLO has already granted a lease for a specified project, this factor should be a non-issue.
5. *Other federal, state, or local requirements*: Interestingly, “final action on the DA permit will normally not be delayed pending action by another federal, state or local agency.”¹⁵⁷

150 Griset *supra* note 144, at 412.

151 33 U.S.C.A. § 1344 (West 2013).

152 See 33 C.F.R. § 320.4 (2013).

153 *Id.*

154 *Id.*

155 *Id.*

156 *Id.*

157 *Id.*

6. *Energy conservation and development*: The regulations state that “energy conservation and development are major national objectives,” and that “district engineers will give high priority to the processing of permit actions involving energy projects.”¹⁵⁸ Developers should view this statement and the inclusion of this factor as federal encouragement for offshore wind energy.
7. *Navigation*: Because “protection of navigation in all navigable waters of the United States continues to be a primary concern of the federal government,” developers should take measures to assure facilities are not located in areas that might conflict with naval exercise, commercial fishing areas, or international shipping lanes.¹⁵⁹
8. *Environmental benefits*: “The district engineer will weigh [environmental] benefits as well as environmental detriments along with other factors of the public interest.”¹⁶⁰
9. *Economics*: Projects proposed by private developers are assumed to have completed the “appropriate economic evaluations,” determining that “the proposal is economically viable, and is needed in the market place.”¹⁶¹ However, developers should be aware that the district engineer has the ability to conduct an independent review at his or her discretion.
10. *Mitigation*: “Consideration of mitigation will occur throughout the permit application review process and includes avoiding, minimizing, rectifying, reducing, or compensating for resource losses. Losses will be avoided to the extent practicable. Compensation may occur on-site or at an off-site location.”¹⁶²

Because DA permits are very fact-specific, it is ultimately up to the discretion of the developer to decide which factors to focus on when compiling information for the Corps. Since the Corps is a federal agency, it is subject to the NEPA process, and developers should be aware that opponents of offshore wind can use that process to delay projects by forcing the Corps to conduct an EA or EIS, just like they did to Cape Wind.¹⁶³

3. THE FAA DETERMINATION OF NO HAZARD

Another interaction with federal regulators comes in the form of the FAA determination of no hazard. As mentioned above in the discussion of *Town of Barnstable, Mass. v. FAA*,¹⁶⁴ the FAA must be notified of the construction of structures that could affect minimum flight altitude or have a negative effect on navigable airspace.¹⁶⁵ Pursuant to FAA Order 7400.2G, “the FAA can find a hazard if the proposed structure would have a

158 *Id.*

159 *Id.*

160 *Id.*

161 *Id.*

162 *Id.* Factors that have little or no relation to offshore wind projects, and therefore were not addressed, are: effect on wetlands, water quality, effects on the limits of the territorial sea, consideration of property ownership, activities in marine sanctuaries, floodplain management, water supply and conservation, and safety of impoundment structures. *See id.*

163 *See Alliance To Protect Nantucket Sound, Inc. v. U.S. Dept. of Army*, 398 F.3d 105 (1st Cir. 2005).

164 *Town of Barnstable, Mass. v. F.A.A.*, 659 F.3d 28, 30 (D.C. Cir. 2011).

165 14 C.F.R. § 77.31 (2013).

‘substantial adverse effect,’” which is defined as “one that would have an adverse effect on a significant volume of aeronautical operations.”¹⁶⁶ The FAA will normally conduct an aeronautical study to determine the effects of the proposed construction. Fortunately for offshore wind projects along the Texas Gulf Coast, the construction of wind farms several miles offshore is likely to have no aeronautical effect, so determinations of no hazard should be relatively easy to obtain.

V. THE FUTURE OF OFFSHORE WIND IN THE UNITED STATES

In addition to the pro-wind attitude in Texas and the beginnings of construction on the Cape Wind project in New England, offshore wind is also alive and well in many other areas of the United States. The states bordering the Great Lakes, as well as the states in the mid-Atlantic region, have made steps in exploiting their offshore wind.¹⁶⁷ Both areas have the potential to realize huge benefits from offshore wind due to strong wind patterns and the existence of huge coastal population centers.¹⁶⁸ In the mid-Atlantic, the development will be mostly federal, and the DOI and BOEMRE have already begun identifying offshore federal leasing blocks and coining the term “wind energy area” (WEA).¹⁶⁹ Development in the Great Lakes will most likely resemble development in Texas, as “each state has jurisdiction over submerged lands out to the center of each lake.”¹⁷⁰ However, federal regulators and the Great Lakes states recently signed a memorandum of understanding “to support the efficient, expeditious, orderly and responsible review of proposed offshore wind energy projects in the Great Lakes.”¹⁷¹ Both the mid-Atlantic and Great Lakes regions possess large clusters of industrial and residential power consumers in manufacturing cities like Baltimore, Cleveland, Chicago, Detroit, Minneapolis, Newark, and Philadelphia. Just like the Texas gulf coast, projects are easier to develop when transmission costs are low, thus enticing willing energy buyers.

New Jersey Governor Chris Christie recently signed into law the New Jersey Offshore Wind Economic Development Act, signaling that the state is serious about taking advantage of its offshore wind potential.¹⁷² The DOE has begun a “wind energy area

166 *Town of Barnstable*, 649 F.3d at 34.

167 See Jeff St. Clair, *Great Lakes May Beat Atlantic to Offshore Wind*, NPR (June 21, 2011), <http://www.npr.org/2011/06/21/137295524/great-lakes-may-beat-atlantic-to-offshore-wind>.

168 See *Offshore Wind Energy*, BUREAU OF OCEAN ENERGY MGMT., <http://boem.gov/Renewable-Energy-Program/Renewable-Energy-Guide/Offshore-Wind-Energy.aspx> (last visited Oct. 10, 2013).

169 Press Release, *Salazar Launches ‘Smart from the Start’ Initiative to Speed Offshore Wind Energy Development off the Atlantic Coast* (Nov. 23, 2010), available at <http://www.doi.gov/news/pressreleases/Salazar-Launches-Smart-from-the-Start-Initiative-to-Speed-Offshore-Wind-Energy-Development-off-the-Atlantic-Coast.cfm>.

170 Roek *supra* note 113, at 25.

171 Memorandum of Understanding between the White House Council on Env'tl. Quality, the Commonwealth of Pa., and the states of Ill., Mich., Minn., and N.Y., (Feb. 22, 2012), available at http://www1.eere.energy.gov/wind/pdfs/great_lakes_offshore_wind_energy_consortium_mou.pdf.

172 New Jersey Offshore Wind Economic Development Act Pub. L. No. 210, c. 57, amending N.J. STAT. ANN. § 48:3-49 *et seq.* (2010).

analysis on an area that begins seven nautical miles from the shore and extends roughly 23 nautical miles seaward.”¹⁷³ The area “extends from southwest to northeast approximately 45 nautical miles between Avalon and Barnegat Light,” and the total area “is approximately 418 square nautical miles.”¹⁷⁴ Attempting to resolve NEPA issues before development and construction, coupled with project locations out of sight from the coastline, should avoid many of the delays faced by the Cape Wind project. Other mid-Atlantic states with smaller populations may be able to produce enough power from offshore wind projects that they can export a significant amount. Specifically, “studies done at the University of Delaware indicate an offshore wind resource capable of meeting Delaware’s entire energy needs for electricity, transportation and all domestic uses, while still having substantial power to export to other states.”¹⁷⁵

With a population of more than 30 million people and a major focus on manufacturing and heavy industry, the Great Lakes region has all the factors necessary for offshore wind to be successful.¹⁷⁶ Due to the industrial history of the region, scholars point to advantages such as deep-water ports that make the Great Lakes “accessible to regional, national, and international shipments of turbine components.”¹⁷⁷ From a practical construction standpoint, there is less corrosion from freshwater and “lake waters tend to be shallower than ocean waters and do not face the same major weather concerns, like hurricane threats.”¹⁷⁸ Test projects are already in the works and have demonstrated the efficiency of project development when federal and state cooperation exists. Lake Erie Energy Development Corporation and the DOE have partnered to create the first freshwater wind farm in the United States. In 2013, the DOE committed \$4 million in support of “Icebreaker,” an offshore wind energy project expected to place five to nine wind turbines off the coast of Cleveland in Lake Erie.¹⁷⁹

Even in the post-Cape Wind northeast, projects like Statoil’s pilot wind farm off the coast of Maine are moving forward. The project will “be composed of four wind turbines with a total capacity of 12 megawatts,” and “sited in the Gulf of Maine some 12 nautical miles from the coast and 18 nautical miles from Boothbay Harbor.”¹⁸⁰ If the pilot project (which uses “spar buoy” technology to allow for floating turbines) is successful, the Maine Public Utilities Commission (PUC) could approve expansion.¹⁸¹ Statoil pledged

173 Marshall McLean, Henry King, Matthew Thomas, *Harnessing the Wind: Development of Wind Energy Projects in New Jersey*, 270-JUN N.J. LAW. 26, 27 (2011).

174 *Id.*

175 Philip J. Cherry, *Energy Policy in the First State: The Time Is Now*, 27-SUM DEL. LAW. 20, 21 (2009).

176 *Great Lakes*, EPA, <http://www.epa.gov/greatlakes> (last updated Sept. 13, 2013); see also *Great Lakes Monitoring*, EPA, http://www.epa.gov/glnpo/monitoring/great_minds_great_lakes/social_studies/without.html (last updated June 26, 2013).

177 Ashlyn N. Mausolf, *Clearing the Regulatory Hurdles and Promoting Offshore Wind Development in Michigan*, 89 U. DET. MERCY L. REV. 223, 231 (2012).

178 *Id.*

179 *Fact Sheet: Offshore Wind Farm Sitings on the Lower Great Lakes*, ARMY CORPS OF ENG’RS (Apr. 2013), available at http://www.lrb.usace.army.mil/Portals/45/docs/ProjFact/113%20Congress/ALL/Offshore_Wind_Farm_Sitings_on_the_Lower_Great_Lakes-REG-All_Districts.pdf.

180 *Maine OKs Floating Wind Farm*, 4110 PUR UTIL. REG. NEWS 1, 1 (Mar. 1, 2013).

181 *Id.*

“a minimum of 40% of its construction and operating costs” to Maine entities, and the PUC found that the state “stands to gain economic benefits of at least \$33 million.”¹⁸²

VI. CONCLUSION

After examining the Cape Wind situation, one might logically conclude that offshore wind is not economically viable in the United States. Fortunately, there are many other factors that suggest a much more favorable future for offshore wind in the United States. It seems obvious that most regulators (both state and federal) endeavor to use the Cape Wind experience as a tool to learn from rather than a model to emulate. The federal government seems committed to streamlining the permitting process through the creation of WEAs and early initiation of the NEPA process. Mid-Atlantic states like Delaware, New Jersey, and Pennsylvania appear committed to working with the DOI and BOEMRE (their federal counterparts) to encourage offshore wind projects along their coastlines. The Obama administration has committed to working with the Great Lakes states to spur offshore wind to power Midwestern manufacturing. New projects are even moving forward in the northeast, and former Secretary of the DOI, Ken Salazar, when recently asked about the legal troubles surrounding Cape Wind stated, “we think we will prevail and the project will be built.”¹⁸³ In addition to these positive regulatory changes for offshore wind, Texas’ unique coastal sovereignty and pro-wind history may also allow investors to feel more secure.

“Texas leads the Nation in wind-powered generation capacity.”¹⁸⁴ The Texas gulf coast is also poised to help the state lead the nation in offshore wind power generation.¹⁸⁵ At this time, Texas “has no state-wide or county-wide permitting regulations that apply to the siting of wind farms.”¹⁸⁶ This absence of regulation allows the GLO to lease offshore tracts through a competitive bidding process like the one it uses to award oil and gas leases on state lands. Both the Texas legislature and the GLO have expressed a pro-wind attitude through a history of encouraging wind development. Texas has already set and surpassed its second RPS, which required the state to generate more than 10,000 MW of renewable power by 2025.¹⁸⁷ The encouragement of the Texas state government, lack of federal entanglement, and pro-energy development attitude of most Texans positions Texas as a leader and “pioneer in an emerging energy market as wind power gives our state the opportunity to evolve into a new kind of energy power-

182 *Id.*

183 Press Release, *Secretary Salazar Confident Cape Wind Approvals Will be Upheld*, CAPE WIND (Feb. 26, 2013), available at <http://www.capewind.org/news1312.htm>.

184 Texas: State Profile and Energy Estimates, U.S. Energy Information Administration, available at: <http://www.eia.gov/state/analysis.cfm?sid=TX>.

185 See generally Andrew Campbell, *You Don't Need A Weatherman to Know Which Way the Wind Blows?: An Argument for Offshore Wind Development in the Gulf of Mexico*, 50 HOUS. L. REV. 899, 908 (2013).

186 Ernest E. Smith & Becky H. Diffen, *Winds of Change: The Creation of Wind Law*, 5 TEX. J. OIL, GAS & ENERGY L. 165, 189 (2009).

187 16 TEX. ADMIN. CODE § 25.173 (2009).

house.”¹⁸⁸ Hopefully, the rest of the country will follow Texas’ example by using regulatory cooperation to simplify the offshore permitting process and allow wind to make a bigger contribution to our power supply.

Ben Deninger is an associate in the Tampa, Florida office of the law firm Cole, Scott & Kisanine, P.A. While his practice focuses on complex commercial litigation arising from construction defect cases, he also works on premises liability and environmental issues. Originally from Sarasota, Florida, Ben received his undergraduate degree from Florida State University, earned a J.D. from the University of Maine School of Law and recently graduated with his L.L.M. degree from the University of Texas School of Law. Ben would like to thank Professors Rod Wetsel and Steve DeWolf for all their kind advice and assistance during the development of this article.

188 Lisa Chavarria, *Wind Power Prospective Issues*, 68 TEX. B.J. 832, 840 (2005).

SOLUTIONS FOR INTERSTATE GROUNDWATER ALLOCATION AND THE IMPLICATIONS OF *DAY*

BY NATHAN WEINERT

I.	Introduction	106
II.	Water and Groundwater Legal Systems Across America	108
	A. Basic Water Law Principles	108
	B. Overview of Texas Groundwater Law	110
	C. Interstate Complications	110
	1. New Mexico	111
	2. Oklahoma	111
	3. Arkansas	112
	4. Louisiana	113
	5. Other Ogallala Aquifer States: Colorado, Kansas, Nebraska, Wyoming, South Dakota	113
	6. Other Rule of Capture States	114
III.	Interstate Groundwater Complications	114
	A. An Overview of Interstate Water Allocation	114
	1. Methods of Allocation	114
	2. Equitable Apportionment	115
	3. Interstate Compact	116
	4. Legislation and Other Federal Initiatives	116
	B. Commerce Clause Concerns Sharply Limit the Ability of States to Unilaterally Solve the Problem	117
	1. <i>Hudson County Water Company</i> : The Original Supreme Court Interstate Water Law Decision Allows for Expansive Protectionist Regulation	117
	2. <i>City of Altus</i> : The Rules Start to Change	118
	3. <i>Sporhase</i> Makes Groundwater an Article of Interstate Commerce	119
	4. The First Test of <i>Sporhase</i> : Public Welfare and Economic Interests: <i>El Paso I and II</i>	121
	5. <i>Hood</i> : Equitable Apportionment Rules the Day	122
	6. <i>Herrmann</i> Demonstrates The Power of Compacts	123
	C. Conclusion	125
IV.	The Texas Groundwater Legal System	125
	A. A Growing State With Growing Water Needs	125
	B. The Texas Groundwater Regime	127
	1. Different Kinds of Water, Different Kinds of Ownership	127
	2. Water Law Roots in Multiple Sources	128
	3. Adoption of the Rule of Capture and Its Implications	129

C.	<i>Edwards Aquifer Authority v. Day</i> Brings the Takings Doctrine to Water Law	132
1.	The <i>Day</i> Decision: Background and Holding	132
2.	Reactions to <i>Day</i> : Elation and Disbelief	133
3.	<i>Day</i> After: Implications and Unanswered Questions	133
4.	<i>Bragg</i> Brings Into Focus the Post- <i>Day</i> Landscape	134
V.	Day and the Way Forward	135
A.	A Review of Takings Principles	136
B.	Unilateral Solutions	136
C.	Oil and Gas: A Useful Framework	137
1.	Interstate Oil and Compacts, Equitable Apportionment, and Congressional Apportionment	138
2.	Oil and Gas Takings Law and Its Implications	139
3.	Mixing Oil and Groundwater: Some Caveats	141
VI.	Conclusion	142

I grew up on a Kansas farm. . .we called our Ogallala water ‘precious’ and bragged that it was the best in the world. But the aquifer’s only natural recharge comes from rain and snow. In our Kansas district, less than half an inch of that reached the aquifer in a given year. We were allowed to pump out over 30 times that amount.

When I expressed concern, my father assured me that the government would step in to stop us someday. Until then, he liked to tease, ‘I got mine!’ But the government has not stepped in. Controls imposed by local water districts — run by irrigators themselves — and by state legislators dependent on the farm vote have been minimal at best.

As a result, in some areas of Kansas and Texas, farmers can no longer pump enough to water their crops. If current withdrawal rates continue, usable water in most areas will be gone by the end of this century.¹

I. INTRODUCTION

The Ogallala Aquifer (also known as the High Plains Aquifer) underlies western Texas.² The largest aquifer in the United States, it contains enough water to fill Lake Huron.³ If the Ogallala were drained, at natural recharge rates it would take an estimated 6,000 years to refill.⁴ Cities, agricultural interests, and natural resource developers all

1 Julene Blair, *Running Dry on the Great Plains*, N.Y. TIMES (Dec. 1, 2011), available at <http://www.nytimes.com/2011/12/01/opinion/polluting-the-ogallala-aquifer.html>.

2 *High Plains Water-Level Monitoring Study*, U.S. GEO. SURVEY, available at <http://ne.water.usgs.gov/ogw/hpwlms> (last updated Sept. 20, 2013).

3 John D. Leshy, *Interstate Groundwater Resources: The Federal Role*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 1475, 1482 (2008).

4 *Id.*

depend on the Ogallala as a source of fresh, abundant water.⁵ The Ogallala has been described as the “poster child” of groundwater use.⁶ It waters one-quarter of the irrigated acreage in the United States, and provides the drinking water for about four of five people living above it.⁷

If the Ogallala was situated only under Texas, the management of this invaluable resource would be challenging enough. Yet, management and preservation of the Ogallala is complicated by the fact that it underlies not just Texas, but New Mexico, Oklahoma, Colorado, Kansas, Wyoming, Nebraska, and South Dakota—eight states, each with their own very different ideas on who owns groundwater and how it should be allocated.⁸ This challenge is not limited to the Ogallala. Of the 30 aquifers recognized by the Texas Water Development Board, 20 underlie multiple states.⁹

Water—and groundwater in particular—is a resource that is governed largely by state law.¹⁰ It thus may be tempting to think that Texas laws are all that is necessary to solve Texas’s groundwater problems. Yet, water has an inherently interstate nature. Water originating from groundwater, runoff, or any other source in one state may travel along a surface watercourse to another state.¹¹ Aquifers may underlie multiple states, subjecting the same resource to different legal regimes pulling in entirely different directions. As a result, groundwater is a resource especially vulnerable to the tragedy of the

5 See *The Ogallala Aquifer Initiative*, NATURAL RES. CONSERVATION SERV. (Sept. 15, 2013), <http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/?cid=stelprdb1048809>.

6 Leshy, *supra* note 3, at 1481-82.

7 Jim Malewitz, *In Drought Ravaged Plains, Efforts to Save a Vital Aquifer*, PEW CHARITABLE TRUSTS STATELINE (Mar. 18, 2013), <http://www.pewstates.org/projects/stateline/headlines/in-drought-ravaged-plains-efforts-to-save-a-vital-aquifer-85899460061>.

8 Peter G. George et al., *Aquifers of Texas*, TEX. WATER DEV. BD. (2011), available at http://www.twdb.state.tx.us/publications/reports/numbered_reports/doc/R380_AquifersofTexas.pdf.

9 See *id.* Generally, Texas recognizes nine major and 21 minor aquifers. In addition to the Ogallala, the other major aquifers underlying Texas and other states are the Hueco-Mesilla Bolsons (New Mexico), Pecos Valley (New Mexico), Seymour (Oklahoma), Trinity (Oklahoma), Carizo-Wilcox (Arkansas, Louisiana), and Gulf Coast (Louisiana) Aquifers. Minor aquifers underlying Texas and other states are the Yegua Jackson (Louisiana), Sparta (Louisiana), Queen City (Arkansas, Louisiana), Nacatoch (Oklahoma and Arkansas), Blossom (Oklahoma), Woodbine (Oklahoma), Rita Blanca (Oklahoma, New Mexico), Edwards-Trinity (New Mexico), Dockum (Oklahoma, New Mexico), Rustler (New Mexico), Capitan Reef Complex (New Mexico), Blaine (Oklahoma), and Bone Spring-Victorio Peak (New Mexico) Aquifers.

10 Leshy, *supra* note 3, at 1480. See also DAN A. TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 1.1 (West 2012).

11 Leshy, *supra* note 3, at 1481.

commons.¹² With different legal restrictions on groundwater use in adjoining jurisdictions, there is a potent opportunity for a race to the bottom.¹³

Groundwater has been the source of exceptionally pitched legal battles in recent years. As cities, agricultural interests, industry, and natural resource developers seek to fulfill the needs of twenty-first century Texas, they often turn to groundwater to quench their thirst. Yet, in an era of limited resources and increasing needs, the demands of states, consumers, and property owners are coming increasingly into tension. In the Ogallala, for example, this situation has helped create what has been described as a “tragedy” and a “ticking time bomb.”¹⁴

Texas has become ground zero for many of these concerns, and the paucity of any interstate regulation of groundwater resources was brought into sharp relief by the 2012 decision *Edwards Aquifer Authority v. Day*, in which the Texas Supreme Court held that landowners have an interest in groundwater in place that cannot be taken for public use without adequate compensation guaranteed by law.¹⁵

This paper reviews recent legal developments and their implications for interstate groundwater. Part II provides an overview of the various water and groundwater legal systems across the United States, with a focus on the groundwater systems of states adjoining Texas. Part III evaluates concerns specific to interstate groundwater resources and case law in this area. In Part IV, the development of the groundwater legal system in Texas is explored. Finally, Part V examines the implications of *Edwards Aquifer Authority v. Day* on attempts to properly allocate interstate groundwater resources.¹⁶

II. WATER AND GROUNDWATER LEGAL SYSTEMS ACROSS AMERICA

A. BASIC WATER LAW PRINCIPLES

As a general rule, state law governs the allocation of rights to both groundwater and surface water.¹⁷ Beyond this fundamental principle, there is little uniformity on how states determine who owns and gets access to water. While state law regulating surface water appropriation may feel like navigating a maze on paper, groundwater appropriation

12 See Paula K. Smith, *Coercion and Groundwater Management*, 16 EVNTL. L. 797, 805-12 (1986) (providing an overview of the ways in which groundwater is both similar to and different than a “traditional” tragedy of the commons scenario).

13 Eric Opiela, *The Rule of Capture in Texas: An Outdated Principle Beyond Its Time*, 6 U. DENV. WATER L. REV. 87, 114 n.172 (2002) (examining the impact of differing groundwater districts in Texas regulating the same aquifer).

14 Malewitz, *supra* note 7.

15 369 S.W.3d 814, 817 (Tex. 2012).

16 The relationship of Texas water law and Mexican water law is also a subject of vital importance as several aquifers cross this international border. However, this paper only focuses on the relationship between Texas and other states. Regardless, many of the concerns that this paper will address arising from *Day* and other cases—such as the possibility that new restrictions on withdrawals from aquifers as the result of an agreement with Mexico could lead to a compensable takings claim—apply equally to both other states and Mexico.

17 Leshy, *supra* note 3, at 1480. See also TARLOCK, *supra* note 10.

is a comparatively three-dimensional obstacle course, with each state adding additional nuance and complication to a field that is often marked by its lack of development.¹⁸

Surface water and groundwater are governed by very different legal systems that developed largely separately from one another.¹⁹ To allocate surface water rights, states generally follow riparian or prior appropriation systems, or a hybrid “dual” or “California” system.²⁰ States often follow the same surface water systems as their neighbors, with riparian regimes dominating in the eastern United States, prior appropriation dominating in the west, and dual systems found in semi-arid regions on either the Pacific Coast or along the Hundredth Meridian in the center of the country.²¹

By contrast, the basis for the allocation of groundwater rights may be found in one of five systems: (1) rule of capture/absolute dominion; (2) American reasonable use; (3) correlative rights; (4) the Restatement rule/regulated riparian; and (5) prior appropriation/appropriative rights.²²

Each of these systems allocates the groundwater rights of landowners in a different way. Under a rule of capture/absolute dominion system (also known as the “English rule”), a landowner may withdraw groundwater from an aquifer underlying his land for any purpose and in any amount largely regardless of the impact on his neighbors or others.²³ A reasonable use system allows a landowner to use groundwater reasonably in connection with the land from which the groundwater was taken.²⁴ A correlative rights system gives each landowner a proprietary interest in a share of the aquifer proportionate to that of the overlying land.²⁵ Under a Restatement rule/regulated riparian regime, permits must be obtained from the state to withdraw water, and these permits should be granted unless the pumping of water will cause certain problems for adjoining landowners.²⁶ In a prior appropriation system, a right to the water may be established through a

18 See generally TARLOCK, *supra* note 10.

19 TARLOCK, *supra* note 10, at § 6:1.

20 *Id.* at § 1:1; 1 ROBERT E. BECK & AMY K. KELLEY, *WATERS AND WATER RIGHTS* § 4.05 (Amy L. Kelley, ed., 3d ed. LexisNexis 2011).

21 TARLOCK, *supra* note 10; BECK & KELLEY, *supra* note 20; William Goldfarb, *Water Law* 21, 32-33 (1988); 1 JOSEPH W. DELLAPENNA, *WATERS AND WATER RIGHTS* §§ 6.01, 8.01-8.02 (Amy L. Kelley, ed., 3d ed. 2011). Dellapenna observes that the traditional line dividing states east of Kansas City into the riparian category and states west of Kansas City into the prior appropriation category may be becoming an anachronism due to increasing regulation in the East. However, the bulk of scholars appear to continue to accept the line as being a convenient concept for understanding the historic roots of surface water allocation law. This historic division is rooted in the ways that the different regions of the country get their water. East of 100° W longitude (a line corresponding with the eastern edge of the Texas panhandle bordering Oklahoma), water generally comes from rainfall. West of this meridian, water comes from winter snows and the ensuing runoff. HERBERT C. YOUNG, *UNDERSTANDING WATER RIGHTS AND CONFLICTS* 42 (2d ed. 2003).

22 DELLAPENNA, *supra* note 21, at § 19.01.

23 TARLOCK, *supra* note 10, at § 4:6. Approximately six states still purport to follow rule of capture systems, and they will be examined in greater depth. See *infra* Part III.C

24 TARLOCK, *supra* note 10, at § 4:7.

25 *Id.* at § 4:14.

26 *Id.* at § 4:18.

first in time, first in right system of acclaim or diversion.²⁷ Modern prior appropriation systems often include a state permitting process to establish who was first in time.²⁸

Dramatic differences may be found even within these five basic systems. States often augment common law with additional regulation and nuance. Special governmental districts are increasingly being given the power to manage groundwater according to principles that may vary from conventional legal doctrines.²⁹ States may or may not recognize a connection between groundwater and surface water law, a factor further complicating any attempt to find uniformity in the system and its rules.³⁰

B. OVERVIEW OF TEXAS GROUNDWATER LAW

The roots of Texas groundwater law run as deep as the water that it governs. The seminal case in Texas groundwater law was the 1904 decision *Houston & Texas Central Railway Co. v. East*, in which the Texas Supreme Court applied the English common law rule of capture in relation to groundwater.³¹ Scholars have traced the origins of Texas groundwater law to Greek law, Roman law, Spanish law, Mexican law, English law, and pre-*East* American law.³² Subsequent case law and commentators have described the Texas rule of capture as an “absolute ownership regime,” and summarized the rule as “if you can reduce the groundwater to possession, it is yours.”³³ Yet, for over a century after *East*, the exact nature of that right remained in question. In the 2012 decision *Edwards Aquifer Authority v. Day*, the Texas Supreme Court finally resolved the issue, holding that water is owned in place by the landowner, and that regulation of this right may constitute a taking.³⁴ The impact of this decision is discussed in greater detail later in Parts IV and V.

C. INTERSTATE COMPLICATIONS

While geographically proximate states often adopt similar surface water legal regimes, groundwater ownership and allocation schemes often differ dramatically between adjoining states. For example, the Texas system of rule of capture and ownership in place differs dramatically from the ownership and allocation schemes in the states Texas borders.³⁵

27 See TEX. WATER CODE § 11.027 (West 2011).

28 TARLOCK, *supra* note 10, at §§ 6:4-6:9.

29 Leshy, *supra* note 3, at 1480.

30 *Id.*

31 81 S.W. 279, 280 (Tex. 1904).

32 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, 15-42 (2004).

33 Friendswood Dev. Co. v. Smith-Southwest Indus., Inc., 576 S.W.2d 21, 25-26 (Tex. 1978); Gerald Torres, *Liquid Assets: Groundwater in Texas*, 122 YALE L.J. 143, 145 (2012).

34 Edwards Aquifer Auth. v. Day, 369 S.W.3d 814, 817-18 (Tex. 2012).

35 While both Texas and Louisiana are rule of capture states, crucial differences exist, including the common law and civil law distinction between the states, the water-richness of Louisiana leading to a void in the development of the state’s groundwater law, and Louisiana’s drift toward either a correlative rights or reasonable use system. See DELLAPENNA, *supra* note 21, at §§8.02, 10.02, 20.02.

To appreciate the complexity inherent in attempting to find an interstate solution, it is worth reviewing these systems and noting how each state has chosen a different method to allocate its groundwater resources.

1. NEW MEXICO

New Mexico follows the prior appropriation doctrine.³⁶ Under the New Mexico constitution, unappropriated groundwater is the property of the state and allocated to users through prior appropriation.³⁷ Landowners have no ownership in the corpus of the water but may acquire the ability to use the groundwater.³⁸ New Mexico has historically coordinated its surface water rights and groundwater rights systems.³⁹ Users must apply to the state for a permit to use the groundwater, and the New Mexico permitting process for determining groundwater rights largely mirrors that for determining surface water rights—with additional requirements that users demonstrate technological feasibility and beneficial use of the water.⁴⁰ Public welfare is taken into account as part of the permitting process.⁴¹

2. OKLAHOMA

Oklahoma follows an appropriative rights system.⁴² Landowners in Oklahoma own the groundwater underlying their land, but the use of this water is governed by the Oklahoma groundwater law.⁴³ Landowners have the right to use the water underlying their land for a domestic purpose without obtaining a permit from the state, but the use of groundwater for a non-domestic purpose requires a permit from the Oklahoma Water Resources Board (OWRB).⁴⁴ Permits are granted if the applicant can demonstrate that the proposed use of the water is beneficial and waste will not occur.⁴⁵ The OWRB is responsible for determining “maximum annual yield” for each groundwater basin in Oklahoma.⁴⁶ The maximum annual yield (also known as “equal proportionate share”) is the amount of groundwater per acre that each landowner will be allowed to take each year for non-domestic purposes.⁴⁷ This system assumes that, if each overlying landowner took his full equal proportionate share each year, the underlying water source would be

36 N.M. CONST. art. XVI, § 2; William A. Paddock, *A Survey of Statutes Governing Appropriation of Water Rights in Twelve Western States*, ROCKY MOUNTAIN MINERAL LAW FOUND. *2B-22-24 (2012), available at 2012 NO. 3 RMMLF-INST PAPER NO. 2B (WestlawNext); Amy Hardberger, *What Lies Beneath: Determining the Necessity of International Groundwater Policy Along the United States-Mexico Border and a Roadmap to an Agreement*, 35 TEX. TECH L. REV. 1211, 1241-42 (2004)(discussing New Mexico’s groundwater law).

37 N.M. CONST. art. XVI, § 2.

38 State *ex rel.* Erickson v. McLean, 308 P.2d 983, 987 (N.M. 1957).

39 TARLOCK, *supra* note 10, at § 6:20.

40 Paddock, *supra* note 36, at *2B-23.

41 N.M. STAT. ANN. § 72-12-3 (West 2013).

42 OKLA STAT. ANN. tit. 82, § 1020.7 (West 2013).

43 *Id.*

44 *Id.* §§ 1020.3, 1020.7.

45 *Id.* at § 1020.9.

46 *Id.* at § 1020.5.

47 L. Mark Walker & Reagan E. Bradford, *The Basics of Oklahoma Water Law*, 80 OKLA. B.J. 1745, 1748 (2009).

depleted in 20 years.⁴⁸ As a result, the system has been criticized as allowing “mining” of groundwater.⁴⁹ The system has also been criticized for failing to recognize the connections between surface water and groundwater.⁵⁰

3. ARKANSAS

What rule of groundwater ownership Arkansas follows is an open question.⁵¹ Scholars have asserted that Arkansas follows an American reasonable use system, or a “reasonable use version of riparian rights.”⁵² The Arkansas Supreme Court adopted a riparian rights system for surface water in 1955.⁵³ In a subsequent 1957 case, it extended the riparian rights reasonable use rule to groundwater.⁵⁴ In a 1975 case, however, the Arkansas Supreme Court issued a decision that appears to support reasonable use for surface water, American reasonable use for groundwater, and correlative rights.⁵⁵ The Arkansas doctrine has been summarized as follows: “Each surface owner above a common source of groundwater has an equal right to make reasonable use of the groundwater subject to the equal rights of other surface owners to make a reasonable use.”⁵⁶

Arkansas state authorities describe the approach taken by Arkansas as a “correlative rights doctrine.”⁵⁷ In 1991, Arkansas passed the Groundwater Protection and Management Act, which was the first legislative attempt to regulate groundwater in Arkansas.⁵⁸ The Act has been criticized as creating a regime that is powerless to address the challenges of overuse.⁵⁹ Before permits may be put into place limiting groundwater withdrawals, the overlying land must be designated as a “critical groundwater area.”⁶⁰ Therefore, once regulation is determined necessary, a water rights permitting program may be implemented.⁶¹ Water rights are an incident of surface ownership of property, and may not be transferred separate from the property itself.⁶²

48 OKLA. STAT. ANN. tit. 82, § 1020.5 (B) (West 2013).

49 Walker & Reagan, *supra* note 47; See also Gary D. Allison, *Oklahoma Water Rights: What Good Are They?*, 64 OKLA. L. REV. 469, 511-13 (2012).

50 Allison, *supra* note 49, at 507-09.

51 Phillip E. Norvell, *Arkansas: Ground Water*, in 6-AR WATERS AND WATER RIGHTS IV (Amy L. Kelley, ed., 3d ed. LexisNexis 2011).

52 *Id.* See also Joseph W. Dellapenna, *The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century*, 25 U. ARK. LITTLE ROCK L. REV. 9, 52 (2002).

53 *Harris v. Brooks*, 283 S.W.2d 189 (Ark. 1955).

54 *Jones v. Oz-Ark-Val Poultry Co.*, 306 S.W.2d 111, 113-14 (Ark. 1957).

55 *Lingo v. City of Jacksonville*, 522 S.W.2d 403 (Ark. 1975). See also Norvell, *supra* note 51.

56 G. Alan Perkins, *Arkansas Water Rights: Review and Considerations for Reform*, 25 U. ARK. LITTLE ROCK. L. REV. 123, 139 (2002).

57 ARK. NATURAL RES. COMM’N., *Water Law in Arkansas*, 6 (2011), available at https://static.ark.org/eeuploads/anrc/arkansas_water_law_2011_draft-new.pdf.

58 Perkins, *supra* note 56, at 148-49.

59 *Id.*

60 ARK. NATURAL RES. COMM’N, *supra* note 57, at 18.

61 *Id.* at 19.

62 ARK. CODE ANN. § 15-22-911 (West 2013).

4. LOUISIANA

Neither the Louisiana courts nor the Louisiana State Legislature have conclusively established the nature of groundwater ownership rights. Louisiana is an outlier in many respects. Louisiana adheres to the civil code system, rather than following a common law tradition.⁶³ Further, Louisiana is comparatively water-rich, particularly when compared to arid states such as Texas, Oklahoma, and New Mexico.⁶⁴ These factors complicate attempts to easily define the Louisiana groundwater law system.⁶⁵ Statutes appear to support an absolute ownership rule interpretation. The Louisiana Civil Code states that, unless otherwise provided by law, the ownership of land includes ownership of everything directly above or below that land.⁶⁶ Sections of the Louisiana Mineral Code also appear to support this interpretation.⁶⁷ In *Adams v. Grigsby*, the only Louisiana case involving a dispute over an aquifer shared by adjoining neighbors, the Louisiana Court of Appeals held that groundwater is similar to oil and gas as a fugitive mineral and applied the rule of capture.⁶⁸ The defendants in a 2003 Louisiana Supreme Court case involving groundwater contamination argued that *Adams* meant that the landowner had no ownership interest in groundwater.⁶⁹ While the court did not directly refute this claim, it did allow the landowner to recover for damage suffered as the result of groundwater contamination.⁷⁰ The lack of action by the Louisiana courts and Legislature on the issue of water rights has left civil law-based Louisiana closer to the classic common law version of water rights than most of its common law neighbors.⁷¹ While statutory changes may have edged Louisiana toward either a correlative rights or reasonable use system, the state's water richness makes it likely the nature of the right will not be conclusively established for some time to come.⁷²

5. OTHER OGALLALA AQUIFER STATES: COLORADO, KANSAS, NEBRASKA, WYOMING, SOUTH DAKOTA

Among the other Ogallala Aquifer states, Colorado, Kansas, Wyoming, and South Dakota follow appropriative rights systems, while Nebraska follows a correlative rights reasonable use system.⁷³

63 Patrick H. Martin, *Louisiana: Introduction*, in 6-LA WATERS AND WATER RIGHTS I (Amy L. Kelley, ed., 3d ed. LexisNexis 2011).

64 *Id.*

65 See Dellapenna, *supra* note 52, at 73-74.

66 LA. CIV. CODE ANN. art. 490 (West 2013).

67 See, e.g., LA. REV. STAT. ANN. tit. 31 § 8 (West 2013).

68 *Adams v. Grigsby*, 152 So.2d 619, 623 (La. Ct. App. 1963). See also Roderic Fleming, Comment, *Hydraulic Fracturing, Louisiana Water Law, and Act 955*, 24 TUL. ENVTL. L.J. 363, 368 (2011).

69 *Corbello v. Iowa Prod.*, 850 So.2d 686, 698 (La. 2003).

70 *Adams*, 152 So.2d at 701.

71 Dellapenna, *supra* note 52, at 77.

72 See DELLAPENNA, *supra* note 21, at § 20.02.

73 COLO. REV. STAT. ANN. §37-82-101 (West 2013); KAN. STAT. ANN. § 82a-703 (West 2013); WYO. STAT. ANN. §§ 41-3-906, 906 (West 2013); S.D. CODIFIED LAWS §46-6-3 (2013); NEB. REV. STAT. § 46-635-42 (2013).

6. OTHER RULE OF CAPTURE STATES

As will be fully explored in Part IV, Texas is a rule of capture state. It is the “lone holdout” among western states in following the rule of capture.⁷⁴ Other states purporting to allocate groundwater in this basic way are Connecticut, Louisiana, Indiana, Maine, and Rhode Island.⁷⁵ Massachusetts may also still follow the classic rule of absolute dominion.⁷⁶

Since 1980, Indiana, Maine, and Texas are the only states that have “reaffirmed their commitment to the absolute dominion rule with at most minor limitations on that rule.”⁷⁷ While Indiana continues to recognize the English rule and that groundwater is the property of the landowner even before taken into possession, modifications have chipped away at the scope of a landowner’s rights.⁷⁸ Maine is the only state other than Texas that, in recent years, has unquestionably reaffirmed the rule of absolute dominion.⁷⁹

III. INTERSTATE GROUNDWATER COMPLICATIONS

A. AN OVERVIEW OF INTERSTATE WATER ALLOCATION

1. METHODS OF ALLOCATION

Interstate groundwater regulation is largely defined by the vacuums in regulation that exist. Interstate compacts allocating groundwater are few and far between, and the gaps in allocation are often filled by either courts extending what minimal law there is, or by thirsty users trying to pump out as much as they can as fast as they can.

The allocation of water between states has primarily developed in the context of surface water systems.⁸⁰ There are three generally-accepted ways to apportion water from interstate watercourses: interstate compact or agreement, equitable apportionment, or congressional apportionment.⁸¹ These methods have been used to allocate interstate surface water resources, and some scholars assert that these methods should also be used for interstate groundwater resources.⁸²

74 *Sipriano v. Great Springs Water of Am., Inc.*, 1 S.W.3d 75, 82 (Tex. 1999) (Hecht, J., concurring).

75 TARLOCK, *supra* note 10, at § 4:6.

76 *Prince v. Stockdell*, 494 N.E.2d 1021, 1023 (Mass. 1986). *See also* Lee P. Breckenridge, *Massachusetts: Introduction*, in 6-MA WATERS AND WATER RIGHTS § I (Amy L. Kelley, ed., 3d ed. LexisNexis 2011).

77 DELLAPENNA, *supra* note 21, at § 20.07.

78 *See Allstate Ins. Co. v. Dana Corp.*, 759 N.E.2d 1049, 1055 (Ind. 2001).

79 *See Maddocks v. Giles*, 728 A.2d 150, 153-54 (Me. 1999).

80 Leshy, *supra* note 3, at 1484.

81 *Id.* at 1482-83.

82 *Id.* at 1484. *See also* Albert E. Utton, Sporhase, El Paso, and the Unilateral Allocation of Water Resources, 57 U. COLO. L. REV. 549, 556 (1986) (“Water resources which underlie a state boundary should be treated in the same way as those that flow on the surface across state boundaries. Unilateral, or self-allocation of groundwater resources should be restrained, just as it is in the case of surface waters. Self-allocation, whether under the guise of the com-

The federal government has an overarching presence in resolving interstate water disputes as a result of its constitutional powers. In Article III, the Supreme Court is given original jurisdiction over cases involving conflicts between multiple states.⁸³ In Article I, Congress is given the power to regulate commerce between the states, and Congress must approve compacts between states.⁸⁴ Thus, each of the solutions above requires federal involvement in some way: Equitable apportionment suits between states are heard directly before the Supreme Court, interstate water compacts must be approved by Congress, and Congress may have the power under the Commerce Clause to directly apportion water underlying multiple states.

Despite this crucial role, the federal government has historically taken a hands-off role in the development and appropriation of groundwater resources, whether interstate or intrastate. The federal government has often limited its role to data-gathering and studies, and providing some development assistance.⁸⁵ This trend may be reversing, as recent years have seen the federal government becoming increasingly involved in groundwater development projects.⁸⁶

With a consensus that compact, equitable apportionment and direct legislation are the three methods that exist to address interstate water disputes, each of these methods has received attention for their potential utility in the groundwater setting.

2. EQUITABLE APPORTIONMENT

Equitable apportionment applies to all interstate streams, but it remains a question as to whether it applies to groundwater.⁸⁷ While there has been longstanding hope that the Supreme Court would take a definitive stand on the issue, the widespread assumption among water law observers is that the Supreme Court will apply equitable apportionment to groundwater.⁸⁸ As noted above, the Supreme Court has original jurisdiction over suits between states.⁸⁹ As a result, the sole test for acceptance of a motion for an equitable apportionment is whether there is an interstate dispute over the allocation of a shared natural resource.⁹⁰

Arguments advanced in favor of equitable apportionment include that it prevents unilateral allocation, provides fairness and the basis for stable expectations, and strengthens federalism.⁹¹ Scholars have argued that the Supreme Court is increasingly comfortable with equitably apportioning groundwater resources, pointing to the 2010 decision not to accept *Hood ex rel. Mississippi v. City of Memphis, Tennessee*,⁹² for certio-

merce clause or of being upstream, is not in the best interest of the planned use of the resource, nor of good federalism.”).

83 U.S. CONST. art. III, § 2.

84 U.S. CONST. art. I, § 8, cl. 3; U.S. CONST. art. I, §10, cl. 3.

85 Leshy, *supra* note 3, at 1485.

86 *Id.* at 1485.

87 Utton, *supra* note 82, at 554; TARLOCK, *supra* note 10, at § 10:24.

88 TARLOCK, *supra* note 10, at § 10:24.

89 U.S. CONST. art III, § 2, cl.1.

90 TARLOCK, *supra* note 10, at § 10:24.

91 Utton, *supra* note 82, at 554-55.

92 570 F.3d 625 (5th Cir. 2009), *cert. denied*, *Mississippi v. City of Memphis*, 559 U.S. 904 (2010).

rari as an indication of this comfort.⁹³ Additionally, the Supreme Court has used interstate compacts as cover to effectively accomplish an equitable apportionment of groundwater resources.⁹⁴ Despite these signals, to date the Supreme Court has yet to accept a case in which the allocation of groundwater unrelated to a compact is the sole issue.

3. INTERSTATE COMPACT

Despite the Supreme Court's likely comfort with equitable apportionment, it has historically expressed a preference for the use of compacts as a method to resolve interstate water disputes.⁹⁵ Only a few interstate compacts expressly address groundwater.⁹⁶ However, in recent years, the Supreme Court has effectively extended compacts addressing surface water to include hydrologically-related groundwater even though the compacts are silent on the subject.⁹⁷ Water lawyers and observers have begun to more vocally advocate for the creation of interstate compacts to deal with groundwater allocation.⁹⁸ Additionally, states may find it advantageous to use compacts to resolve interstate water disputes, as the courts—such as in *Tarrant Regional Water District v. Herrmann*—may use a compact to allow them to embrace more aggressive regulation of groundwater resources than other decisions have traditionally allowed.⁹⁹

4. LEGISLATION AND OTHER FEDERAL INITIATIVES

Scholars and observers have split on what role the federal government should assume in allocating interstate groundwater. Those advocating an increased role for the federal government note the many tools at the federal government's disposal, which include information gathering, funding tools to incentivize states to resolve their groundwater disputes, power over federal lands, use of water rights associated with certain federal lands, regulatory programs, and finally, outright legislation.¹⁰⁰ However, others advocate that the federal government should minimize its role and leave it to the states

93 See Michael D. Tauer, *Evolution of the Doctrine of Equitable Apportionment—Mississippi v. Memphis*, 41 U. MEM. L. REV. 897, 923 (2011). *Hood* will be discussed in further detail. See *infra* Part IV.

94 TARLOCK, *supra* note 10, at § 10:24.

95 See, e.g., *Colorado v. Kansas*, 320 U.S. 383, 392 (1943) (“We say of this case, as the court has said of interstate differences of like nature, that such mutual accommodation and agreement should, if possible, be the medium of settlement, instead of invocation of our adjudicatory power.”).

96 Leshy, *supra* note 3, at 1486-87.

97 *Id.* (citing *Kansas v. Colorado*, 514 U.S. 673 (1995); *Kansas v. Nebraska*, 538 U.S. 720 (2003); *Montana v. Wyoming*, 131 S.Ct. 1765 (2007)).

98 Justin Newell Hester, Comment, *The Nature of Interstate Groundwater Resources and the Need for States to Effectively Manage the Resource Through Interstate Compacts*, 11 WYO. L. REV. 25 (2011); Rex A. Mann, Note, *A Horizontal Federalism Solution to the Management of Interstate Aquifers: Considering an Interstate Compact for the High Plains Aquifer*, 88 TEX. L. REV. 391 (2009).

99 656 F.3d 1222, 1250 (10th Cir. 2011), *aff'd*, 133 S.Ct. 2120 (2013) (finding Oklahoma's restrictions on the exportation of groundwater permissible under the Red River Compact between Oklahoma and Colorado).

100 Leshy, *supra* note 3, at 1488-90.

to determine what level of regulation and allocation is necessary for each individual aquifer.¹⁰¹

Congress has not passed laws directly allocating groundwater resources. Lack of use of this power should not be confused with unavailability. In the fundamental water law decision *Sporhase v. Nebraska ex rel. Douglas*, the Supreme Court noted in *dicta* that, while the federal government has historically deferred to state leadership on water supply issues, the federal government could exclusively regulate in this area under its Commerce Clause powers.¹⁰² The bluntest tool that the federal government has to resolve an interstate water dispute thus remains available.

B. COMMERCE CLAUSE CONCERNS SHARPLY LIMIT THE ABILITY OF STATES TO UNILATERALLY SOLVE THE PROBLEM

Controversies over interstate groundwater and how it can be allocated have raged for decades as states have sought to protect their landowners and water rights. States have often sought to impose their own solutions and restrict the export of groundwater or condition groundwater export on the ability to access another state's groundwater.¹⁰³ Commerce Clause concerns have limited the ability of states to accomplish these goals unilaterally, and decisions in this area have reflected evolving Supreme Court jurisprudence during this time period.

1. HUDSON COUNTY WATER COMPANY: THE ORIGINAL SUPREME COURT INTERSTATE WATER LAW DECISION ALLOWS FOR EXPANSIVE PROTECTIONIST REGULATION

The United States Supreme Court first addressed interstate water rights in the 1908 decision *Hudson County Water Co. v. McCarter*.¹⁰⁴ A water company sought to divert water from the Passaic River in New Jersey and deliver it to New York City.¹⁰⁵ New Jersey, "reciting the need of preserving the fresh water of the State for the health and prosperity of [New Jersey] citizens," enacted a law banning the transfer of water from New Jersey to other states.¹⁰⁶ After the statute was passed, the Hudson County Water Company contracted with New York City to supply at least three million gallons of water per day.¹⁰⁷ The attorney general of New Jersey brought suit, and sought an injunction to bar the water company from taking water out of the state.¹⁰⁸ In a brief opinion, Justice Holmes strongly defended the right of New Jersey to enact statutes to protect its natural resources:

101 See, e.g., James H. Davenport, *Less Is More: A Limited Approach to Multi-State Management of Interstate Groundwater Basins*, 12 U. DENV. WATER L. REV. 139, 166 (2008).

102 458 U.S. 941, 954 (1982) ("Ground water overdraft is a national problem and Congress has the power to deal with it on that scale."). *Sporhase* will be examined in greater depth. See *infra* Part IV.B.3.

103 See generally Christine A. Klein, *The Dormant Commerce Clause and Water Export*, 35 HARV. ENVTL. L. REV. 131, 131-32 (2011).

104 209 U.S. 349, 355 (1908).

105 *Id.* at 353.

106 *Id.*

107 *Id.*

108 *Id.*

But we agree with the New Jersey courts, and think it quite beyond any rational view of riparian rights, that an agreement, of no matter what private owners, could sanction the diversion of an important stream outside the boundaries of the state in which it flows. The private right to appropriate is subject not only to the rights of lower owners, but to the initial limitation that it may not substantially diminish one of the great foundations of public welfare and health.

We are of opinion, further, that the constitutional power of the state to insist that its natural advantages shall remain unimpaired by its citizens is not dependent upon any nice estimate of the extent of present use or speculation as to future needs. . . Any analysis may be inadequate. [New Jersey] finds itself in possession of what all admit to be a great public good, and what it has it may keep and give no one a reason for its will.¹⁰⁹

Hudson County Water Company was the Supreme Court's first attempt to deal with interstate water rights. In the decades that followed, the strong protectionist stance that it took would steadily be chipped away at by subsequent decisions involving the dormant Commerce Clause.¹¹⁰

2. CITY OF ALTUS: THE RULES START TO CHANGE

In 1966, the tide began to turn against unimpeded state measures to contain their groundwater use. In *City of Altus, Oklahoma v. Carr*, the United States District Court for the Western District of Texas considered a case in which Altus, a town in southwest Oklahoma, sought to obtain from C.S. Mock and his wife the groundwater rights to land in Texas bordering the Red River.¹¹¹ Shortly before Altus and the Mocks were able to finalize the lease, Texas enacted a law that prohibited withdrawing groundwater from Texas and transporting it to another state without the authorization of the Texas Legislature.¹¹² Altus sued, seeking a declaratory judgment that the statute was unconstitutional and a violation of the Commerce Clause.¹¹³

In its decision, the court noted that, while states may make laws governing matters of local concern that may affect or regulate interstate commerce, the Commerce Clause prohibits states from enacting laws that impose a direct burden on interstate commerce or otherwise discriminate against it.¹¹⁴ The court held that the statute was an unreasonable burden upon interstate commerce with little relation to the cause of conservation.¹¹⁵ Foreshadowing future cases in this area, the court found that, under Texas law, a landowner had the right to drill wells and appropriate water for his own purpose, and after appropriating the water had the right to sell the groundwater wherever he liked.¹¹⁶ Because the groundwater could be reduced to an object of personal property, groundwater was an article of interstate commerce, and the owner of property had the right to sell the

109 *Id.* at 356-57.

110 See Richard S. Harnsberger et al., *Interstate Transfers of Water: State Options After Sporhase*, 70 NEB. L. REV. 754, 760-63 (1991).

111 255 F. Supp. 828 (W.D. Tex. 1966), *aff'd*, 385 U.S. 35 (1966) (per curiam).

112 255 F. Supp. at 830-32.

113 *Id.* at 830.

114 *Id.* at 837.

115 *Id.* at 840.

116 *Id.*

water that he had appropriated from the groundwater source as he would any other species of property.¹¹⁷

The Supreme Court affirmed the judgment of *City of Altus*.¹¹⁸ For the next sixteen years, this decision was the only federal court decision on the constitutionality of state water embargo statutes.¹¹⁹

3. *SPORHASE* MAKES GROUNDWATER AN ARTICLE OF INTERSTATE COMMERCE

While judicial rumblings had begun that states might not be the exclusive masters of their groundwater domain, even post-*City of Altus* it was generally assumed that groundwater was subject to exclusive state control for two reasons: First, groundwater use was seen as a matter of local concern (much like land use). Second, in many western states groundwater was thought to be owned by the state under the public trust doctrine.¹²⁰ This all changed in 1982, when the Supreme Court took up the issue of water embargo statutes in *Sporhase v. Nebraska ex rel. Douglas* and subjected interstate water rights to the dormant Commerce Clause analysis for the first time.¹²¹

Under the Constitution, “Congress. . . shall have Power. . . to regulate Commerce. . . among the several States.”¹²² This “affirmative Commerce Clause” is a grant of power to the federal government.¹²³ However, the Supreme Court, beginning with *Gibbons v. Ogden*, has also read into this clause a limitation on state regulation. *Gibbons* suggested that, even where no controlling federal legislation existed, in certain circumstances states might lack the power to regulate interstate commerce.¹²⁴ Since *Gibbons*, courts have used this “dormant Commerce Clause” analysis to strike down legislation that unduly interferes with interstate commerce, even if no federal legislation occupies the field.¹²⁵

The Supreme Court has laid out a two-part test to determine whether a violation of the dormant Commerce Clause has occurred. The first question is whether a law discriminates against interstate commerce on its face or in practical effect.¹²⁶ In this context, “discrimination” is differential treatment of in-state and out-of-state economic interests

117 See *id.* at 840 (noting how water withdrawn from underground sources is personal property subject to sale and commerce).

118 *Carr*, 385 U.S. 35.

119 Stephen D. Harrison, Note, *Interstate Transfer of Water: The Western Challenge to the Commerce Clause*, 59 TEX. L. REV. 1249, 1257 (1981) (noting how the *City of Altus* decision was the only recent federal court decision contesting the constitutionality of the Western embargo statutes).

120 Ann Berkley Rogers, *The Limits of State Activity in the Interstate Water Market*, 21 LAND & WATER L. REV. 357, 358 (1986).

121 458 U.S. 941, 953 (stating that possible congressional legislation on groundwater, under the commerce clause, should not be limited by state regulation).

122 U.S. CONST. art. I, § 8, cl. 3.

123 See *id.* See also *Heart of Atlanta Motel, Inc. v. U.S.*, 379 U.S. 241, 258 (1964).

124 Christine A. Klein, *The Dormant Commerce Clause and Water Export*, 35 HARV. ENVTL. L. REV. 131, 134 (2011) (citing to *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824)).

125 *Id.*

126 *Id.*

that benefits the former and burdens the latter.¹²⁷ If the cause for discriminatory treatment is economic protectionism, then it is virtually a per se violation of the Commerce Clause.¹²⁸ This discrimination can only be overcome by showing that the state has no other means to effectuate a legitimate local purpose.¹²⁹ If a law is not discriminatory on its face and regulates even-handedly to effectuate a legitimate local public interest but results in incidental effects on interstate commerce, the law will be upheld unless the burden on interstate commerce is clearly excessive in relation to the local benefits.¹³⁰

Sporhase involved groundwater rights of landowners who owned property on either side of the Nebraska-Colorado border. Jay Sporhase and a business partner owned two contiguous pieces of land, one in Nebraska, the other in Colorado.¹³¹ Nebraska law required any person wishing to withdraw groundwater from a well in Nebraska and transport it to an adjoining state to apply for a permit to do so.¹³² For a permit to be granted, the use of the water must have been reasonable, not contrary to conservation, and not contrary to the public welfare.¹³³ Further, Nebraska only allowed such a permit to be issued if the state in which the water was to be used granted reciprocal rights to withdraw and transport groundwater from that state for use in Nebraska.¹³⁴ Because Colorado law forbade the transfer of groundwater out of state, it would have been impossible for Sporhase to obtain a permit.¹³⁵

Despite the impossible regulatory framework, Sporhase pumped water from a well located in Nebraska and used it to irrigate the land in both Nebraska and Colorado.¹³⁶ Nebraska brought suit to attempt to enjoin the withdrawal of groundwater.¹³⁷ The first question that the Supreme Court addressed was whether groundwater is an article of commerce. The Supreme Court held that it was, and as a result, state regulation of interstate groundwater was subject to Commerce Clause analysis.¹³⁸ It then analyzed the Nebraska law under the Commerce Clause, and found that the first three conditions of the interstate permitting law were reasonable exercises of state interest in conservation and preservation of groundwater and not discriminatory on their face.¹³⁹ As a result, the first three conditions passed the first part of the dormant Commerce Clause analysis.¹⁴⁰ However, the reciprocity requirement was found to be facially discriminatory.¹⁴¹ While the Court appeared sympathetic to Nebraska's statutory goals, it held that the reciprocity

127 *United Haulers Ass'n Inc. v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 338 (2007).

128 *Id.*

129 *Id.* at 338-39.

130 *Id.* at 346; *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

131 *Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941, 941 (1982).

132 *Id.*

133 *Id.*

134 *Id.* at 944.

135 *Id.* at 965 n.2.

136 *Id.* at 941.

137 *Id.*

138 *Id.* at 954-55.

139 *Id.* at 957.

140 *Id.*

141 *Id.* at 958.

requirement was not narrowly-tailored enough to serve the state's interest.¹⁴² As a result, the Nebraska statute violated the Commerce Clause, and it was unconstitutional.¹⁴³

Since *Sporhase*, state restrictions on the export of water have been subjected to the dormant Commerce Clause analysis detailed above. There may be permissible export restrictions. After all, the Supreme Court observed in *Sporhase dicta* that an arid state might be able to establish a relationship between conservation and a ban on the export of water that would serve a legitimate state interest.¹⁴⁴ The Court did not, however, detail how a state could meet this requirement, and states relying on the conservation rationale to justify their export restrictions have found courts unreceptive to this argument.¹⁴⁵

In the decades since *Sporhase*, scholars have observed the decision raised as many questions as it answered.¹⁴⁶ These questions include whether the dormant Commerce Clause analysis applies in cases involving intrastate water resources, complete bans on commerce in water, or the initiation of new water rights.¹⁴⁷ *Sporhase* has been criticized for "an abstractness that leaves factual details and nuances for another day."¹⁴⁸ The decision has also been criticized for asking the wrong question, for overriding state water law, for a failure to account for differences in surface water and groundwater, for focusing on scarcity, and for creating a regulatory void.¹⁴⁹ What has not been questioned, however, is the transformative impact of labeling groundwater an article of interstate commerce.

4. THE FIRST TEST OF *SPORHASE*: PUBLIC WELFARE AND ECONOMIC INTERESTS: *EL PASO I AND II*

Since *Sporhase*, bans and restrictions on the interstate transfer of groundwater have received a mixed reaction in the courts. In the 1983 case, *City of El Paso By & Through Its Public Service Board v. Reynolds*, the United States District Court for the Eastern District of New Mexico overturned a New Mexico law that served as a complete ban on the interstate transfer of groundwater.¹⁵⁰ The City of El Paso, Texas, plaintiff, argued that a New Mexico groundwater embargo was an unconstitutional violation of the Commerce Clause.¹⁵¹ New Mexico argued that the embargo was legal under the Rio Grande Compact between New Mexico and Texas; that the Compact apportioned between New Mexico and Texas surface water on the Rio Grande; and that "the Compact controls the use of ground water hydrologically connected to the apportioned surface water."¹⁵² The court declined to adopt New Mexico's arguments, finding that the history of the Com-

142 *Id.* at 957-58.

143 *Id.* at 960.

144 *Id.* at 958.

145 *See, e.g.,* *City of El Paso By and Through Its Pub. Serv. Bd. v. Reynolds*, 563 F. Supp. 379, 388-90 (D.N.M. 1983) [hereinafter *El Paso I*]. This case will be more fully explored. *See infra* Part IV.B.4.

146 Klein, *supra* note 103, at 137.

147 3 DOUGLAS L. GRANT, *WATERS AND WATER RIGHTS* § 48.03 (Amy L. Kelley & Brett C. Birdsong, eds., 3d ed. LexisNexis 2011).

148 *Id.* (referring to the Court's examination of facial validity).

149 Klein, *supra* note 103, at 137-43.

150 *El Paso I*, 563 F. Supp. 379 (D.N.M. 1983).

151 *Id.* at 381.

152 *Id.* at 381-82, 384.

pact failed to indicate any intent to apportion either the surface water or the groundwater.¹⁵³ The *El Paso I* court largely followed the reasoning in *Sporhase*, finding that, while the conservation of water was a legitimate state interest of New Mexico, the law was not narrowly-tailored and did not survive the strict scrutiny necessary to satisfy the dormant Commerce Clause analysis.¹⁵⁴

After *El Paso I*, the New Mexico Legislature passed two laws. The first statute legalized permits to allow groundwater out-of-state transfers.¹⁵⁵ To receive such a permit, several requirements applied. First, the State Engineer had to find that the export of water “would not impair existing water rights,” would not be “contrary to the conservation of water within [New Mexico],” and would not “otherwise be detrimental to the public welfare of the citizens of New Mexico.”¹⁵⁶ Additionally, a permit involving groundwater export had to pass a six-part test relating to water shortages within New Mexico and the water supply where the water would be transferred.¹⁵⁷ New Mexico law did not apply the same requirements to in-state groundwater use.¹⁵⁸ A second law placed a two-year moratorium on new groundwater permits for two basins from which *El Paso* had sought groundwater.¹⁵⁹ Despite New Mexico’s attempts to comply with the new *Sporhase* standards, the District Court in *El Paso II* held that both pieces of legislation unconstitutional in violation of the Commerce Clause.¹⁶⁰

The two *El Paso* cases illustrate the challenges inherent for states trying to unilaterally control their interstate water. If groundwater is an object of interstate commerce, statutes restricting the export of groundwater must be so broadly written as to be virtually ineffective. Even the presence of a compact in *El Paso II* was not enough to uphold New Mexico’s restrictive water export statutes.

5. HOOD: EQUITABLE APPORTIONMENT RULES THE DAY

In *Hood ex rel. Mississippi v. City of Memphis, Tennessee*, “the state of Mississippi [sought] damages from [Memphis and its water utility] for the alleged conversion of groundwater in the Memphis Sands Aquifer.”¹⁶¹ The aquifer is located beneath portions of Tennessee, Mississippi, and Arkansas and is the primary water source for both DeSoto County, Mississippi, and the city of Memphis, Tennessee, just across the state line.¹⁶² Mississippi claimed that overpumping by the city of Memphis had caused water levels in the aquifer to drop.¹⁶³ The drop in water levels thus created a “cone of depression” causing groundwater that would otherwise lie beneath Mississippi to flow into Tennes-

153 *Id.* at 384.

154 *Id.* at 392.

155 *City of El Paso By and Through Its Pub. Serv. Bd. v. Reynolds*, 597 F. Supp. 694 (D.N.M. 1984) [hereinafter *El Paso II*].

156 *Id.* at 697 (quoting the requirements of N.M. STAT. ANN. §72-12B-1 (West 2013)).

157 *Id.* at 702-03.

158 *Id.* at 702.

159 *Id.* at 705.

160 *Id.* at 708.

161 570 F.3d 625 (5th Cir. 2009), *cert. denied*, *Mississippi v. City of Memphis*, 559 U.S. 904 (2010).

162 570 F.3d at 627.

163 *Id.*

see.¹⁶⁴ Mississippi sought damages from Memphis for its wrongful appropriation of groundwater, alleging that part of the groundwater pumped by Memphis from the reservoir is Mississippi's property, and the state must be compensated accordingly.¹⁶⁵ All of the groundwater wells that Memphis used to pump water from the aquifer were located in Tennessee.¹⁶⁶ No interstate compact governed the aquifer, and no specific amount of groundwater had been allocated among the states overlying the aquifer.¹⁶⁷

The District Court dismissed the suit for failure to join Tennessee as an indispensable party, and the Fifth Circuit upheld this ruling.¹⁶⁸ Mississippi argued that its suit did not require equitable apportionment of the aquifer because it owned the groundwater resources of the state, and as a result there was no interstate water to be equitably apportioned.¹⁶⁹ However, Memphis argued that, because the interests of Tennessee in its groundwater were the same as those that Mississippi was trying to protect, the case could not be resolved without Tennessee's participation.¹⁷⁰ Memphis also advocated that the groundwater should be equitably apportioned between the two states.¹⁷¹ The Fifth Circuit agreed, and held that the case fell squarely within the equitable apportionment doctrine.¹⁷² It noted that "[t]he Aquifer is an interstate water source, and the amount of water to which each state is entitled from a disputed interstate water source must be allocated before one state may sue an entity for invading its share."¹⁷³ The court advocated that groundwater be treated the same as surface water:

The fact that this particular water source is located underground, as opposed to resting above ground as a lake, is of no analytical significance. The Aquifer flows, if slowly, under several states, and it is indistinguishable from a lake bordered by multiple states or from a river bordering several states depending upon it for water.¹⁷⁴

The Supreme Court declined to grant certiorari,¹⁷⁵ thus leaving the parties in effectively the same position they had been in prior to five years of bruising litigation and indicating that Supreme Court's comfort with using equitable apportionment to resolve interstate resource conflicts.¹⁷⁶ To date, the parties have not brought suit before the Supreme Court to equitably apportion this water.

6. HERRMANN DEMONSTRATES THE POWER OF COMPACTS

If the story of Texas's water law is the story of its droughts, the story of interstate water restrictions sometimes seems like the story of reactions to Texas trying to get water

164 *Id.*

165 *Id.*

166 *Id.*

167 *Id.*

168 *Id.* at 629-30.

169 *Id.* at 629.

170 *Id.*

171 *Id.* at 629.

172 *Id.* at 631.

173 *Id.* at 630

174 *Id.*

175 *Mississippi v. City of Memphis, Tenn.*, 559 U.S. 904 (2010).

176 Tauer, *supra* note 93, at 923.

from other states.¹⁷⁷ The United States Supreme Court scrutinized these efforts earlier this year in *Tarrant Regional Water District v. Herrmann*, a decision that reaffirmed the power of compacts to allow states to chart their own course on interstate water restrictions.¹⁷⁸

In 2007, the Tarrant Regional Water District sought to export water to Texas from three tributaries of the Red River in Oklahoma.¹⁷⁹ The Red River Compact (Compact) governs apportionment of water from the Red River.¹⁸⁰ To circumvent Oklahoma's restrictions on water exports, the Tarrant Regional Water District purchased groundwater rights to land in Stephens County, Oklahoma.¹⁸¹ Tarrant challenged two sets of Oklahoma statutes as being unconstitutional.¹⁸² In 2004, Oklahoma adopted a five-year moratorium on interstate transfer of surface water or groundwater.¹⁸³ Additionally, Oklahoma laws treated applications for the use of water in-state and out-of-state differently.¹⁸⁴ These statutes banned out-of-state water transfers, required Legislative approval of out-of-state transfers, and banned out-of-state entities from membership in Oklahoma water districts.¹⁸⁵

In 2011, the Tenth Circuit upheld the Oklahoma restrictions on interstate water transfers as they pertained to waters subject to the Compact.¹⁸⁶ It also held that Tarrant lacked standing to bring suit regarding its Stephens County groundwater because it had not yet suffered a justiciable injury.¹⁸⁷

The Supreme Court granted certiorari in *Herrmann* and oral arguments were heard in April 2013.¹⁸⁸ Tarrant argued that the Compact gave it the right to cross state lines to divert water from Oklahoma and that Oklahoma's restrictions violated the Compact by preventing it from doing so.¹⁸⁹ Tarrant further argued that the restrictions violated the Commerce Clause by preventing water unallocated under the Compact from being distributed out of state.¹⁹⁰

177 See *In re Adjudication of the Water Rights of Upper Guadalupe Segment of Guadalupe River Basin*, 642 S.W.2d 438, 441 (Tex. 1982) ("The story of water law in Texas is also the story of its droughts.").

178 133 S. Ct. 2120 (2013).

179 *Tarrant Reg'l Water Dist. v. Herrmann*, 656 F.3d 1222 (10th Cir. 2011), *aff'd*, 133 S. Ct. 2120 (2013).

180 *Herrmann*, 656 F.3d at 1228.

181 *Id.*

182 *Id.* at 1229.

183 *Id.*

184 *Id.*

185 *Id.* at 1229-30.

186 *Id.* at 1231.

187 *Id.* at 1249.

188 *Id.* at 2122. See also Transcript of Oral Argument at 19, *Tarrant Reg'l Water Dist. v. Herrmann* (Apr. 23, 2013) (No. 11-889), 2013 WL 1742672 (focusing almost entirely on the terms of the Red River Compact and what each state's rights were under the Compact, with the dormant Commerce Clause making only a cameo appearance).

189 *Herrmann*, 133 S.Ct. at 2129.

190 *Id.*

In a unanimous decision issued in June 2013, the Supreme Court affirmed the Tenth Circuit's ruling.¹⁹¹ In an opinion authored by Justice Sotomayor, the Court limited its analysis to the meaning of the Compact.¹⁹² The Court held that, under the Compact, there was no remaining unallocated groundwater, and thus it was impossible for Oklahoma's restrictions to violate the dormant Commerce Clause as Tarrant alleged.¹⁹³ In a footnote, the Court issued a reminder that states' powers to restrict the use of water within their borders are still subject to Commerce Clause restrictions.¹⁹⁴ Moreover, its reasoning in *Herrmann* made it unnecessary to reach that issue as it applied to the Tarrant case.¹⁹⁵

In light of the proactive restrictions Oklahoma imposed on the export of groundwater, it is likely *Herrmann* will stand as a testament to the potency of compacts in the area of water allocation.

C. CONCLUSION

Several lessons can be drawn from these cases. Groundwater is definitively an article of interstate commerce, and thus any solution for the challenges of increasing water use will require an interstate solution rather than unilateral embargoes. While states may apply directly to the Supreme Court for equitable apportionment as an interstate solution, compacts are both the preferred solution for interstate water disputes and a way to ensure that states get extra protections if their water disputes ever reach the Supreme Court.

IV. THE TEXAS GROUNDWATER LEGAL SYSTEM

A. A GROWING STATE WITH GROWING WATER NEEDS

"The story of water law in Texas is also the story of its droughts."¹⁹⁶ While the Supreme Court of Texas has traced the development of water law in Texas to the state's history of drought,¹⁹⁷ this maxim is now incomplete. Rather, the story of water law in Texas is the story of increasing demands in an era of scarcity, when the needs of a growing population and the need to preserve this natural resource for future generations must be balanced against the state's tradition of strong landowner property rights.

Texas has found itself in a potentially untenable position. The population of Texas is increasing dramatically and is expected to continue to rise. "Since the 2010 Census, Texas has experienced a 3.6 percent growth rate" in its population.¹⁹⁸ In the most recent

191 *Id.* at 2137.

192 *See id.* at 2125.

193 *Id.* at 2136-37.

194 *Id.* at 2133 n.11.

195 *Id.*

196 *In re Adjudication of the Water Rights of Upper Guadalupe Segment of Guadalupe River Basin*, 642 S.W.2d 438, 441 (Tex. 1982).

197 *Id.* at 440-41.

198 Steve Campbell, *Texas Gains More in Population Than Any Other State*, FT. WORTH STAR-TELEGRAM, (Dec. 20, 2012), <http://www.star-telegram.com/2012/12/20/4498954/texas-gains-more-in-population.html>.

water plan, the Texas Water Development Board (Board) estimated that the population of Texas would grow to 46.3 million people in the year 2060.¹⁹⁹ The Board estimates that the water needs of the state will increase 22 percent between 2010 and 2060.²⁰⁰ During this same time period, existing water supplies are expected to decrease by 10 percent.²⁰¹ Texas is expected to serve more people with far less water.

At the same time that the state's population is increasing by hundreds of thousands of residents each year, the state faces a historic and crippling drought.²⁰² These factors have combined to force cities to seek new sources of water, often groundwater.²⁰³ While some communities have sufficient surface water to meet their needs, other cities are eagerly eyeing groundwater to alleviate their water crunch. In San Antonio, for instance, city leaders have stated that if they are faced with a prolonged drought, the city would not have enough water by the year 2017 if no new water sources are developed.²⁰⁴ Even failed attempts to develop groundwater have not dissuaded water providers from attempting to secure new groundwater sources.²⁰⁵

These pressures brought water issues to the forefront of the most recent session of the Texas Legislature. Near the conclusion of the session, legislation passed sending a constitutional amendment to voters, allowing for the creation of a state water infrastructure fund.²⁰⁶ The amendment passed in November 2013²⁰⁷ and provides funds for loans to communities for water infrastructure projects and would include \$2 billion in seed money taken from the state's (in this case aptly named) Rainy Day Fund.²⁰⁸ The state's most recent water plan calls for spending \$53 billion over the next 50 years to finance water projects.²⁰⁹ The sudden bipartisan interest in water projects has caught the atten-

199 *Water for Texas: 2012 State Water Plan*, TEX. WATER DEV. BD., 2 (Jan. 2012), available at http://www.twdb.state.tx.us/publications/state_water_plan/2012/2012_SWP.pdf. For purposes of comparison, the population of Texas in 2010 was 25,388,403.

200 *Id.* at 3.

201 *Id.*

202 Matthew Tresaugue, *Texas Drought Could Rival State's Worst Dry Years*, HOUS. CHRON. (Feb. 5, 2013, 10:59 PM), available at <http://www.chron.com/news/article/Texas-drought-could-rival-state-s-worst-dry-years-4253137.php>.

203 Clara O'Rourke & Asher Price, *In Central Texas, A Rush To Secure Water Rights*, AUSTIN AM.-STATESMAN (Dec. 7, 2012, 10:03 PM), available at <http://www.statesman.com/news/news/local/scramble-to-secure-groundwater-rights-to-keep-up-w/nTQPG/>.

204 *Id.*

205 *Id.*

206 Act of May 28, 2013, 83rd Leg., 1st R.S., Tex. Gen. & Spec. Laws, ch. 207, H.B. 4; Robert T. Garrett, *House-Senate Deal Clears Texas Budget Logjam*, DALL. MORNING NEWS (May 22, 2013, 11:43 PM), available at <http://www.dallasnews.com/news/politics/headlines/20130522-logjam-on-budget-breaks-in-texas-legislature.ece>.

207 Drew Joseph, *Water proposal gets a big OK*, SAN ANTONIO EXPRESS NEWS (Nov. 6, 2013).

208 Corrine MacLagan, *Texas Governor Signs Bill Key to \$2 billion Water Plan*, REUTERS (May 28, 2013, 5:43 PM), <http://www.reuters.com/article/2013/05/28/us-usa-texas-water-idUSBRE94R0ZF20130528>.

209 TEX. WATER DEV. BD., *supra* note 199, at 5.

tion of national media, who have attributed the interest to a simple proposition: “[N]o water means no business.”²¹⁰

Beyond the Texas population boom, a second development that has turned Texas water law on its head is *Edwards Aquifer Authority v. Day*, in which the Texas Supreme Court held that a landowner has a property interest in groundwater in place that cannot be taken for public use without just compensation.²¹¹ The implications of this decision will be discussed later in this section.

B. THE TEXAS GROUNDWATER REGIME

1. DIFFERENT KINDS OF WATER, DIFFERENT KINDS OF OWNERSHIP

Texas recognizes four basic kinds of water: state surface water, diffuse water, developed water, and groundwater, with different legal regimes affecting the ownership of each kind of water.

There are three categories of surface water. The first, water of the ordinary flow and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico—a category often summarized as surface water in a watercourse—is owned in public trust as the property of the state.²¹² For a source of water to be considered a watercourse, it must have (1) a defined bank and beds, (2) a current of water, and (3) a permanent source of supply.²¹³ Diffuse water is surface water that has not yet passed into a watercourse, and it is the property of the landowner.²¹⁴ Once it passes into the watercourse, it becomes the property of the state.²¹⁵ Developed water is “new” water, which would not have passed into a watercourse but for the activities of a developer.²¹⁶ Even if the water returns to a watercourse, as long as the developer maintains control over it, he has the right to put it to beneficial use under the terms established by his water right.²¹⁷

Groundwater is further subdivided into three categories: percolating, underground river, or underflow. Percolating groundwater is subject to one rule for how ownership is determined, while underground rivers and underflow are subject to a different rule. Underground rivers and underflow are categorized as “state water,” or water owned by the state.²¹⁸ They are thus not subject to the rule of capture. Water that is found beneath

210 Kate Galbraith, *Getting Serious About a Texas-Sized Drought*, N.Y. TIMES (Apr. 7, 2013), available at <http://www.nytimes.com/2013/04/07/sunday-review/getting-serious-about-a-texas-size-drought.html>.

211 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 817-18 (Tex. 2012).

212 TEX. WATER CODE § 11.021 (West 2013).

213 *Hoefs v. Short*, 273 S.W. 785, 786-87 (Tex. 1925); *Domel v. City of Georgetown*, 6 S.W.3d 349, 353 (Tex. App.—Austin 1999, pet. denied).

214 *Domel*, 6 S.W.3d at 353; see also *Dietrich v. Goodman*, 123 S.W.3d 413, 417-18 (Tex. App.—Houston [14th Dist.] 2003, no pet.).

215 *Dietrich*, 123 S.W.3d at 417.

216 *Harrell v. F. H. Vahlsing, Inc.*, 248 S.W. 2d 762, 776 (Tex. Civ. App.—San Antonio 1952, writ ref'd n.r.e.).

217 *Id.* at 768; Edmund R. McCarthy, Jr., *Symposium: Environmental Impacts of Oil and Gas: Mixing Oil and Gas with Texas Water Law*, 44 TEX. TECH. L. REV. 883, 889-90 (2012); Frank R. Booth, *Ownership of Developed Water*, 17 ST. MARY'S L.J. 1181, 1186 (1986).

218 *Torres*, *supra* note 33, at 148. See also TEX. WATER CODE § 11.021.

the ground is presumed to be percolating.²¹⁹ For more than a century, groundwater that is “percolating” has been subject to the rule of capture.²²⁰

2. WATER LAW ROOTS IN MULTIPLE SOURCES

Texas water law is complicated by the influences acquired from the five separate governments that have ruled Texas: the Kingdom of Spain, the Republic of Mexico, the Republic of Texas, the United States, and the State of Texas.²²¹ Under the law inherited from Spain, surface water and groundwater had been governed under different legal regimes for thousands of years.²²² However, water on property granted by the king belonged to the landowner who took possession of the land.²²³ Under Mexican law, the private ownership of water was “not only possible, but encouraged.”²²⁴ In 1840, the Republic of Texas substituted the common law of England for Mexican and Spanish civil law, and thus riparian water rights came to Texas for surface water resources.²²⁵ Under the common law of England, the proprietor of each bank of a stream had an equal right to use the water that flowed in the stream.²²⁶ In 1895, the State of Texas reverted back to civil law.²²⁷

In 1889, Texas passed the Appropriation Act, which declared that the unappropriated water of every stream within arid parts of Texas in which irrigation was necessary to be the property of the public and authorized diversion of water from streams for irrigation, domestic, and other beneficial use by persons acquiring a right of appropriation under the terms of the Act.²²⁸ In 1917, after a lengthy drought, Texas adopted the Conservation Amendment to its constitution, which the Texas Supreme Court has described as “provid[ing] that the conservation, preservation, and development of the state’s natural resources are public rights and duties,” and giving the state the ability to set up groundwater conservation districts.²²⁹ Until 1967, Texas recognized a dual system of sur-

219 *Tex. Co. v. Burkett*, 296 S.W. 273, 278 (1927).

220 *Hous. & Tex. Cent. Ry. Co. v. East*, 81 S.W. 279, 280 (Tex. 1904).

221 *Miller v. Letzerich*, 49 S.W.2d 404, 407 (Tex. 1932) (providing a quick, representative overview of key parts of the diverse basis of the Texas surface water legal system).

222 *Drummond*, *supra* note 32, at 33.

223 *Id.*

224 *Id.* at 34.

225 *Miller*, 49 S.W.2d at 406.

226 *In re Adjudication of the Water Rights of Upper Guadalupe Segment of Guadalupe River Basin*, 642 S.W.2d 438, 439-40 (Tex. 1982).

227 *See id.* at 439.

228 *Id.* at 440.

229 *Barshop v. Medina Cnty. Underground Water Cons. Dist.*, 925 S.W.2d 618, 626 (Tex. 1996); In its present form, the first section of the Conservation Amendment reads as follows:

The conservation and development of all of the natural resources of this State, and development of parks and recreational facilities, including the control, storing, preservation and distribution of its storm and flood waters, the waters of its rivers and streams, for irrigation, power and all other useful purposes, the reclamation and irrigation of its arid, semi-arid and other lands needing irrigation, the reclamation and drainage of its overflowed lands, and other lands needing drainage, the conservation and development of its forests, water and hydro-electric power, the

face water rights, including riparian rights and appropriated rights. In 1967, the Water Rights Adjudication Act established a single system through which surface water rights could be appropriated and administered.²³⁰ Thus, Texas surface water raged from system to system to the current prior appropriation scheme, with myriad influences helping to shape the current groundwater regime.

3. ADOPTION OF THE RULE OF CAPTURE AND ITS IMPLICATIONS

Compared to the Texas surface water law system, the development of a legal system for groundwater has been relatively simple. In 1904, the rule of capture was adopted and has remained the fundamental rule of Texas groundwater law ever since.²³¹

In 1901, the Houston & Texas Central Railway Company dug a 66-foot well on land it owned in Denison.²³² The Railway decided to dig the well in the midst of a lengthy drought and after examining the well of W.A. East, who lived across the street from the lot on which the Railway dug its well.²³³ East was present during the examination, but likely regretted his cooperation with the railway as the 33-foot deep well on his property used for household purposes dried up after the Railway dug its well, installed a pump, and began pumping 25,000 gallons a day from the well for use in its locomotives and machine shops.²³⁴

East brought suit against the Railway for damaging his well. In *Houston and Texas Central Railway vs. East*, the Supreme Court of Texas held that, despite a lower court's finding that the Railway's use of the water was unreasonable, it was not actionable under the English common law rule of capture articulated in *Acton v. Blundell*.²³⁵ Under the rule as adopted by the Texas Supreme Court, a landowner has the right to dig a well and take all the water he can.²³⁶ If he drains water from a neighbor's well, the neighbor has suffered loss without injury, and this cannot be the ground for a cause of action.²³⁷

East made it clear that a landowner owned water pumped from a well once it reached the surface. The court left unresolved for over a century whether the landowner owned the water in place underneath his land.²³⁸ In the decades following *East*, Texas courts

navigation of its inland and coastal waters, 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.

TEX. CONST. art. XVI, § 59(a).

230 See *Guadalupe River Basin*, 642 S.W.2d at 439-42.

231 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

232 *Hous. & Tex. Cent. Ry. Co. v. East*, 81 S.W. 279, 280 (Tex. 1904).

233 *Id.*

234 *Id.*

235 *Id.* at 280-82.

236 *Id.* at 280.

237 *Id.* at 280-81 (providing that the chief justification for adopting the rule of capture was "the existence, origin, movement, and course of such waters, and the causes which govern and direct their movements, are so secret, occult, and concealed that an attempt to administer any set of legal rules in respect to them would be involved in hopeless uncertainty, and would, therefore, be practically impossible." (quoting *Frazier v. Brown*, 12 Ohio St. 294, 311 (1861))).

238 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 826 (Tex. 2012).

repeatedly punted on chances to determine whether landowners owned the groundwater in place beneath his land.

In 1927, the Texas Supreme Court held that groundwater was the property of the owner rather than of the state; and thus a landowner could sell his water rights, but the court did not specify whether this applied to groundwater in place or only groundwater once it reached the surface.²³⁹ In its 1954 decision in *Pecos County Water Control & Improvement District No. 1 v. Williams* (known as the Comanche Springs case), the El Paso Court of Appeals emphasized that the ownership of groundwater was tied to the land above it.²⁴⁰ The landowner's claim resulting from the rule of capture was sufficient to defeat vested surface water rights since the water was not yet in possession of the downstream owners.²⁴¹ Therefore, as long as there was no waste, there could be no interference with the use of groundwater by the landowner.²⁴² In 1955, in *City of Corpus Christi v. City of Pleasanton*, the Texas Supreme Court described the groundwater rule of capture as "property of owner at the surface," but did not hint as to whether there was an ownership interest in place.²⁴³ In 1978, the Texas Supreme Court, in *Friendswood Development Co. v. Smith-Southwest Industries, Inc.*, described a landowner's interest in groundwater as "absolute ownership," but did not specify whether absolute ownership included ownership in place.²⁴⁴ From *East* through *Friendswood*, Texas courts have been criticized for using property terms without appreciation for their implications regarding ownership in place.²⁴⁵

The question of what the rule of capture meant became more pressing after the Legislature enacted the Edwards Aquifer Authority Act in 1993. In passing the Act, the Legislature made numerous findings about the crucial role that the Aquifer played in sustaining life in the state and the necessity of regulating the aquifer.²⁴⁶ Because of these findings, the legislation imposed numerous restrictions, including an aquifer-wide cap on water withdrawals.²⁴⁷ It also prohibited the withdrawal from the aquifer without a permit from the Edwards Aquifer Authority (EAA).²⁴⁸ Preference in permitting was given to existing users who withdrew water before June 1, 1993.²⁴⁹ In *Barshop v. Medina County Underground Water Conservation District*, the Texas Supreme Court rejected a facial challenge to the Edwards Aquifer Authority Act.²⁵⁰ However, the Court did not address

239 *Tex. Co. v. Burkett*, 296 S.W. 273, 274, 278 (1927).

240 271 S.W.2d 503, 505-06 (Tex. App.—El Paso 1954, writ ref'd n.r.e.).

241 *Id.*

242 *Id.*

243 276 S.W.2d 798, 800 (Tex. 1955).

244 576 S.W.2d 21, 25-26 (Tex. 1978).

245 Susana Elena Canseco, *Landowners' Rights in Texas Groundwater: How and Why Texas Courts Should Determine Landowners Do Not Own Groundwater in Place*, 60 BAYLOR L. REV. 491, 501-02 (2008).

246 *Barshop v. Medina Cnty. Underground Water Cons. Dist.*, 925 S.W.2d 618, 623-24 (Tex. 1996).

247 *Id.* at 633.

248 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 818 (Tex. 2012).

249 *Id.* at 819.

250 *Barshop*, 925 S.W.2d at 633.

whether an aquifer authority denying a landowner a permit to drill a groundwater well would constitute a taking.²⁵¹

Sipriano v. Great Spring Waters of America, Inc. was a version of *East* for the 1990s, with the plaintiffs complaining of their well being drained by their neighbor, and with a bottled water company as the defendant rather than a railroad.²⁵² In *Sipriano*, the Supreme Court rejected an attempt to alter the framework in place of the common law rule of capture, and starkly upheld the existing common law.²⁵³ However, the focus on remedies left the nature of the common law ownership rights still imprecisely defined.²⁵⁴

While the *Sipriano* majority upheld the existing common law rule of capture, other members of the court seemed anxious to transform the existing framework. In the concurrence, Justice Hecht assailed the Court's willingness to uphold the rule of capture, describing the rule as "[w]hat really hampers groundwater management," and noting that Texas was the "lone holdout" among western states in continuing to use the rule.²⁵⁵ Hecht appeared eager to embrace a statewide regulatory scheme that would make the rule of capture obsolete, and looked favorably upon attempts by the Legislature to fix the groundwater apportionment system.²⁵⁶ Hecht concluded his dissent by saying "I concur in the view that, for now—but I think only for now—*East* should not be overruled."²⁵⁷ However, less than 15 years later, Hecht would author the unanimous *Day* opinion which resoundingly endorsed the rule of capture.²⁵⁸

Two other notable cases helped till the soil from which *Day* would sprout. In 2008, the San Antonio Court of Appeals backed the landowner's claim of ownership in groundwater in place beneath his land.²⁵⁹ Also in 2008, the Texas Supreme Court was overturned a groundwater district's rules for transfer permits.²⁶⁰ The system the district used was later described as an allocation structure that combined correlative rights with prior appropriation.²⁶¹ By overturning this decision, the Texas Supreme Court signaled its willingness to take a more interventionist role in protecting the property rights of landowners and the rule of capture system.²⁶²

251 *Id.* at 631 (discussing only whether the state will adequately compensate plaintiff for a taking).

252 1 S.W.3d 75, 75-76 (Tex. 1999).

253 *Id.*

254 Canseco, *supra* note 245, at 502.

255 *Sipriano v. Great Springs Water of Am., Inc.*, 1 S.W.3d 75, 81-82 (Tex. 1999) (Hecht, J., concurring).

256 *Id.* at 81-83.

257 *Id.* at 83.

258 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 817-18 (Tex. 2012).

259 *City of Del Rio v. Clayton Sam Colt Hamilton Trust*, 269 S.W.3d 613 (Tex. App.—San Antonio 2008, pet. denied).

260 *Guitar Holding Co., v. Hudspeth Cnty. Underground Water Cons. Dist. No. 1*, 263 S.W.3d 910, 912 (Tex. 2008).

261 Torres, *supra* note 33, at 158.

262 See Stuart R. White, Note, *Guitar Holding: A Judicial Re-Write of Chapter 36 of the Texas Water Code?*, 62 BAYLOR L. REV. 313, 313 (2010).

C. *EDWARDS AQUIFER AUTHORITY V. DAY BRINGS THE TAKINGS DOCTRINE TO WATER LAW*

The century of law since *East* left the state of affairs in regard to groundwater in flux. The rule of capture had been repeatedly and emphatically endorsed, yet the Legislature passed laws providing more and more control over the use of groundwater. The stage was set for a decision that would transform Texas groundwater law, and could critically undermine the state's ability to pursue any interstate water accommodation.

1. THE *DAY* DECISION: BACKGROUND AND HOLDING

In *Edwards Aquifer Authority v. Day*, the Texas Supreme Court held that land ownership includes an interest in groundwater in place that cannot be taken for public use without adequate compensation guaranteed by the Texas constitution.²⁶³

R. Burrell Day and a business partner purchased 381 acres of property near Brackettville in 1994, the year after the passage of the Edwards Aquifer Authority Act.²⁶⁴ Day intended to grow oats and peanuts and graze cattle on the land.²⁶⁵ He applied for a permit from the EAA to pump 700 acre-feet of water annually for irrigation.²⁶⁶ In 2000, the EAA denied Day's application.²⁶⁷ An administrative law judge with the State Office of Administrative Hearings later found that Day was eligible to pump 14 acre-feet of water.²⁶⁸ Day appealed the EAA's decision to the district court and sued the EAA for taking his property without compensation in violation of the Texas constitution.²⁶⁹ The district court granted summary judgment for Day on appeal, concluding that he was eligible for his permit, and also granted summary judgment for the EAA on all of Day's constitutional claims.²⁷⁰

Both Day and the EAA appealed, and the San Antonio Court of Appeals agreed with the EAA's decision to grant the 14 acre-feet permit.²⁷¹ However, the court held that landowners have ownership rights in the groundwater beneath their property entitled to constitutional protection, and reversed the dismissal of Day's takings claims.²⁷²

Day, the EAA, and the State of Texas petitioned the Texas Supreme Court for review.²⁷³ In 2012, over two years after first hearing arguments in the case, the Supreme Court held that the EAA properly granted the 14 acre-feet permit, that Day had a constitutionally protected interest in the groundwater beneath his property, and remanded to the trial court the matter of whether the denial of Day's permit constituted a taking.²⁷⁴

263 *Day*, 369 S.W.3d at 817-18.

264 *Id.* at 818.

265 *Id.*

266 *Id.* at 820.

267 *Id.* at 820-21.

268 *Id.* at 821.

269 *Id.*

270 *Id.*

271 *Id.*

272 *Id.*

273 *Id.* at 822.

274 *Id.*

2. REACTIONS TO *DAY*: ELATION AND DISBELIEF

While years had passed awaiting *Day*, the reaction was swift. Legal observers described *Day* as “spread[ing] joy among landowners and shock waves among groundwater districts.”²⁷⁵ The decision was called “one of the court’s most significant in recent years – and one of the most detrimental to the state’s parched future.”²⁷⁶ The Texas Agriculture Commissioner celebrated the decision, stating that “the private ownership of water and land has been protected by generations of Texans, and now it is our duty to continue this proud heritage,” while a Sierra Club official described it as a “huge disservice to everyone who has been working for proper management of the groundwater resources needed for our state’s people and environment.”²⁷⁷

3. *DAY* AFTER: IMPLICATIONS AND UNANSWERED QUESTIONS

Although the decision was widely understood to be transformative, less understood is the decision’s practical impact on Texas’s ability to regulate groundwater in the future. In an exhaustive 2004 review of the Texas rule of capture cited by the Supreme Court in *Day*, three water lawyers estimated that cost to compensate landowners could total between \$24.5 billion and \$170 billion.²⁷⁸ Rulings in other cases placing the loss of property value resulting from the denial of a groundwater permit at thousands of dollars per acre indicate the magnitude of costs that may be incurred to restrict groundwater withdrawals.²⁷⁹

For what seems a definitive ruling, *Day* left many questions. Texas jurisprudence on the matter seems to be in conflict. In cases such as *Friendswood*, *Barshop*, and *Sipriano*, the Supreme Court repeatedly endorsed legislative solutions to the groundwater crisis. The Court has approved increased groundwater regulation. In *Sipriano*, the majority affirmed the Texas Legislature’s attempts to find a solution to the groundwater crisis, and Justice Hecht appeared eager to overturn the rule of capture.²⁸⁰ By the time *Day* was handed down, the situation was no less dire, and years of drought had amplified the stakes. However, the Texas Supreme Court’s solution comes with a potential twelve-figure price tag. *Day* itself exemplified this conflict: While the Supreme Court ruled that landowners have a constitutionally-compensable interest in their groundwater and remanded the case for a takings determination under the factors established in *Penn Central Transp. Co. v. City of New York*,²⁸¹ it also upheld the constitutionality of the taking under the EAA.

275 Marvin W. Jones & Timothy C. Williams, *A New Day in Texas: The Implications of Day v. Edwards Aquifer Authority*, BNA TOXICS LAW REPORTER (2012), available at 2012 WL 2831853 (WestlawNext).

276 Gabriel Eckstein, *Texas Water Flowing Above Ground is Public, But Below It’s Private*, FT. WORTH STAR-TELEGRAM (Mar. 10, 2012), available at <http://www.star-telegram.com/2012/03/10/3800358/texas-water-flowing-above-ground.html>.

277 Chuck Lindell, *State Supreme Court: Landowners Own Water Beneath Land*, AUSTIN AM.-STATESMAN (Feb. 24, 2012, 8:16 PM), available at <http://www.statesman.com/news/news/state-regional-govt-politics/state-supreme-court-landowners-own-water-beneath-1/nRkkJ/>.

278 Drummond, *supra* note 32, at 91.

279 See discussion of *Edwards Aquifer Auth. v. Bragg*, *infra* Part V.C.4.

280 *Sipriano v. Great Springs Water of Am., Inc.*, 1 S.W.3d 75, 83 (Tex. 1999).

281 438 U.S. 104 (1978).

4. BRAGG BRINGS INTO FOCUS THE POST-DAY LANDSCAPE

Some clarity to the contours of the post-Day world of groundwater takings jurisprudence was provided in *Edwards Aquifer Authority v. Bragg*, a case decided recently by the San Antonio Court of Appeals. *Bragg* involves a long-running dispute involving two pecan orchards owned by Glenn and JoLynn Bragg.²⁸² Disputes between the Braggs and the EAA have been boiling since 1996, when the Braggs applied for a permit for to withdraw groundwater and use it to irrigate the orchards.²⁸³ The EAA manager recommended that the permit be denied for one orchard and a permit be issued to withdraw a smaller amount than requested for the other orchard.²⁸⁴ Before the EAA could make a final decision the Braggs sued, touching off almost two decades of litigation. The Texas Supreme Court denied the Braggs' claim that a Takings Impact Analysis was required under the Property Rights Act and upheld the EAA's rules.²⁸⁵ Then later the Fifth Circuit ruled that the Braggs' substantive due process had not been violated by the permitting decision.²⁸⁶

The latest round of Bragg litigation—the first to occur post-Day—has thus far resulted in decisive victories for the Braggs, including a recent appellate court decision that the EAA's permit denial was a compensable taking.²⁸⁷ In 2010, a district court judge in Medina County ruled that the EAA's permit denial had resulted in a regulatory taking, and ordered the EAA to pay the Braggs \$732,493.40 for their property's loss of value.²⁸⁸ The EAA appealed that decision to the San Antonio Court of Appeals; oral arguments were heard in March and a decision was issued in November.²⁸⁹ The Braggs scored a clear win on the takings issue: this *Bragg* decision held that the EAA was a proper party for a takings suit resulting from a permitting decision.²⁹⁰ The court rejected the EAA's arguments that no taking had occurred, pointing to Day's strong support for absolute landowner ownership of groundwater in place.²⁹¹ The *Penn Central* factors were then applied, and the court determined that the permitting system imposed by the Edwards Aquifer Authority Act resulted in a taking.²⁹² The Court of Appeals ultimately reversed and remanded the case to the district court, holding that the trial court had

282 *Edwards Aquifer Auth. v. Bragg*, No. 04-11-00018-CV, 2013 Tex. App. LEXIS 13854, at *1 (Tex. App.—San Antonio Nov. 13, 2013, pet. filed).

283 *Id.* at *2.

284 *Bragg v. Edwards Aquifer Auth.*, 71 S.W.3d 729, 732 (Tex. 2002).

285 *Id.* at 738.

286 *Bragg v. Edwards Aquifer Auth.*, 342 F. App'x 43 (5th Cir. 2009).

287 *Bragg*, 2013 Tex. App. LEXIS 13854, at *69.

288 Letter Ruling of Retired District Judge Thomas F. Lee, *Bragg v. Edwards Aquifer Auth.*, No. 06-11-18170-CV (38th Dist. Ct., Medina County, Tex. May 7, 2010), available at http://www.texasgroundwaterlaw.com/uploads/1/2/9/6/12969798/ea_letter_re_bragg.pdf.

289 *Bragg*, 2013 Tex. App. LEXIS 13854.

290 *Id.* at *25-56 (finding that under the EAA Act, the Texas Water Code, and case law, the EAA was a proper party).

291 *Id.* at *44-46 (“In *Day*, the Texas Supreme Court held that a landowner has absolute title in severalty to the water in place beneath his land. The only qualification of that rule of ownership is that it must be considered in connection with the law of capture and is subject to police regulations.”(citation omitted)).

292 *Id.* at *42-69.

improperly valued the taking that had occurred.²⁹³ The proper measure of damages, according to the decision, is one that reflects the difference in value between a pecan orchard with unlimited access to aquifer water and one that is restricted to taking only the amount of water allocated to it by permit.²⁹⁴

Bragg is among the first cases dealing with groundwater takings to be addressed by one of the courts of appeals since *Day*. The sizable sum ordered by the district court judge to be paid by the EAA hints at the scope of compensation that may be due if Texas courts continue rule that landowners must be compensated for the permitting decisions of groundwater aquifer authorities.²⁹⁵ The San Antonio Court of Appeals was wholly undeterred by the EAA's arguments regarding the potential monetary scope of finding that the permitting process had resulted in a taking. The court wrote that "[w]e believe the Legislature understood the potential financial impact involved when it expressly provide in the [Edwards Aquifer Authority] Act that 'just compensation be paid if implementation of [the Act]. . .causes a taking of private property. . .'"²⁹⁶ The latest *Bragg* decision may indicate that the current Texas groundwater district system is in jeopardy, with one environmental consultant saying it left groundwater districts facing an "impossible task."²⁹⁷ Unsurprisingly, a spokesperson for EAA said after the decision that they are likely to appeal.²⁹⁸ The long-standing history of controversy between the parties over what constitutes a taking of groundwater makes this a case that should be watched closely to help determine how Texas courts will apply the takings analysis post-*Day*.

V. DAY AND THE WAY FORWARD

As the state with the strongest support for the ability of landowners to take the groundwater beneath their land and among the strongest ownership regimes in the nation, Texas may have the least interest of any of the Ogallala Aquifer states in finding an equitable interstate solution to the challenge of a depleted aquifer. However, conservation concerns, the potential for interstate groundwater to be depleted by other states if their ownership regimes change, and the possibility that federal courts could step in and equitably apportion the interstate groundwater resources Texas shares with other states should provide Texas with incentive to consider what an interstate solution to the groundwater crisis would mean.

Day has complicated the calculus in this equation. What regulations are now acceptable, and what restrictions would implicate takings claims? These issues are now more

293 *Id.* at *89.

294 *Id.* at *89.

295 See generally Deborah Clarke Trejo, *Identifying and Valuing Groundwater Withdrawal Rights in the Context of Takings Claims*, 23 TUL. ENVTL. L.J. 409 (2010) (providing an overview of how these groundwater rights might be valued).

296 *Bragg*, 2013 Tex. App. LEXIS 13854, at *13 (citation omitted).

297 Neena Satija, *Texas Groundwater Districts Face Bevy of Challenges*, TEXAS TRIBUNE (Aug. 29, 2013), available at <http://www.texastribune.org/2013/08/29/groundwater-districts-beset-increasing-water/>.

298 *Id.*

complicated than ever, but takings principles and oil and gas law can help illuminate the new rules under which Texas groundwater now operates.

A. A REVIEW OF TAKINGS PRINCIPLES

Because *Day* made takings a key consideration in groundwater regulation and allocation, it is important to understand takings principles as applied in Texas, as these may become key tests in any future groundwater legal system.

Both the United States and Texas constitutions bar the government from “taking” private property without just compensation.²⁹⁹ The Texas Supreme Court has described the federal and state provisions as being “comparable,” and relied on federal cases in state takings cases involving the Texas constitution.³⁰⁰ A taking may be physical, in which the government directly appropriates or physically invades private property, or it may be regulatory and based on a government regulation.³⁰¹ The Texas Supreme Court has observed that the federal and state constitutional takings prohibitions “recognize that, while ‘all property is held subject to the valid exercise of the police power,’ a regulation may, under some circumstances, constitute a taking requiring compensation.”³⁰² A compensable regulatory taking occurs if “governmental regulations deprive a property owner of all economically viable use of the property or totally destroy the property’s value,” or if the governmental restrictions unreasonably interfere with the landowner’s rights to use the property.³⁰³

The determination as to whether a regulatory action amounts to a taking is essentially an ad hoc factual inquiry.³⁰⁴ This determination is made under the guidance of a three-part inquiry commonly referred to as the *Penn Central* factors: “(1) the economic impact of the regulation on [the claimant]; (2) the extent to which the regulation has interfered with [the claimant’s] reasonable investment-backed expectations; and (3) the character of the [governmental] action.”³⁰⁵

B. UNILATERAL SOLUTIONS

As illustrated by *Sporhase* and subsequent cases, unilateral restrictions imposed by Texas prohibiting the export of groundwater from Texas are unlikely to pass Commerce

299 U.S. CONST. amend. V (“...nor shall private property be taken without just compensation.”); TEX. CONST. art. I, § 17 (“(a) No person’s property shall be taken, damaged, or destroyed for or applied to public use without adequate compensation being made. . .”).

300 *Hallco Tex., Inc. v. McMullen Cnty.*, 221 S.W.3d 50, 55 (Tex. 2006). See also Timothy Riley, Note, *Wrangling With Urban Wildcatters: Defending Texas Municipal Oil and Gas Development Ordinances Against Regulatory Takings Challenges*, 32 VT. L. REV. 349, 373-88 (2007) (providing a good overview of the evolution of the evolution of the federal and Texas takings doctrines in the context of oil and gas law).

301 *City of Carrollton v. HEB Parkway S., Ltd.*, 317 S.W.3d 787, 792 (Tex. App.—Fort Worth 2010, no pet.).

302 *Hallco Tex., Inc.*, 221 S.W.3d at 55 (quoting *Seagull Energy E&P, Inc. v. Railroad Comm’n*, 226 S.W.3d 383, 389 (Tex. 2007)).

303 *BMTP Holdings, L.P. v. City of Lorena*, 359 S.W.3d 239, 246 (Tex. App.—Waco 2011, pet. granted).

304 *Hallco Tex., Inc.*, 221 S.W.3d at 55; *BMTP Holdings, L.P.*, 359 S.W.3d at 246.

305 *Hallco Tex., Inc.*, 221 S.W.3d at 55 (citing *Penn Central Transp. Co. v. City of New York*, 438 U.S. 104 (1978)).

Clause muster. Texas has attempted to create a statutory scheme for regulating the export of groundwater from a water district that appears to comply with *Sporhase*. Water districts are barred from imposing harsher restrictions on those who will transport the water out of the district than are imposed on users who will use the water in the district, unless the permitting process complies with certain requirements.³⁰⁶ These regulations require that the permit applications apply equally to all new permit or permit amendment applications, “bear a reasonable relationship to the existing district management plan,” and be “reasonably necessary to protect existing use.”³⁰⁷ If users are able to export groundwater out of a water district for beneficial use elsewhere within Texas, then it is unlikely that any embargo barring the export of groundwater from Texas could survive Commerce Clause analysis.³⁰⁸

In addition, simple demographics and geography make it unlikely that Texas will become an exporter of water. There are no American metropolitan areas outside of Texas but within 100 miles of the Texas border with a population greater than 400,000 people.³⁰⁹ By comparison, the Houston, Dallas-Fort Worth, and El Paso metropolitan areas are all within 100 miles of Texas’s border with another U.S. state.³¹⁰ As *Herrmann* illustrates, these thirsty municipalities in Texas are much more likely to want to bring water in than to send water out. Thus, unilateral restrictions are unlikely to be used or to be necessary.

C. OIL AND GAS: A USEFUL FRAMEWORK

In his concurring opinion to *Sipriano*, Justice Hecht looked disdainfully upon the *East* court’s mystical regard for underground natural resources as a justification for the rule of capture:

The extensive regulation of oil and gas production proves that effective regulation of migrant substances far below the surface is not only possible but necessary and effective. In the past several decades it has become clear, if it was not before, that it is not regulation that threatens progress, but the lack of it.³¹¹

In extending ownership in place to groundwater resources, the *Day* court observed that “we held long ago that oil and gas are owned in place, and we find no reason to treat groundwater differently.”³¹² The court adhered to the comparison, noting the price of bottled water and the price of crude oil, and noting that “[t]o differentiate between groundwater and oil and gas in terms of importance to modern life would be difficult.”³¹³

306 TEX. WATER CODE § 36.122(c).

307 *Id.* § 36.113(e).

308 Jones & Williams, *supra* note 275.

309 *Population and Housing Occupancy Status*, U.S. CENSUS BUREAU (2010), available at http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_NSRD_GCTPL2.US24PR&prodType=table.

310 *Id.* Other metropolitan areas in Texas similarly close to the border include Beaumont-Port Arthur, Lubbock, Amarillo, Longview, Tyler, Wichita Falls, Texarkana, Odessa, Midland, and Sherman-Denison.

311 *Sipriano v. Great Springs Water of Am. Inc.*, 1 S.W.3d 75, 82 (Tex. 1999) (Hecht, J., concurring).

312 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

313 *Id.* at 831.

The court observed that the differences between groundwater and hydrocarbons provide no basis from which to conclude that they should be treated differently in regards to ownership in place.³¹⁴

Because the Texas Supreme Court appears to have effectively applied the entirety of oil and gas law to groundwater resources, oil and gas law may inform on attempts to find interstate solutions for groundwater.

1. INTERSTATE OIL AND COMPACTS, EQUITABLE APPORTIONMENT, AND CONGRESSIONAL APPORTIONMENT

The comparison between oil and groundwater is somewhat inapt in providing guidance for solving interstate water challenges, as the appropriation methods discussed above have not been widely used to allocate oil and gas. To date, there has been no equitable or congressional apportionment of interstate oil resources, and the use of interstate compacts has been exceedingly rare.

The lone interstate agreement that Texas has joined regarding oil and gas production is the Interstate Oil Compact, now known as the Interstate Compact to Conserve Oil and Gas.³¹⁵ Texas entered the compact in 1935, and has repeatedly extended its membership. From its inception, the Interstate Oil Compact is reputedly a tool to avoid federal regulation of interstate oil and gas resources.³¹⁶ More recently, it has been criticized as an obsolete “price-fixing cartel.”³¹⁷ Little over a decade after its founding, observers noted that the Interstate Oil Compact had led to some progress in the area of conservation, but the “lack of compulsion” renders it largely ineffective.³¹⁸ Rather than setting production quotas, the Interstate Oil Compact merely included a commission to study and recommend conservation measures.³¹⁹ Each state has continued to set its own production quotas.³²⁰

Today, the Interstate Oil and Gas Compact Commission continues to recommend measures to promote conservation and prevent waste, and recommend measures for coordination of state police powers to promote the maximum ultimate recovery of oil and gas.³²¹ By joining the compact, no state assumes financial responsibility to any other state, nor does breach of the compact subject a state to financial responsibility to other compact states.³²²

The weak nature of this compact limits the amount of guidance it provides. It is a potent reminder of how difficult it can be to find an interstate agreement that possesses sufficient bite to be effective, yet is not so threatening that states are disinclined to join.

314 *Id.*

315 TEX. NAT. RES. CODE ANN. § 90.004.

316 Note, *Administrative Regulation of Petroleum Production*, 59 HARV. L. REV. 1142, 1150 (1946).

317 Note, *State Collective Action*, 119 HARV. L. REV. 1855, 1862 (2006).

318 *Administrative Regulation of Petroleum Production*, *supra* note 316, at 1150.

319 *Id.*

320 *Id.* at 1151.

321 TEX. NAT. RES. CODE § 90.007.

322 *Id.*

2. OIL AND GAS TAKINGS LAW AND ITS IMPLICATIONS

While oil and gas law provides little assistance in understanding how an interstate agreement on groundwater might be viewed through a takings analysis, it helps illuminate what kinds of regulation and limitations on pumping might be acceptable outside of the oil context.

The rule of capture has been applied to Texas oil for decades, “for lack of better knowledge or a better rule.”³²³ If a landowner is concerned about his neighbor drilling a well and depleting the field, unless there is waste, his remedy is to drill his own well and pump as much as he can before the supply runs out.³²⁴ To support its rationale that the oil and gas beneath a landowner’s property is subject to the rules of capture and ownership in place, the *Day* decision quoted the Texas Supreme Court’s 1935 decision *Brown v. Humble Oil & Refining Co.*³²⁵ While *Brown* strongly supported the rule of capture for oil and gas, one small caveat at the end of the quotation in *Day* may make a crucial difference: the rules of capture and ownership in place are both subject to the police power of the state.³²⁶

In *Brown*, the Texas Supreme Court sought to resolve whether the Railroad Commission could pass rules requiring oil wells to be spaced a certain distance apart.³²⁷ The court relied on the Conservation Amendment to hold that the rule of capture did not prevent the Railroad Commission from adopting rules to prevent waste and conserve mineral resources.³²⁸ The court noted that the “exercise of the police power under this rule does not change the rule of property,” rather it “merely regulates and controls the way in which his property shall be used and enjoyed.”³²⁹ Later, the court noted that, to prevent waste, the Commission could limit the rate of flow in the same way that it could regulate well spacing.³³⁰

Subsequent decisions have affirmed this rule. As the Austin Court of Appeals noted in *Browning Oil Company, Inc. v. Luecke*, the natural consequence of the rule of capture in the context of oil is over-drilling, resulting in waste.³³¹ Because of this potential for

323 Robert E. Hardwicke, *The Rule of Capture and Its Implications As Applied to Oil and Gas*, 13 TEX. L. REV. 391, 404 (1935).

324 *Id.*

325 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 829 n.86 (Tex. 2012) (quoting *Brown v. Humble Oil & Refining Co.*, 83 S.W.2d 935, 940 (Tex. 1935) (“The rule in Texas recognizes the ownership of oil and gas in place. . . . Owing to the peculiar characteristics of oil and gas, the foregoing rule of ownership of oil and gas in place should be considered in connection with the law of capture. This rule gives the right to produce all of the oil and gas that will flow out of the well on one’s land; and this is a property right. And it is limited only by the physical possibility of the adjoining landowner diminishing the oil and gas under one’s land by the exercise of the same right of capture. . . . Both rules are subject to regulation under the police power of a state.” (emphasis added))).

326 *Id.*

327 *Brown*, 83 S.W.2d at 940.

328 *Id.* at 940-41.

329 *Id.* at 944.

330 *Id.*

331 *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625, 632-33 (Tex. App.—Austin 2000, pet. denied).

waste, the Texas Railroad Commission imposes rules that limit production.³³² The Railroad Commission may limit the spacing of oil wells in a field and regulate the density of a field.³³³ Additionally, the Railroad Commission may impose “production allowable,” which refers to “the maximum amount of hydrocarbons a well may recover as prescribed by the applicable field rules.”³³⁴ Production allowable is designed to limit production from a well to control the rate of production from the field.³³⁵ The *Browning* court observed that, by imposing these restrictions, the Railroad Commission played an important role in diminishing the rule of capture and its applicability.³³⁶ However, this role was also characterized as crucial to preventing waste and preserving correlative rights.³³⁷

One key to the Railroad Commission’s authority to regulate landowners’ ability to pump oil and gas is the concept of correlative rights. *East* stated that “the law recognizes no correlative rights in respect to underground waters percolating. . . through the earth.”³³⁸ The *Day* court accused the plaintiffs in that case of putting too much stock in the face value nature of this statement, and pointed out that Texas has not foreclosed the possibility of actions for “malice or wanton conduct,” including waste.³³⁹ *Day* once again turned to oil and gas jurisprudence to support the presence of correlative rights in groundwater, noting that state regulation recognizes the presence of correlative rights in oil and gas.³⁴⁰

The Texas Supreme Court has held that it is the rule of capture that makes it possible for the Railroad Commission to achieve its goals of protecting the correlative rights of landowners, while at the same time accomplishing the purposes laid out in the Conservation Amendment.³⁴¹ The rule of capture leaves the Railroad Commission’s historical role unimpeded.³⁴²

Marrs v. Railroad Commission, a 1944 Texas Supreme Court decision, is still regarded as an instructive case on what constitutes a taking in the area of oil and gas regulation.³⁴³ In *Marrs*, the petitioners owned a section of an oil field that had been heavily drilled by Gulf Oil.³⁴⁴ Gulf Oil had drilled the field so rapidly that its section of the field dropped precipitously.³⁴⁵ The petitioners drilled wells to attempt to capture the oil that was draining from their less-drilled section to the more heavily-drilled Gulf Oil section.³⁴⁶ The Railroad Commission imposed a proration order limiting the amount of oil that the

332 *Id.* at 633.

333 *Id.* at 633-34.

334 *Id.* at 634.

335 *Id.*

336 *Id.* at 633.

337 *Id.*

338 *Hous. & Tex. Cent. Ry. Co. v. East*, 81 S.W. 279, 280 (Tex. 1904).

339 *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 830 (Tex. 2012).

340 *Id.* (citing *Elliff v. Texon Drilling Co.*, 210 S.W.2d 558, 562-63 (Tex. 1949)).

341 *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1, 15 (Tex. 2008).

342 *Id.*

343 177 S.W.2d 941 (Tex. 1944). *See also* Marvin W. Jones & Andrew Little, *The Ownership of Groundwater in Texas*, 61 BAYLOR L. REV. 578, 599 (2009); Jones & Williams, *supra* note 275.

344 177 S.W.2d at 942.

345 *Id.* at 944-45.

346 *Id.* at 945.

petitioners could recover.³⁴⁷ The petitioners alleged that this action meant that they could not capture the oil on their property before it drained onto the property owned by Gulf, and thus the Railroad Commission had effected a taking.³⁴⁸ The Supreme Court sided with the *Marrs* petitioners, and imposed an injunction preventing the Railroad Commission from enforcing its proration order.³⁴⁹

Marrs spoke to the balance that is necessary between the Conservation Amendment and the property rights of owners. The court noted that, under the Texas constitution, “the taking of [private] property for public use without adequate compensation” is barred, that equal rights are guaranteed for all men, and that “no citizen shall be deprived of his property except by the due course of the law of the land.”³⁵⁰ Additionally, the Fourteenth Amendment to the U.S. Constitution guarantees due process and equal protection.³⁵¹ The *Marrs* court specifically spoke out against orders made by the Railroad Commission that were “unreasonable, unjust, and discriminatory”:

This Court has many times said that the Railroad Commission cannot indulge in unjust, unreasonable, or arbitrary discrimination between different oil fields, or between different owners in the same field. . . the orders of the Railroad Commission here complained of have the effect of taking one’s property and giving it to another under circumstances where the evidence shows that this is not necessary to conserve the natural resources.³⁵²

Observers pre-*Day* noted that, if this takings doctrine was applied to groundwater rights via the rule of capture, a water district would be able to “justify disparate treatment of adjoining landowners in the same aquifer only if there is some rational basis in the facts that justifies different treatment.”³⁵³ Without some unique feature or unusual circumstances in the field, “there [could] be no differentiation in treatment without violating the equal rights and equal protection clauses of the United States and Texas Constitutions.”³⁵⁴

3. MIXING OIL AND GROUNDWATER: SOME CAVEATS

Day appears to take the position that the rules of capture and of ownership in place are the same for groundwater as they are for oil and gas—except for when they are not. This is disconcerting for the predictability of takings jurisprudence. *Day* recognized that, while preventing waste and ensuring the ability to extract and market the minerals beneath the ground are the principal aims of oil and gas production regulation, groundwater regulation is concerned with myriad other concerns due to the comparatively varied uses of water and the potential for groundwater replenishment. The exceptions to the rule of capture are rare, and essentially limited to malice, waste, and negligent subsi-

347 *Id.* at 942.

348 *Marrs v. R.R. Comm’n*, 177 S.W.2d 941, 943-45 (Tex. 1944).

349 *Id.* at 950.

350 *Id.* at 948 (citations omitted).

351 *Id.*

352 *Id.* at 948-49 (citations omitted).

353 *Jones & Little*, *supra* note 343, at 604.

354 *Id.*

dence.³⁵⁵ However, *Day* approvingly quotes from the State's brief noting the constitutional obligation to preserve both groundwater and oil and gas.³⁵⁶

VI. CONCLUSION

If an interstate solution is found that allocates groundwater, it will come through compact, equitable apportionment, or direct federal legislation. There has been no movement toward federal legislation, so it is likely that compact or equitable apportionment would be required to resolve these disputes.

While compacts allocating surface water have existed for decades, and there is widespread agreement that aquifers such as the Ogallala are in crisis, there is very little movement toward compacting to allocate groundwater.³⁵⁷ Experts are skeptical that compacts for interstate groundwater will be pursued in the near future, citing a lack of interest from the states and the difficulty in creating such compacts.³⁵⁸ This difficulty is both man-made and natural. Groundwater legal systems may differ so severely that agreements are impossible to knit together. Additionally, the complex geological nature of aquifers, with differing recharge, retention, and use rates in different sections may limit the incentives that states have to pursue an agreement.³⁵⁹

Thus, if interstate groundwater disputes are to be resolved, the most likely resolution will be through the courts. In suits similar to *Hood* and *Herrmann*, states may attempt to level the playing field and gain access to new sources of water, or seek equitable apportionment by the courts. If Texas is involved in one of these actions, no matter the method used to apportion water between the states, *Day* may complicate the task. If the United States Supreme Court equitably apportions groundwater resources and cuts the amount of water that Texas can draw from an aquifer, the state will be forced to cut the amount of water that can be withdrawn, but now in a system where all adjoining landowners overlying an aquifer must be treated similarly. As noted above, oil and gas jurisprudence indicate that a water district could only justify disparate treatment of adjoining landowners if it had a rational basis to do so, such as unique or unusual circumstances underlying part of an aquifer. Thus, Texas's options would be either a massive bill for taking the water rights of thousands of landowners, a complete overhaul of the state's water law system, or potentially both.³⁶⁰

Scholars have observed the only way in which existing groundwater districts could comply with the system that *Day* advocates would be to apply a total cap on all withdrawals from an aquifer on a pro rata basis, including potentially restricting existing permit holders and granting all landowners the right to take a certain amount from the aquifer. Such a permitting system would undermine the rule of capture, and correlative rights would overtake absolute ownership.³⁶¹ There is irony in the possibility that *Day*,

355 Drummond, *supra* note 32, at 46-50.

356 Edwards Aquifer Auth. v. Day, 369 S.W.3d 814, 833 (Tex. 2012).

357 Malewitz, *supra* note 7.

358 *Id.*

359 *Id.*

360 See Torres, *supra* note 33, at 163-64.

361 *Id.* at 164.

which strongly defended the rule of capture, could lead to such a fatal undermining of the status quo.

In the post-*Day* world, finding an interstate solution to the overuse of groundwater is unlikely to be a priority. States have similar concerns, however, and it may be worthwhile to pursue joint solutions before these disputes reach crisis level. If these disputes are resolved in court through equitable apportionment, interstate complications may add an entirely new dimension to the post-*Day* Texas groundwater law system.

Nathan Weinert received his Juris Doctor from Baylor Law School in 2013 and is a member of the Missouri Bar. He is a native of Kansas and received his undergraduate degree from William Jewell College in 2008. The author would like to thank Professor Walt Shelton of Baylor Law School for his encouragement and guidance on this note.

RECENT DEVELOPMENTS

AIR QUALITY

UPDATE ON TEXAS STATE IMPLEMENTATION PLAN

The Environmental Protection Agency (EPA) has proposed revisions to the Texas State Implementation Plan (SIP) and SIP submission requirements for the Houston-Galveston-Brazoria (HGB) ozone nonattainment area.¹

BACKGROUND

Ground level ozone is formed when oxides of nitrogen (NO_x) and volatile organic compounds (VOC) emitted by on-road and non-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints react in the presence of sunlight.² Health problems that may be caused by ozone exposure include chest pain, coughing, throat irritation, congestion, lung tissue scarring, and worsening bronchitis, emphysema, and asthma.³

In 1997, the EPA revised the 1-hour ozone standard from 0.12 parts per million (ppm) averaged over one hour to an 8-hour average standard of 0.08 ppm.⁴ The 1997 0.08 ppm, 8-hour primary standard is met at an air quality monitor when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm (that is, 0.084 due to rounding).⁵ The change from the 1-hour to the 8-hour standard was based on EPA's determination that ozone's adverse health effects result at lower concentrations, but over longer exposure periods, than previously considered.⁶

Nonattainment areas are classified as either marginal, serious, severe, or extreme depending on the magnitude of the highest 8-hour ozone design value at a monitoring site in a nonattainment area.⁷ In 2007, Governor Rick Perry submitted a request to the EPA for a voluntary reclassification of the Houston-Galveston-Brazoria (HGB) area

1 Approval and Promulgation of Implementation; Texas; Houston; Reasonable Further Progress Plan, Contingency Measures, and Transportation Conformity Budgets for the 1997 8-Hour Severe Ozone Nonattainment Area, 78 Fed. Reg. 55,029 (proposed Sep. 9, 2013); Approval and Promulgation of Implementation Plans; Texas; Attainment Demonstration for the Houston-Galveston-Brazoria 1997 8-Hour Ozone Attainment Area, 78 Fed. Reg. 55,037 (proposed Sep. 9, 2013).

2 78 Fed. Reg. 55,037, 55,038.

3 *Id.*

4 *Eight-Hour Average Ozone Concentrations*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/region1/airquality/avg8hr.html> (last visited Oct. 7, 2013).

5 *Id.*

6 78 Fed. Reg. 55,037, 55,038.

7 *Eight-Hour Average Ozone Concentrations*, *supra* note 4.

from moderate to severe nonattainment under the 1997 8-hour ozone standard.⁸ The EPA reclassified the HGB area as Texas's only severe nonattainment area effective in 2008.⁹ The HGB nonattainment area has a 2018 attainment deadline.¹⁰

In 2008, the EPA lowered the ozone National Ambient Air Quality Standards (NAAQS) to 0.075 ppm.¹¹ The proposals discussed here do not address the revised standard.¹² Additional SIP revisions will be required in the future for that purpose, and requirements related to the 1997 standard will continue for the foreseeable future.

PROPOSED REVISIONS TO TEXAS SIP – 78 FED. REG. 55029

On September 9, 2013, the EPA proposed revisions to the Texas SIP to meet the requirements for the 1997 8-hour ozone severe nonattainment classification in the following areas: (1) revised emission inventory; (2) reasonable further progress plan; (3) vehicle miles traveled offset analysis; and (4) the associated motor vehicle emission budget for transportation conformity.¹³ The emissions inventory is a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutants in an area, and the emissions from 2002 serve as a base year for calculating Reasonable Further Progress (RFP).¹⁴ The EPA is proposing revisions to the 2002 Base Year Emissions Inventory submitted by the Texas Commission on Environmental Quality (TCEQ).¹⁵

Severe nonattainment designated areas must show a 15 percent reduction in ozone precursor emissions in the first six years and an additional three percent reduction for every year after until the area reaches attainment.¹⁶ The EPA reviewed Texas's methods for developing its 2018 projected emissions and found them reasonable.¹⁷ Areas of moderate or higher nonattainment status must also have contingency measures in place.¹⁸ Texas has elected to use emissions reductions in excess of those needed for RFP as its contingency measures for the HGB RFP SIP, which meets the EPA's requirements.¹⁹

Severe nonattainment areas also must adopt specific enforceable transportation control strategies (TCSs) and transportation control measures (TCMs) to offset increases in emissions resulting from growth in vehicle miles traveled (VMT) or numbers of vehicle trips.²⁰ They must also obtain reductions in motor vehicle emissions as necessary to comply with attainment demonstrations.²¹ A plan for motor vehicle emissions is recom-

8 78 Fed. Reg. 55,029, 55,030; see also *Region 6: State Designations for the 1997 8-Hour Ozone Standard*, U.S. ENVTL. PROT. AGENCY (FEB. 1, 2013), <http://www.epa.gov/glo/designations/1997standards/regions/region6desig.htm>, last visited (JAN. 9, 2013).

9 78 Fed. Reg. 55,029.

10 78 Fed. Reg. 55,037, 55,038

11 *Id.* at 55,038 n.1.

12 *Id.*

13 78 Fed. Reg. 55,029.

14 *Id.* at 55,030.

15 *Id.*

16 *Id.* at 55,031.

17 *Id.*

18 *Id.* at 55,033.

19 *Id.* at 55,034.

20 *Id.*

21 *Id.*

mended to estimate emissions for two different years: the nonattainment area's base year and three different scenarios for the attainment year (two hypothetical emission scenarios and one projected actual emissions).²² The EPA found Texas's analysis meets the VMT Offset requirements.²³

The EPA uses the Motor Vehicle Emission Budget to analyze whether the transportation plans conform to state air quality implementation plans.²⁴ The transportation plan must not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS.²⁵ The EPA found Texas's MVEBs adequate and in conformance with the RFP.²⁶

SUBMITTED TEXAS SIP – 78 FED. REG. 55,037

The EPA has also proposed approval of the following Texas SIP submittals for the HGB 1997 8-hour ozone nonattainment area: (1) the attainment demonstration for the 1997 ozone NAAQS; (2) the inclusion of reasonably available control measures (RACM); (3) the contingency measures plan; and (4) a Motor Vehicle Emissions Budget (MVEB) for 2018, the HGB attainment year.²⁷ The EPA also proposed to approve revisions to the air pollution control measures and General Air Quality Definitions in the Texas SIP.²⁸

To approve the attainment demonstration, the EPA must approve the measures relied on, the attainment MVEB for transportation conformity purposes, and the RFP plan and contingency measures.²⁹ The attainment demonstration measures must be "permanent, enforceable and quantifiable."³⁰ Severe nonattainment areas must use photochemical grid models for their attainment demonstrations.³¹ While photochemical grid modeling indicated attainment by 2018 across most of the area, uncertainty remained at a few locations.³² For those locations, Texas demonstrated attainment through supplemental analysis called weight-of-evidence (WOE).³³ The key factors the EPA noted in the supplemental analysis included the most recent 8-hour monitoring trends and continued emission reduction from turnover in the on-road and off-road motor vehicle fleets.³⁴ Based on this analysis, the EPA concluded that the HGB will attain the NAAQS by 2018.³⁵

The EPA also approved revisions to the Mass Emissions Cap and Trade (MECT) program for nitrogen oxides (NO_x), the highly reactive volatile organic compound emissions cap and trade (HECT), Voluntary Mobile Emissions Program (VMEP), and Trans-

22 *Id.* at 55,034-55,035.

23 *Id.* at 55,036.

24 *Id.*

25 *Id.*

26 *Id.*

27 78 Fed. Reg. 55,037.

28 *Id.*

29 *Id.* at 55,038.

30 *Id.*

31 *Id.* at 55,039.

32 *Id.* at 55,041.

33 *Id.*

34 *Id.*

35 *Id.* at 55,042.

portation Control Measures (TCM) relied upon in the attainment demonstration.³⁶ Moreover, the EPA approved Texas's RACM—to reduce the highly reactive volatile organic compound (HRVOC).³⁷ RACMs (1) must be technologically feasible, (2) must be economically feasible, (3) must not cause “substantial widespread and long-term adverse impacts,” (4) may not be absurd, unenforceable, or impracticable, and (5) can advance the attainment date.³⁸

Texas's contingency measures show that, if attainment is not achieved in 2018, it would occur in 2019.³⁹ The SIP also includes MVEB attainment by 2018 as well as minor revisions to General Air Quality definitions.⁴⁰ The EPA also proposed approval of these submissions.⁴¹

John B. Turney, former general counsel to the Texas Air Control Board, is an environmental attorney at Richards, Rodriguez & Skeith, L.L.P. He is a graduate of Texas A&M University and The University of Texas School of Law.

Stephanie Trinh is a third-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

NATURAL RESOURCES

WILL PROPOSITION 6 CURE THE PRESENT DROUGHT?

PROPOSITION 6: WHAT IS IT AND DO WE NEED IT?

On November 5, 2013, Texas passed landmark legislation to combat water scarcity through water infrastructure and conservation funding and planning through three pieces of legislation: Senate Joint Resolution (SJR) 1, House Bill (HB) 4, and House Bill (HB) 1025.¹ Proposition 6, also known as SJR 1, is the constitutional amendment that established the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue for Texas (SWIRFT).² SJR 1 states that SWIFT will be a “special fund outside the general revenue fund,” and will be administered by the Texas Water Development Board (TWDB) in order to fund the state's water plan.³ The Bill's author, State Senator, Tommy Williams, explains that the Rainy Day Fund's \$2 billion contribution (in addition to the \$6 billion in authorized bonds the Texas Water Devel-

36 *Id.* at 55,042-55,044.

37 *Id.* at 55,044.

38 *Id.*

39 *Id.*

40 *Id.* at 55,045.

41 *Id.*

1 Texas Water Dev. Bd., *Proposition 6 Information* (Nov. 17, 2013), <http://www.twdb.state.tx.us/newsmedia/swift/index.asp>.

2 Tex. S.J.Res. 1, 83rd Leg., R.S., 2013 Tex. Sess. Law Serv. (West) (amended TEX. CONST. art. III, § 49-g).

3 *Id.*

opment Board currently has available) will operate as a “water infrastructure bank” by providing low interest financing for the building of water infrastructures in the state water plan.⁴

The Texas Water Development Board has been creating 50-year regional state water plans that are revised every five years to ensure Texas has enough water should the historic drought conditions of the 1950s reoccur.⁵ The state water plans are projects “intended to help avoid catastrophic conditions during a drought,” where the “capital cost to design, build, or implement the recommended strategies and projects between now and 2060 will be \$53 billion.”⁶ Governor Rick Perry projected that the SWIFT will be able to leverage loans around \$30 billion over the fifty-year building phase.⁷

Proposition 6 will reallocate \$2 billion from the Texas Rainy Day Fund to support numerous state water projects ranging from conservation to reservoir projects included in the state water plan.⁸ TWDB predicts that “50 percent of Texans by 2060 will lack an adequate supply of water during times of drought,” unless the 2012 State Water Plan is fully implemented.⁹ Although the \$53 billion price tag over the next fifty years is astounding, a lack of clean water will “irrevocably harm” the public health and state economy through the billions of dollars in lost income from Texas businesses and their workers.¹⁰

Opponents are skeptical of the forecasted success of Proposition 6 and concerned about the ability of the state to handle economic emergencies if the Rainy Day Fund is depleted.¹¹ A similar constitutional amendment was passed in 2011, Proposition 2, where the Texas Water Development Fund provided \$6 billion for the Texas Water Development Board to sponsor the TWDB’s prior state water plans.¹² Since Proposition 6 simply adds \$2 billion to the TWDB’s budget, opponents of the proposition doubt the efficacy of putting more money into a project that has not yet solved the problem.¹³ A large portion of the proposition’s promised success depends on which projects the Texas Water Development Board chooses to pursue. As of now, there are approximately 562 projects proposed as a legislative wish list, including desalting groundwater and sea water, building pipelines, in addition to developing reservoirs and well fields.¹⁴

However, Senator Williams explains in his bill analysis that the Rainy Day Fund, was created as a savings account for the Legislature to use in times of emergency.¹⁵ Since half of the state’s population will be without adequate drinking in water in times of

4 House Comm. on Appropriations, Bill Analysis, Tex. S.J.Res. 1, 83rd Leg., R.S. (2013).

5 *Id.*

6 *Id.*

7 Press Release, Office of the Governor Rick Perry, Prop. 6 Necessary to Meet Texas Water Needs (Oct. 10, 2013), <http://governor.state.tx.us/news/press-release/18979/>.

8 House Comm. on Appropriations, *supra* note 4.

9 *Id.*

10 *Id.*

11 *Id.*

12 *Id.*

13 Ari Phillips, *A New Water Proposal So Important That Even Rick Perry Supports It*, THINK PROGRESS (Oct. 29, 2013 9:25 AM), <http://thinkprogress.org/climate/2013/10/29/2812921/water-texas-proposition/>.

14 *Id.*

15 House Comm. on Appropriations, *supra* note 4.

drought by 2060, Williams believes the prior 2011 drought is the type of emergency that the fund was designed to support.¹⁶ He also believes that the \$2 billion allocation to SWIFT from the Rainy Day Fund will not jeopardize the state's credit rating or ability to handle an emergency since the Comptroller's January 2013 Biennial Revenue Estimate projects the fund will reach \$11.8 billion by the end of fiscal 2015.¹⁷

Some environmentalists view this plan as too little too late due to inadequate infrastructure. According to Dr. Jay Banner of Jackson School of Geosciences at The University of Texas "to be truly conservative . . . you have to prepare for the [sic] 'worse' case scenario of these 20- or 30-year megadroughts rather than the six-year drought we have in the historical instrumental record."¹⁸ However, Proposition 6 seeks to create the infrastructure necessary to comply with Dr. Banner's plans to prepare for a drought much worse than the one we are currently experiencing. Dr. Banner's study of tree rings indicates that there has been a megadrought at least once a century with some lasting 20-30 years.¹⁹ If Proposition 6 loans the projected \$30 billion mark over the next fifty years, it is possible that Texas will have the infrastructure necessary to sustain one of Dr. Banner's projected droughts.

Proposition 6 passed, but its impacts remain unclear with a large swath of the state in a drought. Is Texas's future water going to dry up, or will Proposition 6 replenish our aquifers and prepare us for the next century?

Carlos Romo is an Associate at Baker Botts L.L.P. The focus of his practice is environmental, air quality, alternative energy, waste and remediation, and water quality.

Maggie Griffin is a second-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

P U B L I C A T I O N S

TAEOR A. ALLEN, *THE SOUTH TEXAS DROUGHT AND THE FUTURE OF GROUNDWATER USE FOR HYDRAULIC FRACTURING IN THE EAGLE FORD SHALE*, 44 ST. MARY'S LAW J. 487 (2013)

INTRODUCTION

Texas has endured its share of historical droughts, leaving the state dreadfully familiar with water crises.¹ New controversies and problems arise with periodic drought conditions while the individuals residing in Texas "struggle over allocation of one of the

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ Marc Airhart, *Preparing for Future Water Shortages*, at: <http://www.utexas.edu/what-starts-here/finding-solutions/preparing-future-water-shortages> (last visited March 30, 2014).

¹⁹ *Id.*

¹ Taelor A. Allen, *The South Texas Drought and the Future of Groundwater Use for Hydraulic Fracturing in the Eagle Ford Shale*, 44 ST. MARY'S LAW J. 487, 487 (2013).

state's most precious commodities: water."² This struggle comes head to head with the booming oil and gas industry. Notably, Texas leads the nation in oil and gas production.³ To stimulate oil and gas production in shale fields, hydraulic fracturing is necessary.⁴ The process requires significant amounts "of water to be injected at high pressure to 'frac' and release gas from an underground formation."⁵ The amount of water needed for this technique potentially places strain on the regional water supply and has led to increased concern among the locals as they are faced with competing "for scarce water due to worsening drought conditions."⁶ Naturally, the increased concern over the diminishing resource of groundwater has raised the question of whether restrictions on the amount of water used for hydraulic fracturing should be increased alongside the existing legal remedies available to the concerned residents.⁷ Taelor A. Allen explores the legal implications raised by the amount of groundwater necessary for hydraulic fracturing in the Eagle Ford Shale with a focus on its usage during a drought.⁸ Additionally, Allen addresses whether hydraulic fracturing in this region significantly affects the amount of groundwater supplies and further explores the legal remedies available to those who suspect their water source is in danger of depletion.⁹ To conclude the comment, Allen proposes solutions that attempt to alleviate the effects of a reduction of groundwater in a state that is no stranger to repeated and long lasting droughts.¹⁰

BACKGROUND ON HYDRAULIC FRACTURING

Allen provides some background on hydraulic fracturing and why it is necessary in the Eagle Ford Shale region. The process of hydraulic fracturing, or "fracking," involves extraction of oil and gas from "underground formations that are lacking in permeability, such as shale or limestone."¹¹ Increasing the permeability allows hydrocarbons to be released throughout the formation and to the surface, making it an essential component of oil and gas production.¹² A formation with low permeability is known as a "tight" formation and removal of oil and gas from these formations is "unconventional" because it requires use of "enhanced recovery techniques, such as hydraulic fracturing," to begin production.¹³

Although hydraulic fracturing is a fairly new technique on the oil and gas scene, it has become increasingly important largely due to its ability to "[free] up '[c]lean burning natural gas' that is essentially locked" within impermeable formations.¹⁴ There are abundant impermeable formations throughout the country.¹⁵ The Eagle Ford Shale is one

2 *Id.* at 488 (internal citations omitted).

3 *Id.* at 489.

4 *Id.*

5 *Id.*

6 *Id.*

7 *Id.* at 490.

8 *Id.* at 490.

9 *Id.*

10 *Id.*

11 *Id.* at 491.

12 *Id.*

13 *Id.* at 491.

14 *Id.* at 493.

15 *Id.*

example. The Eagle Ford Shale is a large formation “spanning twenty-three counties and six million acres in South Texas.”¹⁶ It was discovered in 2008 and drilling activities increased rather quickly.¹⁷ The Eagle Ford Shale has been especially popular because of its ability to produce more oil and gas than other traditional shale plays.¹⁸ A mixture of “horizontal drilling and hydraulic fracturing techniques” is used in the Eagle Ford Shale.¹⁹ The primary water source for hydraulic fracturing in the Eagle Ford Shale is groundwater because less surface water is available for use in this region of the state.²⁰

DROUGHT AND WATER FOR FRACKING

2011 marked one of the worst droughts on record in the state of Texas since the 1950s.²¹ For planning purposes, drought is defined as a prolonged period of deficient precipitation “that results in less than adequate water supplies for a particular activity.”²² In addition to lack of precipitation, drought is also a result of human activities demanding an increase in water supplies.²³ Each geographic area in the state is given a designation from the National Drought Monitor that includes the severity of drought for a given region.²⁴ The Eagle Ford Shale region was labeled as being “within the two most severe drought categories as of September 2011.”²⁵ These statistics suggest that continued drought management is critical as the drought is expected to persist into the future.²⁶

After a review of the basics of groundwater and surface water regulation in Texas, Allen turns attention to whether the volume of water required for hydraulic fracturing is significant and explores the protection currently available to prevent depletion of groundwater.²⁷ Several studies have indicated that the amount of water used for hydraulic fracturing is relatively insignificant compared to the amount used for other reasons like agricultural and municipal use.²⁸ With this and the economic benefits in mind, any additional regulatory measures should be proposed with extreme caution.²⁹ Evidence suggests that the primary use of water in the Eagle Ford Shale area is for agricultural purposes.³⁰ When examining the economic impact of agriculture relative to the impact of the oil and gas industry, Allen suggests that “regulatory measures should not be taken against hydraulic fracturing without first considering the reduction of agricultural water use.”³¹

16 *Id.*

17 *Id.*

18 *Id.* at 494.

19 *Id.*

20 *Id.* at 495.

21 *Id.* at 504, note 105.

22 *Id.* at 504.

23 *Id.* at 505.

24 *Id.*

25 *Id.*

26 *Id.* at 506.

27 *Id.* at 507.

28 *Id.*

29 *Id.* at 508.

30 *Id.*

31 *Id.*

One argument Allen offers against increased regulation is that existing remedies are in place for limiting overuse of water resources.³² One example is an implied easement of reasonable use and without explicit language stating otherwise, “execution of an oil and gas lease affords the mineral estate an easement to use the surface estate for drilling activities, but such use is limited to the extent it is deemed reasonably necessary for the purposes of exploration and production of minerals.”³³ The implied easement of reasonable use prompts another question. Is the volume of groundwater used for hydraulic fracturing a reasonable use during drought?³⁴ Allen then discusses the accommodation doctrine “which limits the lessee’s easement allowing reasonable use of the surface estate for the purpose of mineral development and exploration.”³⁵ This doctrine requires the lessee to reasonably accommodate the pre-existing surface uses of the surface owner “when oil and gas activities interfere with” those pre-existing uses and “reasonable alternatives are available to the lessee.”³⁶ As with most other industry, the alternative must be reasonable in light of the usual custom and practice within the oil and gas industry.³⁷ Of course as alternative means become available, surface owners will have more claims against lessees that do not follow those alternatives.³⁸

In addition to the accommodation doctrine, groundwater districts limit the effect of the rule of capture as an existing remedy.³⁹ While a landowner is typically able to remove as much groundwater from his property as he wishes without liability, “the rule does not preclude liability for negligent, malicious, or wasteful acts.”⁴⁰ Groundwater districts traditionally considered hydraulic fracturing operations to fall within the permit exceptions.⁴¹ In light of the current drought situation, some have proposed that increased permitting regulations should be imposed on the hydraulic fracturing operation.⁴² However, groundwater districts are weary of enforcing greater restrictions out of fear “that these regulations will constitute a taking of property that requires compensation.”⁴³

Allen concludes with a discussion of proposed solutions to help mitigate the effects of hydraulic fracturing on groundwater. These proposals include “encouraging a shift in current water management policies, abrogation of common law rules, and gaining a better understanding of the water supply landscape through better water volume reporting practices and studies on the effects of hydraulic fracturing on water supplies.”⁴⁴ Abrogation of the common law rule of capture doctrine would require establishment of an alternative course of action to follow. Allen mentions adoption of reasonable

32 *Id.* at 509.

33 *Id.* at 510.

34 *Id.*

35 *Id.* at 511.

36 *Id.*

37 *Id.* at 512.

38 *Id.*

39 *Id.* at 514.

40 *Id.*

41 *Id.* at 515.

42 *Id.*

43 *Id.* at 516.

44 *Id.* at 517.

use or correlative rights with groundwater.⁴⁵ Advocates of reasonable use argue that unlimited access to water through the rule of capture would ultimately lead to depletion of the water source.⁴⁶ However, it is unlikely that reasonable use would be adopted in the state of Texas as the Supreme Court has often deferred to the Legislature and has refused to do away with the rule of capture.⁴⁷

While correlative rights work to prevent excessive water use as each landowner is entitled to his fair share of the resource in question, critics argue that this would have a negative effect upon the “free market transfers of groundwater.”⁴⁸ Additionally, determining each landowner’s appropriate share would be incredibly difficult.⁴⁹ This leads into the final discussion of Allen’s comment: Improvement of water monitoring to gain a “better understanding of the effects of hydraulic fracturing on the availability of valuable groundwater sources.”⁵⁰

Allen suggests that one of the best ways to obtain information about? is through increased communication between the industry and regulators.⁵¹ As an example, The American Petroleum Institute (API) provides “best practices for minimizing the negative environmental impacts of hydraulic fracturing, thereby proactively increasing communication beyond the level required by existing, mandatory regulations.”⁵² API encourages companies to use non-potable water, whenever possible, to avoid placing pressure on the regions water supply as well as recycling of water previously used for hydraulic fracturing.⁵³ All of these suggestions move the industry in the right direction.

CONCLUSION

Since the oil boom is expected to continue and there is no foreseeable end of sight from the drought, it is likely that Texas will “see a continuing policy shift in the state’s current water management scheme in an effort to protect the state’s groundwater reserves.”⁵⁴ Since hydraulic fracturing has an enormous positive economic impact on the region, it is important to determine the true effect on local groundwater supply prior to implementing greater restrictions that may not be completely effective.⁵⁵ In the interim, concerned residents are not without hope. Allen suggests they should “take advantage of currently existing resources to protect their groundwater reserves through common law remedies, contractual provisions in oil and gas leases, and current rules and restrictions on water usage instituted by local groundwater conservation districts and the Texas Railroad Commission.”⁵⁶

45 *Id.*

46 *Id.* at 518.

47 *Id.* at 519.

48 *Id.* at 519-520.

49 *Id.* at 520.

50 *Id.* at 524.

51 *Id.*

52 *Id.* at 525.

53 *Id.*

54 *Id.* at 526.

55 *Id.* at 527.

56 *Id.*

Joshua D. Katz is an attorney with Bickerstaff Heath Delgado Acosta L.L.P in Austin. Mr. Katz practices environmental law, administrative law, water law, electric utility regulation, and related litigation. He received his law degree from The University of Houston Law Center.

Cassie Tigue is a second-year law student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

SOLID WASTE

EVALUATION OF COAL ASH REGULATION: EPA SEEKS PUBLIC COMMENT ON NEW INFORMATION PERTAINING TO PROPOSED REGULATION

INTRODUCTION

In August 2013, the Environmental Protection Agency (EPA), through a Notice of Data Availability (NODA) and Request for Public Comment, reopened the comment period on certain sections of its proposed rulemaking related to the management and disposal of coal combustion residuals (coal ash).¹ The comment period, which lasted until September 3, 2013, provided an opportunity for the public to comment on potential changes and new technical information pertaining to the EPA's 2010 proposed coal ash rule.² The rule proposed on June 21, 2010 seeks to regulate coal ash generated at coal-fired power plants, which accumulates as residue and is captured by pollution control devices.³ The aim of the proposed regulation is to ensure the "safe disposal and management of coal ash from coal-fired power plants that is disposed in surface impoundments and landfills."⁴ Notably, the EPA has not specified whether coal ash will be regulated as hazardous waste under the Subtitle C of the Resource Conservation and Recovery Act (RCRA) or, alternatively, under the RCRA's Subtitle D as solid waste.⁵ Moreover, the EPA has declined to provide a specific timeframe for finalizing the regulations, and it is predicted that the EPA will not issue its final rule by the end of 2013.⁶

1 Hazardous and Solid Waste Management System: Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities, 78 Fed. Reg. 46,940 (Aug. 2, 2013).

2 *Id.*

3 Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities, 75 Fed. Reg. 35,128 (June 21, 2010) (to be codified at 40 C.F.R. pt. 257).

4 *Frequent Questions: Coal Combustion Residuals (CCR) – Proposed Rule*, U.S. ENVTL. PROT. AGENCY (Sept. 4, 2013), <http://www.epa.gov/wastes/nonhaz/industrial/special/fossil/ccr-rule/ccrfaq.htm#1> [hereinafter Proposed Rule].

5 Anthony Adragna, *Industry, Others Do Not Expect Coal Ash Rule Until 2013 Without Court Action*, BNA, Mar. 8, 2013, available at LEXIS, 46 DER A-27 (2013).

6 *Id.*

PROPOSED COAL ASH REGULATION

As it currently stands, coal ash is exempt from regulation as a hazardous waste under Subtitle C of the RCRA.⁷ However, citing environmental concerns over the management and disposal of coal ash in surface impoundments and landfills, and driven in part by the structural failure of a surface impoundment retaining wall in Tennessee Valley Authority's plant in Kingston, Tennessee, the EPA proposed two alternative options for coal ash regulation in June 2010.⁸ The first option provides for coal ash to be regulated as a hazardous waste under Subtitle C of the RCRA.⁹ Under this approach, the exemption of coal ash under the RCRA would be redrawn, and instead the EPA would list coal combustion residue as "special wastes subject to regulation under [S]ubtitle C of [the] RCRA, when they are destined for disposal in landfills or surface impoundments."¹⁰ Alternatively, the exemption of coal ash from RCRA regulation would stand, but the EPA would set a national, minimum standard regulating the disposal of the coal ash as solid waste under Subtitle D of the RCRA.¹¹ Under this option, the EPA would not regulate the generation, storage, or treatment of coal ash prior to disposal.¹²

The EPA has stated that the main differences between the two regulatory options are implementation and enforcement.¹³ The Subtitle C option would provide for direct federal enforcement through the creation of permit programs, but its implementation may take several years since states have the opportunity to develop their own implementation rules (subject to EPA approval).¹⁴ Alternatively, the Subtitle D option would come into effect sooner (approximately six months after the rules are promulgated), but it would not establish a permit program or allow for direct federal enforcement, nor would it establish "the same extensive management requirements" for disposed coal ash.¹⁵ Compliance with the Subtitle D rule would be largely driven by citizen suits.¹⁶

2013 NOTICE OF DATA AVAILABILITY

The August 2013 NODA presented new data and information pertaining to the 2010 proposal of coal ash regulation and reopened the comment period on this proposed regulation.¹⁷ The newly-released data falls into three categories: "[1] additional data to supplement the Regulatory Impact Analysis [(RIA)] and risk assessment, [2] information on large-scale fill, and [3] data on the surface impoundment structural integrity assessments."¹⁸ The EPA also sought comment on two issues pertaining to technical requirements at coal ash management units like impoundments and landfills.¹⁹

7 42 U.S.C. § 6921(b)(3)(A) (2006).

8 75 Fed. Reg. at 35,128.

9 *Id.* at 35,134.

10 *Id.*

11 *Id.*

12 *Id.*

13 Proposed Rule, *supra* note 4.

14 *Id.*

15 *Id.*

16 *Id.*

17 78 Fed. Reg. at 46,940.

18 *Id.*

19 *Id.*

First, the EPA proposed to revise the technology-based effluent limitation for steam electric power plants.²⁰ Some of the rule's limitations overlap elements of the coal ash rule. A major source for this information is an industry survey providing technical information about wastewater generation and treatment at power plants, as well as economic data (such as the cost of wastewater treatment technology and the financial implications for potentially affected power plants).²¹ The EPA is considering whether to rely on this data to revise the current RIA and risk assessment of the coal ash rule proposal and is evaluating the newly acquired information.²²

Second, the EPA sought public comment on the adequacy of data used to determine what constitutes large-scale fill and how this can be distinguished from legitimate beneficial uses of coal ash, such as concrete, bricks, or fly ash used in roadway construction.²³ At issue is whether the EPA should develop size criteria to identify large-scale fill or whether to provide a definition that categorizes the types of activities the EPA will consider under the regulation.²⁴

Third, the EPA sought to more public comment on its assessment of surface impoundments in the most recent NODA.²⁵ The EPA began soliciting comments on its final reports and assessment of 53 surface impoundments on October 13, 2010, and has since completed reports for 522 units and 209 facilities.²⁶

Finally, the EPA reopened the comment period on two issues:

(1) [t]he feasibility of complying with [its] proposed time frames for closing surface impoundments in the [S]ubtitle D option; and (2) how the technical requirements (including the design and operating requirements for new CCR landfills) relate to the construction of new CCR overfill units that have been constructed on top of closed surface impoundments or landfills.²⁷

TIMEFRAME FOR FINALIZING THE REGULATION

Although the EPA faces litigation from environmental groups seeking issuance of a final coal ash rule, the agency has declined to provide a specific timeframe for finalizing the regulation, noting that it will finalize the rule "once [it] has made a full evaluation of all the timely submitted comments received to date."²⁸

Ali Abazari is a partner with Jackson Walker L.L.P. who specializes in industrial waste management, strategic environmental planning, environmental auditing, Superfund, underground

20 Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 78 Fed. Reg. 34,432 (proposed on June 7, 2013) (to be codified at 40 C.F.R. pt. 423).

21 *Environmental Protection Agency: 2010 Questionnaire for the Steam Electric Power Generating Effluent Guidelines*, U.S. ENVTL. PROT. AGENCY (May 20, 2010), http://water.epa.gov/scitech/wastetech/guide/steam-electric/upload/Steam-Electric_Questionnaire_052010.pdf.

22 78 Fed. Reg. at 46,942.

23 *Id.* at 46,943.

24 *Id.* at 46,944.

25 *Id.*

26 *Id.*

27 *Id.* at 46,942.

28 Proposed Rule, *supra* note 4.

storage tanks, underground injection disposal wells, transactional issues involving the sale and acquisition of contaminated properties, water utilities, and water quality. He previously served as a regulatory specialist at URS Corporation and as an attorney in the Litigation Division of the Texas Commission on Environmental Quality.

Kathleen Pritchard is a second-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

WATER QUALITY

CITY OF WACO V. TEX. COMM'N ON ENVTL. QUALITY, 413 S.W.3D 409 (TEX. 2013) AND *TEX. COMM'N ON ENVTL. QUALITY V. BOSQUE RIVER COALITION*, 413 S.W.3D 403 (TEX. 2013)

INTRODUCTION

On August 23, 2013, the Texas Supreme Court reversed an earlier decision by the Third Court of Appeals addressing the availability of contested case hearings for “affected persons.”¹ In a 9-0 decision, Justice Devine wrote that the Texas Commission on Environmental Quality (TCEQ or Commission) did not abuse its discretion in denying the City of Waco’s (Waco) request for a contested case hearing.² This decision was centered on whether Waco was characterized as an “affected person” with standing to request a contested case hearing under statutes regulating CAFOs.³ The contested case hearing request concerned a proposed water quality permit amendment for the future expansion of the O–Kee Dairy (Dairy) of Hamilton County.⁴ The Dairy is a “concentrated animal feeding operation” (CAFO), which is an operation feeding large numbers of animals (in this case, large numbers of cattle) for extended periods in a confined area. In a companion case, *Tex. Comm’n on Env’tl. Quality v. Bosque River Coalition*, the Supreme Court found that the TCEQ did not abuse its discretion in denying the Bosque River Coalition’s (Coalition) contested case hearing request.⁵

BACKGROUND

The Dairy is located about 80 miles upstream from Lake Waco.⁶ Lake Waco, which is formed by branches of the Bosque River, serves as the sole drinking water supply for Waco.⁷ The Dairy operates within the watershed of the North Bosque River.⁸ Although

1 City of Waco v. Tex. Comm’n on Env’tl. Quality, 413 S.W.3d 409 (Tex. 2013).

2 *Id.* at 411.

3 *Id.* at 413.

4 *Id.*

5 *Tex. Comm’n on Env’tl. Quality v. Bosque River Coalition*, 413 S.W.3d 403, 404 (Tex. 2013).

6 *City of Waco*, 413 S.W.3d at 413.

7 *Id.* at 411.

CAFOs yield significant production, they can have negative effects on the environment and are generally required to obtain water quality permits from TCEQ, which help prevent these facilities from polluting nearby water sources.⁹ With the recent increase in dairy production in Waco and surrounding areas and concerns about the quality of its water supply, Waco has led efforts seeking tougher regulations to restrict the dairies' activities.¹⁰

In 2001, as part of its effort to strengthen regulations and pursuant to the authority provided by Tex. Water Code §§ 26.501-504, Waco urged the Texas Legislature to impose "new environmental restrictions on dairy CAFOs located in a 'major sole source impairment zone' (MSSIZ)."¹¹ The 2001 law, which only applies in the North Bosque Watershed, requires that new or expanded CAFOs located within a MSSIZ obtain individual water quality permits tailored to the dairy's particular circumstances.¹² These newly implemented rules allowed CAFOs needing individual permits to continue operations under their old authorizations so long as the individual permit was applied for by July 27, 2004.¹³

In March 2004, the Dairy filed its application to convert from a general to an individual permit and to expand its herd and waste application area.¹⁴ In addition to the requests by the Dairy, the draft permit "proposed several new measures to strengthen the overall water quality protections at the facility. . ."¹⁵ Waco objected to the proposed amended water quality draft permit and requested a contested case hearing.¹⁶ Waco asserted it was entitled to a contested case hearing as an "affected person" and included affidavits from professional engineers supporting its claim.¹⁷

The TCEQ denied Waco's request, pursuant in part to TEX. WATER CODE § 26.028(d), which exempts from the public hearing requirement permit amendments that do not seek either to "increase significantly the quantity of waste authorized to be discharged" or to "change materially the pattern or place of discharge" if "the activities to be authorized . . . will maintain or improve the quality of waste authorized to be discharged" and meet certain other requirements.¹⁸ Although the amendment sought was a "major amendment," the proposed permit brought the Dairy into compliance with the new CAFO rules, increased oversight of operational activities by TCEQ, including land application records and annual soil samples, and decreased chronic rainfall discharges and the amount of phosphorus discharged into the watershed. Thus, the agency

8 *Id.* at 413.

9 *Id.* at 410.

10 *Id.* at 412; see also Emily Rogers & Nick Ybarra, *City of Waco v. Tex. Comm'n on Env'tl. Quality*, 346 S.W.3d 781 (Tex. App.—Austin, pet. filed), 42 TEX. ENVTL. L.J. 117 (2011); see also *City of Waco v. Tex. Comm'n on Env'tl. Quality*, 346 S.W.3d 781 (Tex. App.—Austin 2011).

11 *City of Waco*, 413 S.W.3d at 412.

12 *Id.* (citing TEX. WATER CODE § 26.503(a)).

13 *City of Waco*, 413 S.W.3d at 413.

14 *Id.*

15 *Id.*

16 *Id.* (citing TEX. WATER CODE § 5.556 and 30 TEX. ADMIN. CODE § 55.201).

17 *Id.* at 414.

18 *Id.* at 416.

concluded the permit amendment had an overall beneficial environmental impact.¹⁹ Therefore, TCEQ rejected Waco's argument that it would be adversely affected by the permit approval.²⁰

Waco next sought judicial review of TCEQ's order in district court.²¹ The district court affirmed the TCEQ decision, and Waco appealed and the court of appeals held that the Commission acted arbitrarily and abused its discretion in concluding that Waco was not affected person entitled to a contested case hearing and remanded the case.²² TCEQ then sought review, which was granted.²³

TEXAS SUPREME COURT'S DECISIONS

TEX. COMM'N ON ENVTL. QUALITY V. CITY OF WACO

The relevant issue before the Texas Supreme Court was "whether the City has a statutory right to intervene in the permitting process and obtain a contested case hearing under the Administrative Procedure Act" (APA).²⁴

TCEQ argued that the court of appeals misread the statutory exemption and agency rules that define hearing rights under Chapter 26 of the Texas Water Code.²⁵ TCEQ argued that there was no right to a contested case hearing for an application under the particular provisions of the Texas Water Code,²⁶ and further argued that the Commission had the discretion to deny the hearing request if the proposed permit is an amendment or renewal and the permit will not significantly increase the discharge of waste but would maintain or increase the quality of discharge, among other factors.²⁷

The Texas Supreme Court agreed, holding that TCEQ was within its discretion when it denied Waco's request for a contested case hearing on the Dairy's application for an amended permit.²⁸ The Court noted that, even if Waco qualified as an affected person, "it may still not be entitled to a public hearing if [TEX. WATER CODE § 26.028(d)'s] exception reasonably applies."²⁹ In analyzing the Commission's decision that no contested case hearing was available pursuant to Section 26.028(d), the Court found that there was enough evidence in the record to support TCEQ's determination that the Dairy's proposed amended permit would not significantly increase or materially change the amount of discharge of waste.³⁰

19 *Id.* at 421-23.

20 *Id.* at 423.

21 *Id.* at 415 (citing TEX. WATER CODE §§ 5.351, 5.354).

22 *Id.* at 415-16; see also *City of Waco v. Tex. Comm'n on Env'tl. Quality*, 346 S.W.3d 781, 827 (Tex. App.—Austin 2011).

23 *City of Waco*, 413 S.W.3d at 415-16.

24 *Id.* at 423.

25 *Id.* at 424.

26 *Id.* (citing 30 TEX. ADMIN. CODE § 55.201 (i)(5)).

27 *Id.* at 424 (citing TEX. WATER CODE § 26.028(d) and 30 TEX. ADMIN. CODE § 55.201 (i)(5)).

28 *Id.* at 425.

29 *Id.* at 420.

30 *Id.* at 424.

TEX. COMM'N ON ENVTL. QUALITY V. BOSQUE RIVER COALITION

A companion case to *Tex. Comm'n on Env'tl. Quality v. City of Waco*, decided less than a month later, concerned an identical issue: whether a non-profit environmental-protection group, the Bosque River Coalition ("Coalition"), was entitled to a contested case hearing challenging the proposed amendment of water quality permits to approve increased herd sizes at dairies within the Bosque River watershed.³¹ The TCEQ Executive Director determined that the amendment draft permit encompassed new water quality protections, which would comply with regulatory and statutory requirements, contradictory to the Coalition's complaints.³² The Coalition argued similar issues to those in the *City of Waco* case.

The Coalition maintained that determining status as an affected person is determining standing and must be, on disputed facts, decided in a contested hearing.³³ The Coalition also argued that the Commission's conclusion that the amended water permits would be more protective of water quality than the original permits was irrelevant, and thus arbitrary, to a determination that the Coalition is not an affected person.³⁴ The Coalition further argued that, as an affected person, it had the right to a contested case hearing because the Dairy in question sought a major amendment to its existing permit.³⁵ In response to the Coalition's argument, TCEQ clarified that its classification of the Dairy application as a major amendment is not a concession that the Coalition is entitled to a contested case hearing.³⁶ The Coalition argued that it was not awarded the opportunity to express its dissatisfactions with the amended permit in a contested case hearing.³⁷ TCEQ countered that claim by explaining that the Coalition was offered other occasions to express its concerns, such as the comment period and public meetings, where TCEQ considered all evidence presented in resistance to the amended permit.³⁸

With Justice Devine again writing for the Texas Supreme Court, the Court reversed the decision of the Third Court of Appeals, holding that the Coalition's status as an affected person did not determine its right to a contested case hearing because the Water Code provisions at issue in this case expressly exempted the proposed amendment from contested case procedures.³⁹

CONCLUSION

While the City of Waco finds itself on the losing end of an administrative law battle over standing for a contested case hearing, Waco City Attorney Jennifer Richie stated that "the upstream dairies have started to work with the city in the past three or four years since the legal challenges began" and noted that "the leaders of the dairy industry

31 *Tex. Comm'n on Env'tl. Quality v. Bosque River Coalition*, 413 S.W.3d 403 (Tex. 2013).

32 *Id.* at 405.

33 *Id.* at 406. (citing TEX. WATER CODE § 26.028(c)).

34 *Id.*

35 *Id.* at 407.

36 *Id.* at 408.

37 *Id.*

38 *Id.*

39 *Id.* at 404.

have realized the importance of the water quality of the City of Waco.”⁴⁰ The amendments to the Dairy’s water quality permit may positively redirect the dairy industry production practices and resulting environmental impacts. Given the increasing recognition of the importance of water quality for natural resources, safety and health reasons, not only to Waco, but also certainly to all Texas cities, effective regulation and control by TCEQ is crucial.

Emily Rogers is a partner practicing environmental, water, and wastewater utility law at Bick-erstaff, Heath, Pollan & Caroom, L.L.P. in Austin. Ms. Rogers is a graduate of The University of Houston Law Center who formerly served as an attorney for the Texas Natural Resource Conservation Commission.

Joshua Brown is a second-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

WATER RIGHTS

TCEQ APPROVES LAKE RALPH HALL PROJECT

INTRODUCTION

On September 24, 2013, the Texas Commission on Environmental Quality (TCEQ) approved the construction of the Lake Ralph Hall reservoir.¹ This project is the first major water supply reservoir approved in Texas since 1985.² The U.S. Army Corps of Engineers is expected to approve the construction within the next 2 years.³

LAKE RALPH HALL: BACKGROUND AND TCEQ PROCEEDINGS

In 2003, the Upper Trinity Regional Water District (UTRWD) applied to the TCEQ for a Water Use Permit to construct and maintain the Lake Ralph Hall reservoir

40 Tommy Witherspoon, *Texas Supreme Court Negates Waco’s Standing In Dairy Permit Hearings*, WACO TRIBUNE-HERALD (Aug. 24, 2013), http://www.wacotrib.com/news/business/texas-supreme-court-negates-waco-s-standing-in-dairy-permit/article_da8a8496-2f0a-54fa-a2e2-fa922f8837eb.html.

1 Tex. Comm’n on Env’tl. Quality, *Order Approving the Application of Upper Trinity Regional Water Dist. for Water Use Permit No. 5821*, TCEQ Docket No. 2012-0065-WR; SOAH Docket No. 582-12-5332 (Sept. 24, 2013), available at: http://www2.tceq.texas.gov/epic/eenf/index.cfm?fuseaction=search.load2&AGY_DKT_NUM_TXT=2012-0065-WR&doc_ed-613532772013283&doc_name=Order%202012-0065-WR.pdf&format_cd=pdf see also Wendy Hundley, *TCEQ Approves Lake Ralph Hall Permit*, THE DALLAS MORNING NEWS (Sep. 25, 2013, 6:10 AM), <http://http://www.dallasnews.com/news/metro/20130924-texas-environmental-agency-approves-lake-ralph-hall-permit.ece>.

2 Hundley, *supra* note 1.

3 *Id.*

to cope with the increasing demand for water in North Texas.⁴ The proposed location of the reservoir is on the North Sulphur River in Fannin County.⁵ The reservoir has a maximum capacity of 180,000 acre-feet and will, at most, cover a surface area of 8,500 acres.⁶ After completion, the reservoir can provide 45,000 acre-feet of water per year for municipal, industrial, agricultural, and recreational purposes.⁷ The reservoir area and the accompanying wildlife habitat mitigation area will cover lands currently used for timber harvesting, forestry, and rangeland.⁸ The application was declared administratively complete on August 13, 2004.⁹

In March 2006, TCEQ held public meetings and received numerous comments from supporters and opponents of the project.¹⁰ Some supported the project because of the area's water needs, whose growth is among the fastest in North Texas.¹¹ Some believe that the project appropriately balances the needs to serve an increased population with the impacts to the environment.¹² Supporters also believe that the site is suitable for construction and that the cost is reasonable.¹³ Nonetheless, many commentators expressed skepticism.¹⁴ Specifically, opponents of the project expressed concerns with changes in downstream flows, the project's economic impact on the timber industry, the need for the reservoir, the possible deprivation of property, the project's economic impact on a nearby paper mill, compliance with interbasin transfer regulations, potential silting problems, the ability of UTRWD to adequately finance the project, the project's impact on recreational water use, the level of wildlife mitigation, the project's impact on local property taxes, and the project's impact on archeological and historical artifacts.¹⁵

After considering these comments, TCEQ issued a Draft Permit on June 17, 2011.¹⁶

4 Tex. Comm'n on Env'tl. Quality, *Notice of An Application for Water Use Permit and Public Meetings* (Application No. 5821), available at: <http://www7.tceq.state.tx.us/uploads/eagendas/hr-rfr/2012-0065-WR-info.pdf> (last visited Oct. 2, 2013).

5 *Id.*

6 Tex. Comm'n on Env'tl. Quality, *Executive Director's Response to Comments*, available at: <http://www7.tceq.state.tx.us/uploads/eagendas/hr-rfr/2012-0065-WR-Rtc.pdf> (last visited Oct. 2, 2013).

7 *Id.*

8 *See id.* (Farmers, ranchers, and timber operators were concerned about the project's impact to this property and business.)

9 Tex. Comm'n on Env'tl. Quality, *Interoffice Memorandum from Project Manager of Water Rights Permitting Team to Chief Clerk on UTRWD's Application for Water Use Permit* (Feb. 3, 2012), available at: <http://www7.tceq.state.tx.us/uploads/eagendas/hr-rfr/2012-0065-WR-info.pdf>.

10 *Id.*

11 *Id.* at 6.

12 *Id.* at 8.

13 *Id.* at 13.

14 *Id.*

15 *Id.* at 4-20.

16 State Office of Admin. Hearings, *Proposed Order*, SOAH Docket No. 582-12-5332, TCEQ Docket No. 2012-0065-WR, available at <http://www.soah.state.tx.us/pfdsearch/pfds/582/12/582-12-5332-po1.pdf>.

SOAH HEARING OF CONTESTED CASE

On March 6, 2012, the TCEQ issued an Interim Order granting the requests of certain affected persons for a contested case hearing and referring the application to the State Office of Administrative Hearings (SOAH).¹⁷ Parties to the proceedings included the applicant (UTRWD), the Executive Director of TCEQ, the city of Flower Mound, National Wildlife Foundation (NWF), Texas Conservation Alliance (TCA), Office of Public Interest Counsel (OPIC), and nine affected individuals.¹⁸ By August 2012, the nine individuals withdrew from the proceeding.¹⁹ A contested case hearing proceeded in early 2013 and, on June 25, 2013, SOAH issued its Proposal for Decision recommending approval of the permit.²⁰

SOAH addressed several issues concerning compliance of UTRWD with relevant statutes and regulations on environmental and water rights. First, SOAH discussed whether UTRWD was required to release water to protect instream flows in the North Sulphur River downstream of the reservoir.²¹ Disregarding NWF's challenge, SOAH concluded that, because the river has already been considerably degraded, specific instream flow releases were unnecessary and would amount to a waste of water.²² NWF also proposed changes to certain special conditions to UTRWD's proposed mitigation of the abandoned river channel downstream of the dam (Restored Channel Mitigation Area).²³ SOAH largely disagreed with NWF on these proposals.²⁴ Second, SOAH held that UTRWD complied with all the statutory and regulatory conditions applicable to water conservation.²⁵ Furthermore, SOAH examined whether UTRWD met certain legal requirements on procedural issues, unappropriated water, beneficial use and impairment of water rights, public welfare, environmental flows, consistency with state water plans and approved regional water plans, water conservation, sedimentation, and environmental mitigation measures.²⁶ For these issues, SOAH ruled largely in favor of UTRWD.²⁷ On September 24, 2013, the Commission adopted SOAH's recommended Proposal for Decision and approved the permit.²⁸

17 State Office of Admin. Hearings, *Proposal for Decision* (SOAH Docket No. 582-12-5332, TCEQ Docket No. 2012-0065-WR), at 9, available at http://www.lakeralphhallinfo.com/pdf/Contested_Case_Hearing_-_Proposal_For_Decision.pdf (hereinafter Ralph Hall PFD).

18 *Id.* at 10.

19 *Id.*

20 *Id.* at 167.

21 *Id.* at 14-28.

22 *Id.* at 23.

23 *Id.* at 28-34.

24 *Id.*

25 *See id.* at 49, 59, and 76.

26 *See id.* at 80-123.

27 *Id.*

28 Tex. Comm'n on Env'tl. Quality, *Order Approving the Application of Upper Trinity Regional Water Dist. for Water Use Permit No. 5821*, TCEQ Docket No. 2012-0065-WR; SOAH Docket No. 582-12-5332 (Sept. 24, 2013), available at: http://www2.tceq.texas.gov/epic/eenf/index.cfm?fuseaction=search.load2&AGY_DKT_NUM_TXT=2012-0065-WR&doc_ed-613532772013283&doc_name=Order%202012-0065-WR.pdf&format_cd=pdf.

THE FUTURE

Lake Ralph Hall is expected to be completed by 2025.²⁹ Considering Lake Ralph Hall is 1 of 26 major reservoirs being planned in Texas,³⁰ the TCEQ and SOAH's interpretation of relevant statutes and regulations in this project may have critical implications for future reservoir projects.

Robin Smith is an attorney with the Texas Commission on Environmental Quality. Ms. Smith handles water rights, municipal solid waste, water quality and hazardous waste area matters. She has also worked with the Texas Water Commission, the Texas Supreme Court, and the Dallas Court of Appeals.

George Liu is a second-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

FEDERAL CASENOTE

KOONTZ v. ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT: MONETARY EXACTIONS SUBJECT TO *NOLLAN* AND *DOLAN*

On June 25, 2013, the U.S. Supreme Court held that a local government is subject to the heightened constitutional scrutiny analysis under *Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 512 U.S. 374 (1994), when it demands property or monetary exactions from a permit applicant, even when the permit application is denied.¹ The Supreme Court reversed the Florida Supreme Court's ruling in favor of the District, and remanded the case to the Florida Supreme Court to determine the appropriate remedy.²

BACKGROUND

Koontz owns a 14.9-acre tract of undeveloped land in Florida.³ To protect its water resources and wetlands, Florida enacted the Water Resources Act and the Warren S. Henderson Wetlands Protection Act.⁴ Because of this legislation, Koontz needed both a Management and Storage of Surface Water (MSSW) permit and a Wetlands Resource Management (WRM) permit from the District to develop a 3.7-acre portion of his land, which had previously been deemed wetlands.⁵ Koontz submitted his applications for these permits, including an offer to give the District a conservation easement on the remaining undeveloped land to mitigate the effects of his development.⁶ The District

29 Hundley, *supra* note 1.

30 *Id.*

1 Koontz v. St. Johns River Water Mgmt. Dist., 133 S. Ct. 2586, 2591 (2013).

2 *Id.*

3 *Id.* at 2591-92.

4 *Id.* at 2592.

5 *Id.*

6 *Id.*

gave Koontz the options of either: (i) developing on 1 acre and providing the District a conservation easement on the remaining land, or (ii) developing the 3.7 acre area, granting the District a conservation easement on the remaining land, and paying contractors to improve “approximately 50 acres of District-owned wetlands.”⁷

Koontz refused both of those options.⁸ Consequently, the District denied the permits and Koontz filed suit in Florida state court claiming the District’s actions were an unconstitutional taking of property without just compensation.⁹ The Florida Circuit Court originally granted the District’s motion to dismiss, but the case was reversed and remanded on appeal to the Florida District Court of Appeal for the Fifth Circuit.¹⁰ On remand, the Florida Circuit Court applied the nexus and rough proportionality rule from *Nollan* and *Dolan* and ruled in favor of Koontz.¹¹ The Florida District Court of Appeal affirmed.¹² The Florida State Supreme Court then reversed, holding that denial of the applications in this situation was distinguishable from granting applications with conditions that are the subject of *Nollan* and *Dolan*.¹³ The court also determined that a demand for money does not need to satisfy the requirements of *Nollan* and *Dolan*.¹⁴

TAKINGS UNDER *NOLLAN* AND *DOLAN*

The unconstitutional conditions doctrine prevents the government from compelling citizens to forfeit their constitutional rights to receive benefits such as land-use permits.¹⁵ “*Nollan* and *Dolan* ‘involve a special application’ of this [unconstitutional conditions] doctrine that protects the Fifth Amendment right to just compensation for property the government takes when owners apply for land-use permits.”¹⁶ *Nollan* and *Dolan* “reflect two realities of the permitting process.”¹⁷ One of the realities is that land-use permits are especially susceptible to the type of compulsion the unconstitutional conditions doctrine seeks to prevent because of the high value of the permit to the landowner and the government’s “broad discretion to deny a permit.”¹⁸ The other reality is that “dedications of property” are often necessary to balance costs to the public by the proposed land use.¹⁹ *Nollan* and *Dolan* take both of these realities into account by requiring the government to show a nexus and rough proportionality between the costs to the public and the property the government demands as a condition of permit approval.²⁰

7 *Id.* at 2593.

8 *Id.*

9 *Id.*

10 *Id.*

11 *Id.*

12 *Id.*

13 *Id.*

14 *Id.* at 2594.

15 *Id.* at 2595.

16 *Id.* at 2594.

17 *Id.* at 2595.

18 *Id.*

19 *Id.*

20 *Id.*

SUPREME COURT'S DECISION

Justice Alito, writing for the Court, held that the analyses in *Nollan* and *Dolan* apply to Koontz's applications regardless of whether the government is approving a permit with conditions that demand the applicant's property or denying a permit for refusal to comply with the conditions.²¹ The Court was concerned that any other holding would allow the government to circumvent the requirements of *Nollan* and *Dolan* and cause them to become a "dead letter" by rewording the conditions that demand the applicant's property as "precedent to permit approval."²²

The Court next addressed how a taking can occur when no property was actually taken. Under the unconstitutional conditions doctrine, the Court held that the Takings Clause is violated by the government's coercion of a landowner to give up his or her rights to a land-use permit.²³ However, the Court recognized that the remedy of just compensation is only available for takings when the permit condition has been imposed and the property has actually been taken.²⁴

The Court reasoned that a local government does not violate the unconstitutional conditions doctrine if it provides at least one avenue for permit approval that satisfies the requirements of *Nollan* and *Dolan*.²⁵ The Court rejected the District's suggestion that the option to allow Koontz to develop 1 acre of land and grant the District a conservation easement on the remaining property relieved the District of the obligation to satisfy *Nollan* and *Dolan* with regard to the offsite mitigation option.²⁶ Specifically, the Court noted that Koontz desired to develop 3.7 acres of his land and determined that an offer by the District to approve a "less ambitious project does not obviate the need to determine whether the demand for offsite mitigation satisfied *Nollan* and *Dolan*."²⁷

The final portion of the majority's opinion addressed whether a demand to spend money as opposed to a demand for an easement can form the basis of a takings claim.²⁸ To be successful on an unconstitutional conditions claim, one must satisfy the basic premise that the government, "could not have constitutionally ordered the person asserting the claim to do what it attempted to pressure that person into doing."²⁹ The majority rejected both the District's and the dissent's argument that spending money cannot form the basis of a takings claim and held that monetary exactions must meet the nexus and rough proportionality requirements.³⁰ The majority held that such monetary exactions are per se takings when they are connected to a "specific, identifiable property interest such as a bank account or parcel of real property."³¹

The Court voiced several reasons for its determination that monetary exactions are subject to *Nollan* and *Dolan* requirements. First, the Court was concerned that the Dis-

21 *Id.*

22 *Id.* at 2595-96.

23 *Id.* at 2596.

24 *Id.* at 2597.

25 *Id.* at 2598.

26 *Id.*

27 *Id.*

28 *Id.* at 2598-99.

29 *Id.* at 2599.

30 *Id.*

31 *Id.* at 2600.

trict's reasoning would allow a permitting authority to easily circumvent *Nollan* and *Dolan* by giving "the owner a choice of either surrendering an easement or making a payment equal to the easement's value."³² Next, the Court indicated that such payments are "functionally equivalent" to demands for easements and other land use exactions.³³ Finally, the Court stated that the payment at issue has a "direct link between the government's demand and a specific parcel of real property."³⁴ The Court equated Koontz's proposed payment to cases where the government takes a lien on the property.³⁵ Because of the burden placed on "petitioner's ownership of a specific parcel of land,"³⁶ the link raises the concerns *Nollan* and *Dolan* seek to address—that "the government may use its substantial power and discretion in land-use permitting to pursue governmental ends that lack an essential nexus and rough proportionality to the effects of the proposed new use of the specific property at issue, thereby diminishing without justification the value of the property."³⁷ The issue of whether money damages are available when there is only a *Nollan* and *Dolan* unconstitutional conditions violation and no taking was remanded back to the Florida Supreme Court.³⁸

LOOKING TO THE FUTURE AND CONCERNS OF THE DISSENT

The dissent raised concerns about the implications of this decision. First, extending *Nollan* and *Dolan* to monetary exactions will make it incredibly difficult to distinguish between an impermissible monetary exaction and a permissible demand to pay money, such as a tax or a fee.³⁹ This could create a potential "intrusion into local affairs" because it could encompass permitting fees such as those that "mitigate a new development's impact on the community" or "cover the direct costs of providing services like sewage or water" and would require adherence to the nexus and rough proportionality requirements.⁴⁰ Second, the majority's holding could prevent negotiation between permitting authorities and applicants for fear that suggestions during the negotiation process will be seen as impermissible demands.⁴¹ This could leave options off the table that would otherwise benefit both the applicant and the permitting authority and instead result in more outright denials of applications.⁴² Whether these concerns will materialize is unclear, but they are important for landowners and governmental entities to consider as they prepare and evaluate permit applications, respectively.

David J. Klein is a member of the Lloyd Gosselink Rochelle & Townsend, P.C.'s Water and Districts Practice Groups in Austin, where he focuses on representing water utilities, municipalities, water districts, water authorities and landowners with their water supply, water quality,

32 *Id.*

33 *Id.*

34 *Id.* at 2600.

35 *Id.* at 2599.

36 *Id.* at 2599.

37 *Id.* at 2600.

38 *Id.* at 2593.

39 *Id.* at 2607 (Kagan, J., dissenting).

40 *Id.*

41 *Id.* at 2610.

42 *Id.*

and water and sewer utility service interests. Mr. Klein earned his J.D. from The John Marshall Law School in Chicago, Illinois.

Kristin Garrett is a third-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

STATE CASENOTES

***PORT OF HOUSTON AUTHORITY v. AARON*, 415 S.W.3D 355 (TEX. APP.—HOUSTON [1ST DIST.] SEPT. 5, 2013, NO PET.)**

INTRODUCTION

In *Port of Houston Authority v. Aaron*, the First Court of Appeals reversed an order denying the Port of Houston Authority's claim of governmental immunity and rendered judgment dismissing the tort claims brought against the Port Authority by ninety-five property owners who live near the Bayport Terminal.¹

PROPERTY OWNERS' TORT CLAIMS

The Port of Houston is a twenty-five-mile long complex of marine terminals, industries, and other facilities.² The Port Authority is the political subdivision responsible for the operation of the Port's public marine terminals.³ The Bayport Terminal handles containerized cargo, which involves unloading containers from vessels, moving containers to the dock and container stacks, and placing containers on trucks for delivery.⁴

Ninety-five property owners living in a community near the Bayport Terminal filed suit against the Port Authority under the Texas Tort Claim Act (TTCA).⁵ Specifically, the property owners claimed nuisance and negligence per se caused by the Port Authority's operation of motorized cranes; the use of excessively loud horns, loudspeakers, alarms, and lights during the night; the emission of pollutants and noxious substances; and the failure to provide on-shore electrical service for vessels so that the vessels could avoid using pollution-emitting generators.⁶ The property owners specifically alleged that the Port Authority's operation of the Bayport Terminal "cause[s] excessive noise, light, and chemical pollution that interferes with the use and enjoyment of their homes and violates a municipal noise-control ordinance" and resulted in apprehension, loss of peace of mind, inability to sleep, mental anguish, and disruption of peaceful enjoyment of their

1 *Port of Hous. Auth. v. Aaron*, 415 S.W.3d 355, 358 (Tex. App.—Houston [1st Dist.] Sept. 5, 2013, no pet.).

2 *Id.*

3 *Id.*

4 *Id.*

5 *Id.* at 359; see TEX. CIV. PRAC. & REM. CODE ANN. §§ 101.001-.109 (West 2011 & Supp. 2012).

6 *Port of Hous. Auth.*, 415 S.W.3d at 359.

property.⁷ The property owners further claimed that their sleep deprivation caused “physical maladies, traumatic stress disorders, and extreme mental anguish.”⁸

PROPERTY DAMAGE INSUFFICIENT TO WAIVE GOVERNMENTAL IMMUNITY

The Port Authority moved for dismissal, claiming governmental immunity from both liability and suit.⁹ Absent express waiver of governmental immunity in the TTCA, the court of appeals held that the Port Authority immune from the plaintiffs’ suit.¹⁰ The court observed that section 101.021 of the TTCA only waives governmental immunity for: (a) property damage and personal injury resulting from the use of motor-driven equipment, or (b) personal injuries caused by a condition or use of tangible personal or real property.¹¹

The Port Authority asserted that purely economic loss of property value, along with the resulting mental anguish, were insufficient to constitute property damage or personal injuries to waive immunity under the TTCA.¹² Though the TTCA does not define “property damage,” the court did not reach the issue of what constitutes “property damage” under the TTCA because it instead found that the harm alleged by the property owners was common to the general community.¹³ The court relied on the community-damages rule that precludes recoveries when alleged injuries are the result of the operation of a public work and when alleged damages are suffered by the community as a whole.¹⁴ On that basis, the court of appeals held that the owners did not suffer damages sufficient to confer jurisdiction.¹⁵

The Port Authority also asserted that, under the TTCA, “personal injury” does not include mere mental anguish or its manifestations that are derived from property damage without some accompanying physical injury.¹⁶ The court of appeals agreed.¹⁷ Although the property owners claimed “sleep deprivation and resulting physical maladies, traumatic stress disorders, and extreme mental anguish,” the court found these claims were best characterized as mental anguish and physical manifestations of mental anguish.¹⁸

Noting that the TTCA only creates a waiver of governmental immunity and not a cause of action, the court determined that, as a matter of law, mental anguish based solely on negligent property damage is not a compensable damage.¹⁹ As such, the court did not reach the issue of whether the alleged damages were, in fact, “personal injuries” within section 101.021 of the TTCA because the property owners did not state a claim that would subject the Port Authority to liability.²⁰ The court held that the Port Au-

7 *Id.*

8 *Id.*

9 *Id.*

10 *Id.* at 363-64.

11 *Id.* (citing TEX. CIV. PRAC. & REM. CODE ANN. § 101.021(1), (2)).

12 *Port of Hous. Auth.*, 415 S.W.3d at 363-64.

13 *Id.*

14 *Id.*

15 *Id.*

16 *Id.* at 364-65.

17 *Id.*

18 *Id.*

19 *Id.*

20 *Id.*

thority retained its immunity.²¹ Accordingly, the court reversed the order of the trial court and rendered judgment dismissing the property owner's claims against the Port Authority.²²

AARON V. PORT OF HOUSTON. AUTH., No. 01-12-00640-CV, 2013 WL 4779716 (TEX. APP.—HOUSTON [1ST DIST.] SEPT. 5, 2013, NO PET. H.) (MEM. OP.)

INTRODUCTION

In a companion inverse condemnation case, *Aaron v. Port of Houston Authority*, the property owners living in the community near the Bayport Terminal sought compensation for the taking of their land pursuant to article I, section 17 of the Texas Constitution.²³ The First Court of Appeals affirmed the dismissal of those claims, holding that the property owners did not have a right to compensation under article I, section 17 for alleged damage to their property.²⁴

CONSTITUTIONAL TAKINGS CLAIMS

Article I, section 17 of the Texas Constitution mandates that adequate compensation be paid to property owners whose property is “taken, damaged or destroyed for or applied to public use.”²⁵ Governmental immunity may be waived for inverse condemnation and intentional nuisance claims that rise to the level of a constitutional taking.²⁶ The property owners asserted that the noise, light, and air pollution generated by the Bayport Terminal “substantially interfere[d] with the use, enjoyment, and benefits of the surrounding residential property,” constituting a taking of their property requiring compensation.²⁷ Similar to the preceding case, each property owner alleged the same harm without making property-specific claims.²⁸

The Port Authority filed two jurisdictional pleas, which asserted that: (a) the Port Authority maintained governmental immunity from the suit because the property owners did not plead a valid inverse condemnation or intentional nuisance claim by alleging only community damages; and (b) the property owners had not established that their properties were uninhabitable due to Bayport Terminal operations.²⁹

COMMUNITY-DAMAGES RULE PRECLUDES NON-PARTICULARIZED, COMMUNITY-WIDE RECOVERY

The court of appeals again relied upon the community-damages rule, noting that courts have construed article I, section 17 to only permit recovery when a property

21 *Id.*

22 *Id.*

23 No. 01-12-00640-CV, 2013 WL 4779716, at *1 (Tex. App.—Houston [1st Dist.] Sept. 5, 2013, no pet. h.) (mem. op.).

24 *Id.* at *1.

25 TEX. CONST. art I, § 17.

26 *Aaron*, 2013 WL 4779716, at *3.

27 *Id.* at *1.

28 *Id.* at *2.

29 *Id.*

owner's injury is not an injury suffered by the community generally.³⁰ The court looked to the Texas Supreme Court's explanations of the community-damage rule, stating that "[t]he concept of [community] damage is not primarily geographical."³¹ Rather, the relevant "community" depends upon the nature of the injury.³² As such, if the nature of the injury that is suffered by an individual property owner is common or similar to other property within the same community, the property is not considered constitutionally damaged.³³

The court further noted that Texas courts, including the First Court of Appeals, have previously concluded that the community as a whole that surrounds a public work may suffer from the noise, light, and air pollution resulting from the operation of the public work.³⁴ It also found that, in *Interstate Northborough Partnership v. Texas*, on which the property owners relied, the property owner was not barred from recovery by the community-damage rule because the property owner's increased proximity to the public work injured his property in a different way, not just a different degree, than others in the community.³⁵

The court determined that the plaintiff property owners did not specify any particularized damage to the various properties that was in any way unique from the damage suffered by the community as a whole.³⁶ Although it noted that some property owners were inevitably impacted more than others based on their location, the difference in damage was one of degree, and not kind, and therefore was not compensable under article I, section 17.³⁷ Furthermore, the property owners' allegations of injuries were purportedly shared among all the 500 class members in the community.³⁸ The court consequently indicated that the deficiencies in the pleadings would not be cured by an opportunity to amend.³⁹ Accordingly, the court of appeals affirmed the dismissal of the claims with prejudice.⁴⁰

Howard Slobodin is the General Counsel and Secretary, Board of Directors, of the Trinity River Authority of Texas in Arlington. He received his B.A. from The University of Oregon in 1998 (cum laude) and his J.D. from The University of Texas School of Law in 2001 (with honors).

Ashleigh Acevedo is a second-year student at The University of Texas School of Law and a staff member of the TEXAS ENVIRONMENTAL LAW JOURNAL.

30 *Id.* at *3 (citing *Felts v. Harris Cnty.*, 915 S.W.2d 482, 484 (Tex. 1996)).

31 *Id.* at *4 (quoting *State v. Heal*, 917 S.W.2d 6, 9 (Tex. 1996)).

32 *Id.* at *4 (citing *State v. Schmidt*, 867 S.W.2d 769, 781 (Tex. 1993)).

33 *Id.* (citing *Fort Worth Improvement Dist. No. 1 v. City of Fort Worth*, 158 S.W. 164, 168-69 (Tex. 1913)).

34 *Id.* at *5.

35 *Id.* (citing *Northborough P'ship v. Tex.*, 66 S.W.3d 213, 223 (Tex. 2001)).

36 *Id.* at *5.

37 *Id.* at *6.

38 *Id.* at *4.

39 *Id.* at *6.

40 *Id.*