Subsurface Water Rights in Louisiana

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I. Introduction

We never know the worth of water till the well is dry. ~

Thomas Fuller, Gnomologia, 1732

Louisiana is lucky to have been blessed with a relative abundance of subsurface water or “groundwater”; indeed, it’s common to hear of Louisiana as a “water-rich state.”1 Louisiana’s laws governing groundwater have developed against, and been informed by, this history of availability of this important resource. However, even in our water-rich state, groundwater resources have come under increased strain in recent years as the number of groundwater users and the magnitude of groundwater uses have grown.

Every day, approximately 8,700 million gallons (Mgal/d) of groundwater is withdrawn in this state.2 On a statewide basis, that withdrawal is divided according to user group as follows:3

- power generation 50%
- industry 30%
- irrigation (rice and general) 9.6%
- public supply 7%
- aquaculture 2.6%
- rural domestic/livestock .5%

Within the industry user group, the vast majority of the groundwater withdrawn is utilized for the manufacture of paper products (38%) and chemicals (38%).4 The water use report does not give a specific number for the oil and gas production-related withdrawals that fall within that user group; however, groundwater has been and is presently used in oil and gas production throughout Louisiana in varying degrees, in drilling operations as well as in secondary recovery operations like the hydraulic

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2 Water Use in Louisiana, 2005 (DOTD and USGS) at 115. This report can be found on the DNR website at http://dnr.louisiana.gov/cons/groundwater/reports/WaterUse05.pdf.
3 Id.
4 Id. at 117.
fracturing technique being employed by natural gas producers in the Haynesville Shale Play in Northwest Louisiana.

There can be little doubt that groundwater is, and will continue to be, a resource of major importance in this state to many user groups, including oil and gas producers. Consequently, it's helpful to understand the existing and possible future Louisiana legal regime with respect to groundwater rights and obligations, and to give some thought to the issues and challenges that exist with respect to groundwater rights in the specific context of oil and gas operations.

II. Louisiana's Absolute Ownership Rule

A. Pre-Mineral Code law

Under Louisiana law, groundwater is considered to be a fugacious mineral that, like oil and gas, is res nullius until it is reduced to possession and ownership. This analogy between groundwater and oil dates back to the early 1900s and is found in the few Louisiana decisions that mention, in dictum, the nature of groundwater.

Given the analogy of groundwater to oil and gas, it's not surprising that when finally confronted with the issue of competing users of a common reservoir, a Louisiana court of appeal held that the rule of capture applies. In Adams, owners of property in a subdivision who obtained their fresh water from water wells drilled into the Wilcox Aquifer brought suit against an oil operator who was drawing water from the same aquifer to conduct secondary drilling operations, claiming that the defendant's water withdrawals were depleting the common aquifer, depreciating their property values, and causing them to incur additional costs to continue to obtain groundwater from their own wells. Plaintiffs alleged that the Wilcox Aquifer was the only source of fresh water in the area, the aquifer is limited in the total amount of water it can provide, and the defendant could utilize a deeper, saltier formation that provided water suitable for its drilling needs. Based upon these allegations and


6 See, e.g., Rives v. Gulf Refining Co., 62 So. 623 (1913) ("'Water and oil . . . and still more strongly gas, may be classed by themselves, if the analogy be not too fanciful, as minerals ferae naturae. In common with animals, and unlike other minerals, they have the power and tendency to escape without the volition of the owner . . . They belong to the owner of the land, and are a part of it, and are subject to his control; but when they escape, and go into other land, or come under another's control, the title of the former owner is gone.'"'), Higgins Oil & Fuel Co. v. Guaranty Oil Co., 82 So. 206 (1919) ("The analogy between the subterranean oil and subterranean or percolating waters is, we believe, near complete . . . .")

7 Adams, 152 So. 2d at 624.

8 Id. at 620.

9 Id. at 620-21.
claims, the defendant operator filed an exception of no cause of action, which provided the procedural lens through which the Second Circuit Court of Appeal looked at the groundwater issue.

After holding that the Civil Code articles governing "running waters" and "natural drainage" upon which the Plaintiffs relied applied only to surface waters,\(^{10}\) the court began its analysis of Louisiana's groundwater regime by stating that it "willingly concede[d], in the absence of specific authority, that the resolution of the question presented must be approached and determined by analogy."\(^{11}\) Following the earlier dicta from the Rives and Higgins decisions, the court went on to state that "[t]he nature of oil and gas as fugitive substances and as minerals likened to 'ferae naturae' is too well established by the jurisprudence of our state to require citation or necessitate comment. . . . Subterranean waters, by analogy, must be classified with oil and gas as fugitive substances."\(^{12}\) The court reviewed the two competing common law rules employed in other states with respect to the ownership and use of groundwater – the "English Common Law" rule, which allows the owner of land to use the water below his land in any manner he saw fit, subject only to a restriction against "avoidable injury to his neighbor," and the "American Rule," a rule based upon the concept of "correlative rights" that allows landowners to make "reasonable use" of the waters beneath their land – and stated that while it "might be inclined . . . to adopt" the more equitable American Rule:

> We are of the opinion that such action would require a presumptuous and unjustified reversal of the large and uniform body of our jurisprudence with respect to the ownership of fugitive minerals as exemplified by the established determination of ownership of, and rights to, oil and gas.

* * *

The non-ownership of the owner of land in fugitive sub-surface minerals in place has been too long and too well established to admit of further question.\(^{13}\)

Carrying the analogy between groundwater and oil and gas to its conclusion, the court recognized that "the right of defendant in the instant case to use an unlimited and unregulated amount of water from a well drilled on his own land cannot be interfered with" by the court unless the alleged damages to the aquifer were caused by his "intent or negligence."\(^{14}\) The court went to pains to point to the legislature as the

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\(^{10}\) See current La. Civ. Code arts. 657-58 (running waters) and 655 (natural drainage).

\(^{11}\) Adams, 152 So. 2d. at 622.

\(^{12}\) Id.

\(^{13}\) Id. at 623.

\(^{14}\) Id. at 624.
only source of possible limits on this “rule of capture,” stating that “[u]nder the law and jurisprudence of this state the regulation of the amount of oil and gas withdrawn from a well was not regulated by our courts, but was only established and controlled by enactment by the Legislature of statutory conservation measures.”

Absent such statutory measures, the courts are “without authority” to establish limits on the use of groundwater by landowners; thus, the court held, seemingly reluctantly, that “the coincidental damages suffered by plaintiffs must be regarded as damnum absque injuria.”

Even though the Adams decision was decided almost fifty years ago, it remains the only Louisiana decision to address directly the issue of a landowner’s right to utilize groundwater. At least one commentator has opined that the Adams court’s adoption of the “Absolute Ownership” rule was hardly inevitable, and Louisiana’s “abuse of rights” doctrine could have supported a more equitable rule. Nonetheless, the Adams court believed itself constrained to adopt the Absolute Ownership rule, at least until the Louisiana Legislature jumps into the fray with a statutory alternative to, or limitation on, the operation of this rule. In any event, as commentators have noted, the Absolute Ownership rule is arguably supported by the ad coelum principle of Civil Code article 490 (which, surprisingly, was not cited by the Adams court), which states that “[u]nless otherwise provided by law, the ownership of a tract of land carries with it the ownership of everything that is directly above or under it.”

Under Louisiana’s pre-Mineral Code law, it was accepted that a landowner could alienate or lease his exclusive right to reduce groundwater to possession and ownership. Civil Code article 699 continues to list the right “of drawing water” as an example of a predial servitude, and the jurisprudence contains several decisions involving servitudes of drawing water.

B. The Mineral Code

Since 1975, the issue of rights to, and ownership of, groundwater has been governed by the Mineral Code, which specifically provides that

\[ \text{http://digitalcommons.law.lsu.edu/mli_proceedings/vol57/iss1/16} \]
"[t]he provisions of this Code are applicable to all forms of minerals, including oil and gas," and "[t]hey are also applicable to rights to explore for or mine or remove from the land . . . subterranean water." Thus, while the Mineral Code does not directly state that groundwater is a "mineral" like oil and gas, it does provide expressly that groundwater is subject to the Code.

While no court has addressed whether the Mineral Code alters the pre-Mineral Code law as described in Adams, the prevailing view seems to be that the Code has resulted in little, if any, change. Echoing the language of the Adams court, Mineral Code article 6 provides that:

Ownership of land does not include ownership of oil, gas, and other minerals occurring naturally in liquid or gaseous form . . . . The landowner has the exclusive right to explore and develop his property for the production of such minerals and to reduce them to possession and ownership.

Further, Article 8 gives the landowner the right to "use and enjoy his property in the most unlimited manner for the purpose of discovering and producing minerals, provided it is not prohibited by law" and affirms that "[h]e may reduce to possession and ownership all of the minerals occurring naturally in a liquid or gaseous state that can be obtained by operations on or beneath his land even though his operations may cause their migration from beneath the land of another." This "Absolute Ownership" rule appears to be tempered somewhat by Article 9, which states that "[l]andowners and others with rights in a common reservoir or deposit of minerals have correlative rights and duties with respect to one another in the development and production of the common source of minerals"; however, Article 10 goes on to limit the scope of Article 9, providing that:

A person with rights in a common reservoir or deposit of minerals may not make works, operate, or otherwise use his rights so as to deprive another intentionally or negligently of the liberty of enjoying his rights, or that may intentionally or negligently cause damage to him. This Article and Article 9 shall not affect the right of the landowner to extract liquid or gaseous minerals in accordance with the principle of Article 8.

21 Klebba, supra, at 1830 ("in view of the dearth of references to groundwater in the Mineral Code, it can be ventured that while the Mineral Code didn’t advance groundwater law in Louisiana, neither did it represent a retrogression. It seems not to have changed the law, nor was there any expressed attempt to do so."); Levine, supra, at 1131 ("had the Mineral Code been in force when Adams was decided, the result would not have differed.")
Adams is cited in the Comment to Article 10, lending further support to the conclusion that the Mineral Code’s regime does not differ significantly from the pre-Code law. Thus, Louisiana law appears to continue to provide for “absolute ownership” by a landowner, subject only to liability for “waste”—i.e., damage caused intentionally or negligently by the landowner. And, as in pre-Code law, the landowner may grant a servitude or lease with respect to his exclusive right to reduce groundwater to possession and ownership; since 1975, such an interest would be governed by the rules applicable to mineral servitudes or mineral leases.

Commentators have debated the wisdom of including groundwater within the Mineral Code. Professor Klebba of Loyola Law School reasons that:

In retrospect, it may have been a mistake for the drafters of the Mineral Code to have included groundwater within the ambit of a document that was so heavily oriented toward the petroleum industry. Superficially, water is a fugitive substance much like oil, but there are important differences in the way it moves in geological formation and the fact that supplies of surface water and groundwater are closely connected. In contrast to oil, water in an aquifer can usually be replaced (recharged) within a reasonable timeframe, and “safe yield” or “sustained yield” are usually desired management objectives; “mining” is normally frowned upon. Moreover, important differences in the uses to which water is put, particularly its uses on the overlying land and by those who live there, might dictate a different legal regime for water than for oil.24

Another writer is more emphatic in denouncing this “error,” stating that:

The Mineral Code’s approach to groundwater is identical to its regime for all fugacious minerals; its present application to groundwater, however, is a serious error. None of the highly developed and constitutionally tested mechanisms for the regulation of oil and gas—mechanisms that operate as restraints on the rule of capture—apply to ground water. Absent such modifications and controls, the Mineral Code, like the absolute ownership doctrine, encourages the unbridled use of ground water and, in turn depletion of aquifers.25

Whether erroneous or not, Louisiana’s continued application of the Absolute Ownership rule places it in a “distinct minority” with respect to other states and their groundwater regimes.26

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24 Klebba, supra, at 1830.
25 Levine, supra, at 1131-32.
26 Klebba, supra, at 1831.
III. State Regulation of Groundwater Use

In Adams, the court recognized the need for, and even invited, legislative action to address the issue of groundwater utilization. The Mineral Code was thereafter enacted; however, consistent with the concept of a "code" in this civil law-based system, it articulates only the general rules and principles applicable to mineral law. However, as any oil and gas practitioner in this state knows, the "absolute ownership" rule of the Mineral Code has been significantly modified as the result of the enactment of a comprehensive body of conservation laws and regulations governing oil and gas development.

The Louisiana Supreme Court thoroughly explained the purpose, history, and legal regime of the state's oil and gas unitization law in Nunez v. Wainoco Oil & Gas Co., 488 So. 2d 955, 959-64 (La. 1986). With respect to the law's purpose, the court described the science behind oil and gas production, the need to "employ a reasoned and proportionate use of the reservoir energy if production is to bring to the surface the greatest percentage of recoverable oil," and the inefficiency and "immeasurable waste" that can result when such a "reasoned" use of this energy is not made. With respect to the substance of the law, the court noted the specific powers given by the legislature to the Commissioner of Conservation to establish compulsory drilling units for the "pooling" of the mineral interests in separate tracts and to designate the optimum location for unit wells. Citing Mire v. Hawkins, 186 So. 2d 591 (La. 1966), the court explained that the unitization law is a "departure from the traditional notions of private property" that modifies the "exclusive authority" given to landowners by Civil Code articles 477 and 490 with respect to the land surface and subsurface. These modifications are consistent with both: (1) the modern amendments to Articles 477 and 490 that added express language to the articles that made it clear that the "exclusive authority" described in the articles is subject to being limited by other laws, and (2) Louisiana Constitution article I, §4, which subjects private property rights to "reasonable statutory restrictions and the reasonable exercise of the police power." Based upon these principles, the court held that the unitization law "effectively amends La.

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27 488 So. 2d. at 960.
28 Id. at 961.
29 Id. at 962.
30 See La. Civ. Code art. 477 ("Ownership is the right that confers on a person direct, immediate, and exclusive authority over a thing. The owner of the thing may use, enjoy, and dispose of it within the limits and under the conditions established by law."); art. 490 ("Unless otherwise provided by law, the ownership of a tract of land carries with it ownership of everything that is directly above or below it. The owner may make works on, above, or below the land as he pleases, and draw all the advantages that accrue from them, unless he is restrained by law or the rights of others.")
Civ. Code art. 490 and other private property laws in the interest of conserving the natural resources of the state and, in effect, of protecting private property interests, or 'correlative rights,' of nondrilling landowners.31

Given the analogy of groundwater to fugitive minerals like oil and gas, as well as the treatment of groundwater like oil and gas under the Mineral Code, the logical question that follows is whether a similar comprehensive body of conservation laws also exists in this state with respect to groundwater, which shares the fugitive quality of oil and gas and raises additional thorny issues of competing uses and preservation of the resource for future users. The answer, at least for now, is a resounding "no," at least with respect to a truly comprehensive groundwater regime, though the legislature has enacted statutes governing certain aspects of groundwater use in the state and created a commission to study and recommend a comprehensive groundwater plan.

The backdrop of Louisiana’s statutory groundwater law is the same for groundwater as it is for the state’s other natural resources. In particular, Louisiana’s general policy concerning the conservation of natural resources such as groundwater is set forth in Article IX, Section 1 of the Louisiana Constitution, which reads as follows:

§1. Natural Resources and Environment; Public Policy
The natural resources of this state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people. The legislature shall enact laws to implement this policy.

This constitutional provision is a statement of policy rather than a self-executing constitutional right.32 Consequently, the primary responsibility for carrying out the policy rests with the state legislature and state agencies exercising their legislatively granted powers.33

31 488 So. 2d at 963.
32 See Lee Hargrave, “The Public Trust Doctrine: A Plea for Precision,” 53 La. L. Rev. 1535, 1542 (1993) (“This language was adopted instead of a provision establishing a self executing constitutional right. The chairman of the committee that drafted the proposal explained, ‘We heard amendments by members of our committee who wanted to provide a citizen with the right to sue in our constitution.’ But the votes were not sufficient to adopt this right.”). See also Steven J. Levine, Comment, “Ground Water: Louisiana’s Quasi-Fictional and Truly Fugacious Mineral,” 44 La. L. Rev. 1123, 1140 (1984) (the “language [of Article IX, Section 1] may be regarded as hortatory or aspirational, rather than mandatory”).
In several substantive areas, the legislature has utilized its public trust authority to enact statutes and create a permit procedure administered by a state agency designed to ensure that operations and activities conducted in the state will not pose a substantial risk to human health or the environment.\textsuperscript{34} Groundwater utilization is not one of the areas in which the legislature has created such a general permitting scheme. Such a program was proposed in 1972, but it died in committee.\textsuperscript{35} Instead, groundwater utilization has been addressed by the legislature in a series of statutes that are, at present, limited in scope.

The generally applicable groundwater provisions are found in Chapter 13-A and 13-B of Title 38 of the Revised Statutes entitled “Utilization of Ground Water Resources” and “Ground Water Resource Management,” respectively. Section 38:3091, the initial provision of Chapter 13-A, provides that:

The utilization of ground water resources is hereby found and declared to be a matter of public interest.

It is the purpose of this chapter to provide for the efficient administration, and gathering of data concerning ground water resources of the State of Louisiana.

Chapter 13-A is administered by the Commissioner of Conservation, who is given the authority to make rules and regulations providing for, among other things, registration of water wells, establishment of well-construction standards, and collection of information regarding wells and groundwater usage.\textsuperscript{36} Chapter 13-A does not provide the Commissioner with the authority to limit groundwater pumping or usage in any manner.

Section 38:3097.1, the initial provision of Chapter 13-B, describes the state’s ultimate goals with respect to the management of groundwater resources, using language that is both emphatic and expansive:

As the effective management and planning in the utilization of the state’s water resources is hereby found and declared to be a matter of public interest, the state must have a comprehensive ground water management program. Said program must take into


\textsuperscript{36} La. R.S. 38:3093-94.
consideration the requirements, needs, and obligations of all stakeholders of water in the state of Louisiana. The program shall be based on good management practices, sound science, and economics according to generally accepted principles in those disciplines. It must include as a goal the long-term sustainability of the state's ground water aquifers and preservation of the state's ecological welfare, while considering the economic value thereof to the state's role in interstate commerce and the economic welfare of its citizens. Further, it must provide for the efficient administration in the utilization and management of ground water resources, including the gathering of data related to the state's water resources. Thus, the state's water resources must be protected, conserved, managed, and replenished in an effective manner, with due regard for the foregoing considerations and in the best interest of all the citizens of the state. 37

Section 3097.1 further instructs that "the statewide groundwater resource management program and any rule, regulation, or order of the commissioner shall recognize historic use of groundwater resources in the state." Despite the breadth of this language, the remainder of the chapter falls far short of the referenced "comprehensive ground water management program." Instead, it: (1) provides the Commissioner of Conservation with substantive powers to regulate groundwater usage in limited circumstances; and (2) creates a Ground Water Resources Commission with the duty to "continue the development, in cooperation with the commissioner, of a statewide groundwater resource management program." 38

With respect to the substantive powers given to the Commissioner, Chapter 13-B authorizes the Commissioner to regulate groundwater usage (through the making of rules, regulations, and/or orders) to: (1) do "all things required" to prevent waste of water resources, and (2) prevent or alleviate damaging saltwater movement, water level decline and loss of aquifer sustainability, subsidence, and/or adverse effects on an existing well through the placement of pumping restrictions on wells that are (a) large volume wells, or (b) within a "critical area of groundwater concern." 39 A "large volume well" is defined as a well with "an exterior casing size of eight inches or greater in diameter or as defined by rules and regulations promulgated by the commissioner." 40

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37 La. R.S. 38:3097.1(A) (emphasis added).
38 La. R.S. 38:3097.4.
39 La. R.S. 3097.3. With respect to wells that do not fall within these categories, the Commissioner may only regulate the spacing of the wells, not their allowable production. La. R.S. 38:3097.3(C)(4)(b)(ii).
40 La. R.S. 38:3097.2(9).

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http://digitalcommons.law.lsu.edu/mli_proceedings/vol57/iss1/16
Commissioner used its authority pursuant to the statute to add an additional category to this definition, providing by rule that the term “large volume wells” also includes a well or group of wells used for hydraulic fracturing for natural gas production. A “critical area of groundwater concern” is an area that must be declared by the Commissioner and is defined as an area “in which, under current usage and normal environmental conditions, sustainability of an aquifer is not being maintained due to either movement of a salt water front, water level decline, or subsidence, resulting in unacceptable environmental, economic, social, or health impact, or causing serious adverse impact to an aquifer, considering the areal and temporal extent of all such impacts” and in which “sustainability cannot be maintained without withdrawal restrictions.” In such an area, the Commissioner may make orders restricting groundwater withdrawals, considering: (1) groundwater for human consumption and public health and safety has the highest priority; (2) all other uses have equal priority; (3) historical use; (4) the ability, including economic ability, of a particular user to relocate to an alternative source of water; and (5) the user’s conservation efforts and actual reductions in water usage, taking into account historic groundwater production. Thus far, the only such areas designated by the Commissioner as “critical areas of groundwater concern” are three portions of the Sparta Aquifer in north Louisiana designated by the Commissioner in August, 2005.

In addition to these generally applicable statutes, the legislature has enacted statutes regulating groundwater usage in certain regions of the state in which groundwater availability has been of particular concern. Section 38:3087.131 et seq. establish the Sparta Groundwater Conservation District in North Central Louisiana for the purpose of “conduct[ing] a study and survey of groundwater resources in the district, including, but not limited to, consideration of what is necessary or advisable to conserve groundwater resources and where appropriate, prevent or alleviate damaging or potentially damaging drawdowns, land

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41 LAC 43:VI:103. The well or wells must be capable of producing 1,500 gallons per minute. A group of wells must be within the same lease or unit and screened in the same aquifer.

42 La. R.S. 38:3097.2(1). In October, 2008, the Commissioner issued a “Ground Water Use Advisory” in which he expressed some concern with respect to the sustainability of the Carrizo-Wilcox Aquifer in northwest Louisiana and asked oil and gas operators to use alternate water sources (surface water or the Red River Alluvial Aquifer) for their drilling and hydraulic fracturing operations in that area of the state. See http://dnr.louisiana.gov/sec/execdiv/pubinfo/newsr/2008/1016con-gwater-advisory.ssi.

43 La. R.S. 38: 3097.6(B)(3).

44 The District includes the parishes of Bienville, Bossier, Caddo, Caldwell, Claiborne, Jackson, LaSalle, Lincoln, Morehouse, Natchitoches, Ouachita, Richland, Sabine, Union, Webster, and Winn. La. R.S. 38:3087.131.
surface subsidence and groundwater quality degradation. These statutes do not provide any authority for the Commissioner to limit groundwater use in the affected area.

Section 38:3071 and the subsequent articles establish the Capital Area Groundwater Conservation District, which encompasses the Baton Rouge, Pointe Coupee, and Feliciana parishes. In contrast to the Sparta District, the Capital Area District’s powers are extensive, encompassing the “authority to do all things necessary to prevent waste of groundwater resources and to prevent or alleviate damaging or potentially damaging subsidence of the land surface caused by withdrawal of groundwater within the district.” Specific powers include, among other things, the power to: (1) require permits for the drilling of water wells with a fifty thousand gallons per day capacity, (2) specify well spacing upon a showing that water quality, withdrawal quantity, or subsidence threatens the public interest, (3) establish groundwater use priorities where groundwater depletion is threatened; (4) take necessary steps to prevent intrusion of saltwater or other pollutants into the aquifers, including controlling the pumping rates of users in the affected area; and (5) limit production rates when there is a danger to the quality or quantity of water, or when the danger of damaging subsidence exists. While these powers are extensive, certain wells are exempted from the district’s regulation, including (but not limited to) shallow wells, wells in the Mississippi River Alluvial Aquifer, and wells “used exclusively for bona fide agricultural or horticultural purposes” or domestic use, regardless of the volume pumped from such wells.

As the foregoing statutes demonstrate, the existing legislative scheme with respect to groundwater regulation is a mixed bag. Generally speaking, the rule of capture (“Absolute Ownership rule”) applies, allowing any landowner the right to extract an unlimited quantity of water from beneath his property limited only by a prohibition against “waste.” However, the Commissioner of Conservation does have the

46 La. R.S. 38:3076(A).
47 La. R.S. 38:3076.
48 Any order limiting production rates cannot “have the effect of in any way denying to any owner of land or any other person holding rights to water derivative from any landowner a reasonable opportunity to produce and beneficially use his just and equitable share of the groundwater supply.” La. R.S. 38:3076(B). Further, the Board of Commissioners has no authority to regulate “water produced from formations producing oil or gas or both for commercial purposes or to issue any rule, regulation, or order conflicting with regulation of drilling to and production from or disposition of water from such formations by the commissioner of Conservation.” La. R.S. 38:3076(C). Finally, the Board is prohibited from regulating (or assessing pumping charges for) wells shallower than 400 feet, wells in the Mississippi River Alluvial Aquifer, and wells used exclusively for bona fide agricultural/horticultural purposes or domestic use. La. R.S. 38:3076(D).
power to limit pumping with respect to both large-diameter wells and fracking wells throughout the state. In one area of the state (Baton Rouge), the Capital Area Groundwater District (in cooperation with the Commissioner of Conservation) has the power to regulate and limit groundwater use generally, but certain classes of wells and use (agriculture and domestic) are exempted from regulation even in this area. And elsewhere, the Commissioner can declare “critical” areas in which he has the authority to limit pumping from any well, giving priority to human consumption uses and considering, among other things, “historical use.” Thus, the scheme contains some rules based on geography, other rules based on the type of use or size of the well, and general statements concerning the “priority” of uses and directing that “historical use” is to be taken into account (though it is not determinative). This lack of uniformity is not surprising given the fact that Louisiana has continued to be perceived as a “water-rich” state, making it difficult to overcome the resistance of certain user groups to the idea of restricting groundwater use in a statewide, comprehensive manner. However, there is little doubt that the state’s days as a limitless fountain of groundwater will eventually wind to a close – sooner, perhaps, than most people think.

There are indications that the state’s focus on groundwater regulation has sharpened in the last year or two. In the 2008 legislative session, the legislature enacted Act 581, providing the Commissioner of Conservation with new authority to issue compliance orders and issue civil penalties for violations of state laws and regulations governing groundwater compliance, and the Commissioner has already made use of this authority by conducting compliance audits throughout north Louisiana and issuing over 150 compliance orders and dozens of notice of violation. In 2009, the Commissioner added hydraulic fracturing wells to the list of regulated wells, utilizing for the first time the power delegated by the legislature to add to the definition of “large volume wells.” Further, in October, 2008, Governor Jindal announced his new appointments to the Ground Water Resources Commission, and the Commission began its meetings and deliberations in the quest to come up with the comprehensive groundwater regulation plan that thus far has eluded the state. It remains to be seen whether the present incarnation of the Commission will be able to put together a comprehensive groundwater plan that is able to garner a consensus that such a plan is needed now and overcome the historic resistance to regulation.

IV. Some Issues with Respect to Groundwater Use in Oil and Gas Operations

So what are the implications of the foregoing with respect to oil and gas production? While there do not appear to be any reported Louisiana decisions addressing issues of groundwater use in the context of mineral
development, it's not difficult to formulate, though perhaps not resolve, a few issues that could arise in the future.

The first such issue is the means by which a mineral right holder can obtain the right to utilize groundwater. As discussed above, the Mineral Code (like pre-Code law) allows a person other than the landowner to obtain the right to utilize groundwater from beneath the landowner's property by obtaining a conventional servitude or lease. Consistent with the Absolute Ownership rule, the Mineral Code does not appear to limit the quantity of the groundwater that can be used, so long as the user does not commit "waste"—i.e., "intentionally or negligently" deprive other users of the aquifer of enjoying their rights or cause damage to them.

Thus, absent any pumping restrictions imposed by the Commissioner of Conservation (or the Capital Area Commissioner) pursuant to the provisions discussed above, the holder of an express water servitude or lease would appear to be able to draw an unlimited quantity of groundwater that could be utilized on any tract or tracts for drilling and production operations, absent a limitation in the contract that established his interest.

Can a groundwater user obtain a general water servitude via acquisitive prescription? While the Civil Code now provides for acquisitive prescription with respect to apparent servitudes (i.e., servitudes that are "perceivable by exterior signs, works, or constructions"), the Mineral Code provides that "[m]ineral rights may not be established by acquisitive prescription." Given that the Mineral Code expressly applies to "rights to explore for or mine or remove from the land . . . subterranean water," it would appear that even if the drawing of water by someone other than the landowner is done through the use of visible works or constructions (i.e., a water well), the user will not acquire a water servitude. The only argument that he would be able to make in this regard is that his surface activities were of sufficient magnitude to allow him to acquire ownership of the land itself, which carries with it the right to draw the groundwater from below the land.

Does an ordinary mineral servitude or mineral lease include the right to draw groundwater? The Mineral Code does not state that groundwater is a mineral and, in any event it does not purport to define the term "mineral" for all purposes, including the construction of a

\[49\] See La. R.S. 31:6, 8, 15.  
\[50\] La. R.S. 31:10.  
\[52\] La. R.S. 31:159.  
\[53\] See La. R.S. 31:160 ("When title to land is perfected by a possessor on the basis of acquisitive prescription, the title includes mineral rights to the extent that his possession included mineral rights for the required prescriptive period.")
particular conveyance of mineral rights. Thus, the question of whether a particular substance is included or excluded from a conveyance of a mineral right is a fact-specific question that depends upon the specific language of the conveyance and, in ambiguous cases, additional evidence of the parties' intent. It's not difficult to find a dictionary definition of the word "mineral" that expressly includes water. Thus, an argument can be made based upon the standard-type language contained in many leases (e.g., "oil, gas, and other minerals") that water is included. However, considering the totality of a mineral servitude or lease (including the "exclusive right" language that would effectively deprive a mineral lessor of the right to use groundwater from beneath his own property for his own use (domestic, agricultural, etc.) and the provisions relating to the necessity of paying royalties on "minerals" produced), it seems likely that absent unusual circumstances, a mineral lease (and, presumably servitude) would not be interpreted to include water as a "mineral" in the granting clause.

While it is unlikely that a garden variety mineral servitude or lease would be held to include groundwater as a "mineral" subject to the granting clause, this does not mean that the servitude or lease holder lacks the right to make use of the groundwater beneath the tract subject to the mineral right. Many leases include language allowing the use of the surface of the land "for all purposes" that are "necessary," "incidental," and/or "useful" to the exploration and production of the minerals covered by the lease. Even if such language is lacking, Louisiana courts have held that unless such use is restricted by the lease itself, a mineral lessee has the right to use the surface of the land to the extent reasonably necessary to drill for oil and gas. This right to use the surface has been held to include the right to make uncompensated use of "soil" (which, like "subterranean water" is expressly subject to the

54 La. R.S. 31:4 (Comment).
55 See, e.g., Holloway Gravel Co. v. McKowen, 9 So. 2d 228 (La. 1942).
56 See, e.g., Merriam Webster's Collegiate Dictionary (10th ed) (defining "mineral" as, among other things, "any of various naturally occurring homogeneous substances (as stone, coal, salt, sulfur, petroleum, water, or natural gas) obtained usu. from the ground").
57 See, e.g., Holloway Gravel Co, 9 So. 2d at 232-33 (holding that reservation of "mineral, oil, and gas rights' with respect to rural property did not include rights to mine sand and gravel, which could not be removed from the land without destroying its surface for agricultural and grazing purposes).
58 See Caskey v. Kelly Oil Co., 737 So. 2d 1257, 1263 (La. 1999) ("Even in the absence of a clause setting forth the types of surface activities the lessee may engage in on the leased premises, the lessee has an implied right to use the surface to the extent 'reasonably necessary' to explore for and drill oil and gas wells."); Rohner v. Austral Oil Expl. Co., 104 So. 2d 253, 255 (La. App. 1st Cir. 1958). With respect to mineral servitudes, see La. R.S. 31:22 ("The owner of a mineral servitude . . . is entitled to use only so much of the land as is reasonably necessary to conduct his operations.")
Mineral Code pursuant to Article 4) found on the leased premises in constructing a well site, so long as the amount of such soil used is not unreasonable or excessive.59 This right to use the surface is, however, subject to the express or implied obligation of the lessee (or servitude holder) to restore the property to its original condition.60

While groundwater is not, strictly speaking, part of the “surface” of land, the drilling of a water well on the leased property could be considered to be a use of the surface for a purpose “necessary” and “incidental” to drilling and production activities within the scope of the foregoing rules. Further, there can be little dispute that the right to capture and use groundwater is a right that appertains to the “surface” of the land insofar as only the surface owner or a party holding a servitude or lease from him enjoys the right of capture.61 Under either rationale, it can be argued that the right to drill for and utilize groundwater from beneath the leased premise is one of the “necessary” and/or “incidental” rights that comes along with a mineral servitude or lease (unless expressly excluded).

Under this rationale, such use of the groundwater would presumably come with the same limitations that apply with respect to the exercise of other “incidental”-type uses. First, the mineral servitude or lease owner could use only so much groundwater as is “reasonably necessary” for its drilling and production operations on the property subject to the mineral right or property unitized therewith, absent an “adjacent lands” clause that could authorize off-property use.62 Second, the servitude or lease owner would be subject to the rule that he must exercise his right “with reasonable regard” for the rights of the landowner.63 This particular principle could prove challenging to apply to groundwater, which the landowner may be utilizing for his own purposes and/or with respect to the portion of the surface that is not being utilized for mineral development (for example, to irrigate crops or to water animals).64 Finally, the groundwater use would presumably be subject to the

60 La. R.S. 31:22 and 122; Prather, 563 F. Supp. at 1368.
61 La. R.S. 31:6, 8, 10.
62 See, e.g., Caskey, 737 So. 2d at 1262-64.
63 See id., See also La. R.S. 31:11 and 23.
64 For example, it would seem anomalous to require a mineral lessee to restrict his surface operations to that portion of the land reasonably necessary for his operations, but then allow him to withdraw so much water from the subsurface in conjunction with those operations that the landowner/lessor would be functionally unable to use the farmland on his property that is not being occupied by the mineral lessee.
requirement that the mineral servitude or lease holder must restore the property to its original condition, though it is very difficult to see how (or even if) this “restoration” requirement could be applied to groundwater.

With respect to the restoration issue, both the jurisprudence and, now, statutory law have provided that the restoration obligation can include restoring groundwater quality that has been damaged by a mineral right holder. In *Corbello v. Iowa Production*, 850 So. 2d 686, 698-701 (La. 2003), the Louisiana Supreme Court held that even though a landowner does not “own” groundwater beneath his property, he can recover damages from the mineral lessee for contamination of the groundwater that occurred as a result of the lessee’s operations. Since *Corbello*, the legislature has enacted two statutes that modify the *Corbello* holding in certain respects. Specifically, Louisiana Revised Statutes 30:2015.1 governs the recovery of damages “for the evaluation and remediation of any contamination or pollution that is alleged to impact or threaten usable groundwater,” and Revised Statutes 30:29 govern the recovery of “environmental damages,” defined as “any actual or potential impact, damage, or injury to environmental media” caused by contamination resulting from activities associated with oilfield sites or exploration and production sites.

As the quoted language makes clear, *Corbello* and the two statutes address only the issue of “contamination,” which is generally considered to be an issue of groundwater quality; none of these authorities contains any language indicating that groundwater quantity can similarly provide a basis for a damages award and/or “restoration,” and the potential applicability of a duty to restore the “quantity” of groundwater raises a multitude of questions. Does the difference in the law between groundwater quality (which has long been regulated by specific environmental statutes proscribing contamination) and quantity (which, as discussed above, is generally not subject to regulation) support the exclusion of groundwater quantity from the restoration obligation? Is there really a difference between quality and quantity in this context after all? Groundwater isn’t actually consumed in mineral operations, at least not completely; rather, at least a portion of the groundwater utilized in drilling and production operations is recovered, but only after it has been so altered during the course of drilling and production operations that it would be undesirable and potentially dangerous to “put it back” into a potential drinking water aquifer after its use, even if such replenishment could be accomplished logistically. Does the fact that it can be recovered, though in a different quality, support an argument that it has

65 This includes, but is not limited to, groundwater.

66 Louisiana has specific rules that govern the handling and disposal of such post-drilling and production water. See Statewide Order 29-B.
merely been functionally “contaminated” beyond the capacity to be remediated, thereby bringing it within the rules that allow for the recovery of damages for “contaminated” groundwater? Could Revised Statutes 30:2015.1 and 30:29 even be applied under this theory insofar as they provide for actual remediation rather than merely the recovery of a lump sum damage award?

As the foregoing makes clear, there are many unresolved issues in Louisiana law with respect to the rights and obligations of mineral servitude and lease holders in relation to groundwater use. While the dearth (indeed, absence) of jurisprudence has given little guidance thus far, it does appear that a mineral servitude or lease holder is in a better position if he holds a water right servitude or lease or includes in his mineral servitude or lease a provision expressly providing for an equivalent right; in such a case, he has the right to actually consume the groundwater, which is not subject to a duty of “restoration.”

V. Conclusion

Despite their obvious and increasing practical importance, rights in groundwater (or “subsurface water”) Louisiana have been the subject of little judicial attention and only moderate legislative action thus far. It can be stated with relative confidence that the Absolute Ownership rule is alive and well, subject to: (1) a prohibition against waste; and (2) certain statutory limitations that govern certain wells and/or certain areas of the state. It can also be stated with some certainty that a landowner’s right to utilize the groundwater beneath his property can be conveyed to another in the form of a servitude or lease that is governed by the Mineral Code. Beyond these principles, there is significantly less certainty.

Given the growing importance and use of groundwater, it’s likely that there will be litigation in the foreseeable future that addresses at least some of these issues. It’s also possible that legislative action will occur as a result of the ongoing activities of the Ground Water Resources Commission. Consequently, it seems fair to say that as a state, we are still in the infancy or perhaps adolescence of our groundwater rights development, and the true identity of our groundwater law regime will emerge fully only in future years.

[Editor’s note: Attached is a slide presentation that accompanied Ms. Duarte’s paper. It was prepared and presented by Bruce K. Darling.]
Groundwater Use in Louisiana: Sources of Information and a Few Key Issues
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What is Groundwater?
• The science of hydrology is divided into two fields:
  – Surface water (rivers, streams, lakes, etc.)
  – Groundwater (all water below the surface)
• We oftentimes don’t realize that the two are different sides of one coin.
  – All groundwater originates as surface water
  – Hydrologic cycle
Louisiana Aquifers

Major Aquifers of Louisiana

- Sparta Aquifer – Northern Louisiana
- Chicot Aquifer – Southwestern Louisiana
- Southern Hills Aquifer System – Southeastern Louisiana
Assistance in Developing the Statewide Water Management Plan (2002)


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