

Drops in the Bucket: Historic Classifications and Recent Developments Related to the Legal Aspects of Surface Water in Louisiana¹

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I.	INTRODUCTION	62
II.	WHY SURFACE WATER AND WHY NOW?	64
	A. <i>Haynesville Shale Play—Bringing Surface Water Uses to the Fore</i>	64
	B. <i>Hydrokinetic Uses of Louisiana’s Surface Waters</i>	66
	C. <i>Cross-Border Water Disputes</i>	67

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III. WHO OWNS SURFACE WATER? 67

IV. OVERVIEW OF LEGAL SOURCES AVAILABLE FOR SURFACE WATER USE AND REGULATION 70

V. RIPARIAN RIGHTS 77

VI. HYDROKINETIC USES OF SURFACE WATER..... 81

 A. *Regulating and Permitting Hydrokinetic Projects*..... 82

 1. Regulation of the Hydrokinetic Industry..... 82

 2. Regulation of the Production, Transmission, and Marketing of Generated Power 84

 3. Regulating and Permitting the Use of Surface Water for Hydrokinetic Purposes 86

 B. *Leasing, Rentals, and Royalties Related to Hydrokinetic Projects*..... 89

 1. Leasing of State Water Bottoms and Property 89

 2. Rentals and Royalties 91

 C. *Rentals and Ownership of Produced Electric Energy from Hydrokinetic Projects* 93

VII. OTHER POTENTIAL IMPACTS TO LOUISIANA’S SURFACE WATERS: CROSS-BORDER WATER USES 96

 A. *The Sabine River Authority*..... 96

 B. *Tarrant Regional Water District v. Herrmann* 99

VIII. DISCUSSION 101

 A. *Post-Act 955—What Is the Law?*..... 101

 B. *Where Do We Go from Here?*..... 102

IX. CONCLUSION 105

I. INTRODUCTION

Louisiana has traditionally been viewed as a water-rich state.² For this reason, primarily, there has been little consideration of the regulation of Louisiana’s water resources over the state’s 200-plus-year history.³

2. Mark Davis & James Wilkins, *A Defining Resource: Louisiana’s Place in the Emerging Water Economy*, 57 LOY. L. REV. 273, 297 (2011).

3. Indeed, as noted in a recent report, between statehood in 1812 and 1972, there was no management of groundwater resources in Louisiana. LA. GROUND WATER RES. COMM’N, MANAGING LOUISIANA’S GROUNDWATER RESOURCES WITH SUPPLEMENTAL INFORMATION ON SURFACE WATER RESOURCES: AN INTERIM REPORT TO THE LOUISIANA LEGISLATURE 14-15 (2012), available at <http://dnr.louisiana.gov/assets/docs/conservation/groundwater/12.Final.GW.Report.pdf>; see also Roderic Fleming, Comment, *Hydraulic Fracturing, Louisiana Water Law, and Act 955: An Irresistible Economic Force Meets an Immovable Legal Object*, 24 TUL. ENVTL. L.J. 363, 367-68 (2011) (noting that Louisiana’s water ambivalence may have historically resulted from its abundance). As is set forth at length herein, the same cannot be said of Louisiana’s surface water

Such a phenomenon is not new, and it is not limited to Louisiana. In general, ambivalence regarding an abundant resource often exists and persists until problems and shortages begin to occur.⁴ Even today, as acute water needs for energy production purposes in certain parts of Louisiana have brought water use and protection to the fore, little is known regarding the legal rights to this resource in Louisiana.

With the passage of time, the demands on Louisiana's water resources have increased substantially.⁵ Competing interests vying for a share of this resource include various industries, agriculture and aquaculture, municipalities, power generators, and coastal restoration projects.⁶ With this increasing competition and a general obligation to ensure the preservation of this essential natural resource, Louisiana's elected and appointed officials have undertaken considerable analyses of the legal issues related to water rights in recent years.⁷ Although some of these efforts have been visible to the legal community and to the public at large, much of the theoretical inner workings of this work have not been visible to date. This Article examines a portion of the legal analysis of the past few years—one that has received the least amount of attention—in the hopes of providing a legal basis for how to handle surface water in Louisiana so meaningful and informed regulation can occur going forward. Without meaningful and informed regulation of surface water in Louisiana, during dry times, the rights of riparian landowners or the citizenry of the state may be ignored, and industrial, agricultural, or aquacultural operations will suffer the consequences of unreasonable expenses associated with procuring much needed water.

resources. However, even attempts to regulate the latter did not acquire any semblance of cohesion until the very recent past.

4. Indeed, Brian Fagan has noted: "We turn a faucet, and [water] is there for drinking, something we take completely for granted. So commonplace is water in our daily lives that we are indifferent to it and have been for a long time." BRIAN FAGAN, *ELIXIR: A HISTORY OF WATER AND HUMANKIND*, at xiii (2011). Fagan goes on to cite a poignant note on the topic by Rachel Carson, who observed: "In an age when man has forgotten his origins and is blind even to his most essential needs for survival, water along with other resources has become the victim of his indifference." RACHEL CARSON, *SILENT SPRING* 39 (First Mariner Books ed. 2002) (1962). Both of these observations are at least reasonable explanations of the idea that abundance has resulted in ambivalence regarding the regulation of Louisiana's water resources for much of the state's history.

5. See Davis & Wilkins, *supra* note 2, at 273.

6. See generally B. PIERRE SARGENT, U.S. GEOLOGICAL SURVEY, *WATER USE IN LOUISIANA, 2010: WATER RESOURCES SPECIAL REPORT NO. 17, REVISED* (2012), available at <http://la.water.usgs.gov/publications/pdfs/WaterUse2010.pdf>; LA. GROUND WATER RES. COMM'N, *supra* note 3, at 9.

7. See, e.g., La. Op. Att'y Gen. 08-0176 (2010); La. Op. Att'y Gen. 09-0028 (2010); La. Op. Att'y Gen. 09-0066 (2010); La. Op. Att'y Gen. 09-0291 (2010); see also Act No. 955, 2010 La. Acts 3315, 3315-19.

II. WHY SURFACE WATER AND WHY NOW?

The past several years have seen a convergence of new impacts, uses, and threats to Louisiana's surface water resources. Among the impacts and threats are natural gas production in North Louisiana and cross-border water disputes between Oklahoma and Texas (with implications for Louisiana and Texas).⁸ New uses that have raised questions regarding surface-water rights and obligations in Louisiana are those related to hydrokinetic energy production. Each of these impacts is reviewed here to set the stage for the legal analysis of surface water ownership, rights, and controls that are the subject of this Article.

A. Haynesville Shale Play—Bringing Surface Water Uses to the Fore

Development of the Haynesville Shale, a massive natural gas play in northwestern Louisiana, began in about 2007.⁹ Because the natural gas deposits are trapped within shale at great depths, until recently the resource had been prohibitively difficult and expensive to exploit.¹⁰ With the advent of directional drilling and the ability to fracture the shale with great pressure at depth, exploitation of the Haynesville Shale began in earnest in 2008.¹¹ At present, there are 2475 natural gas wells permitted or in production in the Haynesville Shale.¹² Under normal circumstances, all of this production would not likely raise concerns about water availability. However, the natural gas in formations such as the Haynesville Shale must be extracted by way of hydraulic fracturing (commonly referred to as “fracking”).¹³ Fracking requires massive amounts of water, which is sent down the well under pressure and is used to crack the deep rocks.¹⁴ These cracks release the trapped natural gas

8. See Davis & Wilkins, *supra* note 2, at 294, 296.

9. BERNSTEINRESEARCH, NATURAL GAS: METHOD IN THE MADNESS? 45-46 (2009); see also Fleming, *supra* note 3, at 364.

10. See Kim de Rijke, *Hydraulically Fractured: Unconventional Gas and Anthropology*, 29 ANTHROPOLOGY TODAY 13, 13 (Apr. 2013); Kathy Finn, *Shale! Shale! The Gang's All Here: Big Bucks and Challenges at Haynesville and Along the Tuscaloosa Trend*, LA. LIFE, July-Aug. 2012, at 40, 40-41.

11. Jean-Philippe Nicot & Bridget R. Scanlon, *Water Use for Shale-Gas Production in Texas, U.S.*, 46 ENVTL. SCI. & TECH. 3580, 3580-81 (2012).

12. *Haynesville Shale Gas Play Well Activity Map*, LA. DEP'T OF NATURAL RES., http://dnr.louisiana.gov/assets/OC/haynesville_shale/haynesville.pdf (last updated Sept. 26, 2013).

13. Fleming, *supra* note 3, at 365; see also S. Tian, G. Li, Z. Huang, J. Niu & Q. Xia, *Investigation and Application for Multistage Hydrjet-Fracturing with Coiled Tubing*, 27 PETROLEUM SCI. & TECH. 1494, 1494-95 (2009) (“Hydraulic fracturing technique is a key to economically exploit and develop low-permeability reservoirs.”).

14. Rick Jervis, *Gas Drilling Tactic Fuels a Boom and Health Concerns*, USA TODAY (Dec. 17, 2010, 4:05 PM), <http://usatoday30.usatoday.com/news/nation/2010-12-14-1Louisiana>

from the shale.¹⁵ Although specific volumes vary, average water needs for fracking one Haynesville Shale well is around 600,000 gallons.¹⁶ Considering the large numbers of wells currently permitted or operating in the area, there is reason to be concerned about the depletion of water sources in northwest Louisiana.

Admittedly, the Haynesville Shale is not the only threat to Louisiana's water resources. In fact, although it is the most acute and obvious threat to those resources, this mineral production is not even the largest threat.¹⁷ Research has shown that agricultural uses and other industrial needs far eclipse fracking operations in terms of their demands on Louisiana's water resources.¹⁸ The Haynesville uses of water have simply been much more in the public's attention than other uses.¹⁹ One example of this is the large number of trucks that will simply pull up, along a public road right-of-way, to a surface water source in north Louisiana, stick a hose into the source, and start pumping out water for use in nearby fracking operations.²⁰ Not surprisingly, this sort of activity has raised the ire of local farmers and riparian owners.²¹

Historically, surface water uses for mineral operations had not been such a concern, as they largely did not exist. Groundwater resources had been the traditional water source for these operations,²² meaning that, in most areas, water use for mineral operations had been out of sight and out of mind. Production companies would drill a water well to supply their needs for particular operations and most people did not pay any mind to these uses. In 2008, based upon scientific concerns that the Carrizo-Wilcox Aquifer in Louisiana was under threat of overuse from mineral production operations, the Louisiana Commissioner of Conservation, in his regulatory role of protecting the state's groundwater resources, issued a directive for mineral production companies to avoid using groundwater for their operations in the Haynesville Shale and to

14_CV_N.htm; *EPA Widens Fracking Investigation: Agency Will Study Water Volumes as Well as Risks*, 832 CHEM. ENG'R 14, 14 (2010).

15. Jervis, *supra* note 14.

16. *Water Use in Haynesville Deep Shale Gas Exploration*, CHESAPEAKE ENERGY 1 (May 2012), http://www.chk.com/media/educational-library/fact-sheets/haynesville/haynesville_water_use_fact_sheet.pdf.

17. See SARGENT, *supra* note 6, at 11.

18. *Id.* at 11, 15-22.

19. See Edna Wheless, *Boom Time in DeSoto Parish: Haynesville Shale Changes Rural Landscape and Lifestyle*, LA. LIFE, Nov.-Dec. 2009, at 56, 59.

20. See, e.g., La. Op. Atty. Gen. 08-0176 (2010).

21. See generally Wheless, *supra* note 19.

22. See Fleming, *supra* note 3, at 365.

shift, instead, to surface water sources to satisfy their needs.²³ This single event instigated the sea change that has focused attention on the long-term viability of Louisiana's surface waters as a subject of consumptive use and has required a comprehensive legal analysis regarding whether the state has the authority to control such uses at all.

*B. Hydrokinetic Uses of Louisiana's Surface Waters*²⁴

Hydrokinetics is the process of harnessing electric power from moving water currents and tides.²⁵ This type of activity is a use of surface water that has, to date in Louisiana, received little attention from a legal perspective. Hydrokinetic power is a renewable, carbon-free power source created when electrical generation turbines are placed in rivers or other bodies of running water to use the flow of the water to create electric power.²⁶ Unlike hydropower dams, which also produce hydroelectric power but operate on water pressure, hydrokinetic turbines produce electricity from the ambient movement of the water.²⁷ In addition to the stream flow power generation contemplated in this Article, tidal power and wave power are two other examples of hydrokinetic power sources.²⁸ The two additional types of hydrokinetic power are not specifically reviewed here. However, the law that is reviewed in this Article should hold true for any tidal or wave power kinetic energy uses in Louisiana.

23. *Ground Water Use Advisory: Commissioner of Conservation Recommends Wise Water Use Planning in the Haynesville Shale*, LA. DEP'T OF NATURAL RES. (Oct. 16, 2008), <http://dnr.louisiana.gov/index.cfm?md=newsroom&tmp=detail&aid=509>. The Commissioner issued a similar recommendation at the beginning of the exploitation of the Tuscaloosa Marine Shale in 2011. *La. Commissioner of Conservation Recommendation on Water Sources*, LA. DEP'T OF NATURAL RES. (Aug. 2011), <http://dnr.louisiana.gov/assets/OC/2011-TMS-Ground-Water-Resource.pdf>.

24. Portions of this Part and Part IV were adapted from Louisiana Attorney General Opinion 09-0148 (2010).

25. David Leary & Miguel Esteban, *Renewable Energy from the Ocean and Tides: A Viable Renewable Energy Resource in Search of a Suitable Regulatory Framework*, 4 CARBON & CLIMATE L. REV. 417, 417 (2009).

26. Larry Eisenstat & Bethany Dukes, *Overcoming Boundaries (Real and Imagined) to Hydrokinetic Power Development*, ELECTRIC LIGHT & POWER, Nov.-Dec. 2009, at 14, 14.

27. Zach Kupperman, Recent Development, *The Federal Energy Regulatory Commission Issues Preliminary Permits for Hydrokinetic Projects on the Mississippi River, Order Issuing Preliminary Permit, FFP Project 24, LLC, 122 FERC ¶ 62,023 (Jan. 15, 2008)*, 22 TUL. ENVTL. L.J. 486, 487 (2009).

28. Rachael E. Salcido, *Rough Seas Ahead: Confronting Challenges To Jump-Start Wave Energy*, 39 ENVTL. L. 1073, 1076 (2009) (commenting on the tidal and wave (i.e., nonriverine) hydrokinetic technology presently available). The author also notes the scientific community's concerns with these devices' potential impacts to marine environments, thereby supporting our concerns voiced *infra* that the entire panoply of state and federal environmental protection laws must be applied to these devices to ensure that their uses outweigh any costs. *Id.* at 1096-1104.

Hydrokinetics is of especial import to this Article because it incorporates yet another use of surface water, albeit a use that does not diminish the corpus of the resource. It is precisely this nondiminishing aspect of hydrokinetics that raises additional legal questions that are addressed in a separate section of this Article.

C. Cross-Border Water Disputes

As alluded to above, Louisiana, for the present, is a wet state. In many cases, Louisiana is less concerned about what to do about too little water but, rather, how to deal with too much water. This is not the case nationwide, and many of the thirstier states to the west of Louisiana are in dire and increasing need of freshwater sources.²⁹

It is within this scenario that Louisiana has recently found itself involved in cross-border water disputes. These disputes are set forth more fully *infra*. However, the ever-increasing population of the American West and its correlative need for freshwater will certainly mean that issues related to freshwater demands on places like Louisiana will only increase. Therefore, a review of cross-border water uses as they currently stand in Louisiana and as they stand following a recent United States Supreme Court decision is contained herein.

III. WHO OWNS SURFACE WATER?

Louisiana's Civil Code sets forth the classification of publicly and privately owned things. In pertinent part, Louisiana Civil Code article 450 states:

Public things are owned by the state or its political subdivisions in their capacity as public persons.

Public things that belong to the state are such as running waters, the waters and bottoms of natural navigable water bodies, the territorial sea, and the seashore.³⁰

Based upon this classification, it is clear that it is the intention of the legislature that "running waters" are to be owned by the state as public things. This classification alone does not imbue the state with any regulatory authority over the use of "running waters." Rather, it merely vests the ownership of this resource in the state.³¹ The regulatory

29. See Davis & Wilkins, *supra* note 2, at 275 n.5.

30. LA. CIV. CODE ANN. art. 450 (2010).

31. Louisiana law states: "Ownership is the right that confers on a person direct, immediate, and exclusive authority over a thing. The owner of a thing may use, enjoy, and dispose of it within the limits and under the conditions established by law." *Id.* art. 477(A).

authority, as discussed below, exists by virtue of Louisiana's public trust doctrine.³² However, before reaching an analysis of the public trust doctrine and its relationship to the state's surface waters, a further examination of certain provisions of the Louisiana Civil Code is necessary.

Louisiana Civil Code article 448, among other things, divides "things" under Louisiana law into the categories of common, public, and private.³³ For the purposes of this Article, private things are fairly self-explanatory and do not enter into the analysis. Common things are defined as follows: "Common things may not be owned by anyone. They are such as the air and the high seas that may be freely used by everyone conformably with the use for which nature has intended them."³⁴ Thus, common things are not subject to the patrimony of either the state or private citizens.³⁵ Historically, "running waters" had been included within the definition of common things,³⁶ thus making them free for the use of anyone and everyone. The Louisiana legislature, in 1910, enacted Louisiana Revised Statute (La. R.S.) 9:1101, which reclassified running waters by stating (in pertinent part):

The waters of and in all bayous, rivers, streams, lagoons, lakes and bays, and the beds thereof, not under the direct ownership of any person on August 12, 1910, are declared to be the property of the state. There shall never be any charge assessed against any person for the use of the waters of the state for municipal, industrial, agricultural or domestic purposes.³⁷

This law is still valid in that it still exists in this form and has not been challenged. This law appears to recognize that during a time when "running waters" were classified as common things, the legislature deemed it necessary to ensure that no one would be restricted from their use. In effect, if this protection of access to "running waters" was the intent, La. R.S. 9:1101 was a superfluous law in 1910, as no restriction on the use of "running waters" could have existed as long as those waters were classified as common things. However, as was recognized by those revising this portion of the Civil Code in the 1970s, La. R.S. 9:1101 effectively (whether intentionally or not) removed "running waters" from the category of common things and placed them under the category of

32. See LA. CONST. art. IX, § 1.

33. LA. CIV. CODE ANN. art. 448.

34. *Id.* art. 449.

35. See 2 A.N. YIANNPOULOS, LOUISIANA CIVIL LAW TREATISE: PROPERTY § 46 (4th ed. 2001); Gulf Oil Corp. v. State Mineral Bd., 317 So. 2d 576, 582 (La. 1974).

36. LA. CIV. CODE ANN. art. 449 cmt. (c).

37. LA. REV. STAT. ANN. § 9:1101 (2008).

public things.³⁸ This change in ownership classification presents significant ramifications for the control, use, and regulation of surface water resources under the current constitutional scheme in Louisiana.

Because “running waters” have been reclassified as public things³⁹ with their ownership vested in the state, certain constitutional restrictions now apply to their use. Under Louisiana Constitution article VII, section 14(A), the people of Louisiana have provided:

Except as otherwise provided by this constitution, the funds, credit, property, or things of value of the state or of any political subdivision shall not be loaned, pledged, or donated to or for any person, association, or corporation, public or private. Except as otherwise provided in this Section, neither the state nor a political subdivision shall subscribe to or purchase the stock of a corporation or association or for any private enterprise.⁴⁰

Thus by reclassifying “running waters” as a thing owned by the state, it is unconstitutional for the state to simply divest itself of such waters absent the receipt of fair market value compensation.⁴¹ This statement is premised on the presumption that “running waters” can be considered “things of value of the state” under Louisiana Constitution article VII, section 14(A). Such a presumption, however, is not without support. Although there is no commodity trade in water,⁴² people have been willing to pay for its use in Louisiana for some time. For example, the Sabine River Authority (SRA) has been selling water from the Toledo Bend Reservoir for many years.⁴³ Thus in Louisiana, water is a thing of value.

Interestingly, because the restrictions against donating things of value belonging to the state existed by constitutional fiat before the enactment of La. R.S. 9:1101 in 1910,⁴⁴ that law, to the extent that it purported to allow the consumptive use of “running waters” free of

38. LA. CIV. CODE ANN. art. 449 cmt. (c).

39. It is important to note here that Louisiana Civil Code article 450 is not limited to “running waters” when dealing with water that belongs to the state. Also included are the waters in naturally navigable water bodies. The distinction between these classes of water is discussed *infra*. It is also important to note that while classified as common things, these waters could not be alienated under any circumstances. See *Gulf Oil*, 317 So. 2d at 582.

40. LA. CONST. art. VII, § 14(A).

41. See LA. REV. STAT. ANN. § 30:961(C) (2007).

42. Leo Lewis & Lewis Smith, *Water Whets Appetite of Traders with an Eye to the Next Fortune*, TIMES (London), Oct. 19, 2007, at 32.

43. See generally LA. REV. STAT. ANN. § 38:2325(A)(16) (2013) (contains the SRA's authorization to sell water).

44. Similar language to Louisiana Constitution article VII, section 14(A), existed in the 1921, 1913, 1898, and 1879 Louisiana Constitutions. See LA. CONST. OF 1921, art. 4, § 12; LA. CONST. OF 1913, art. 58; LA. CONST. OF 1898, art. 58; LA. CONST. OF 1879, art. 56.

charge, was unconstitutional *ab initio*. Thus, from the perspective of control over its running waters, since at least 1910 when they were converted from common things into public things, the state has not been able to allow unrestricted consumptive use without some remuneration. Although this background is relevant and important to understanding how running waters are now managed by the state of Louisiana, it is not informative regarding how, if at all, the state manages water from a resource protection perspective.

IV. OVERVIEW OF LEGAL SOURCES AVAILABLE FOR SURFACE WATER USE AND REGULATION

In Louisiana, there has been considerable debate regarding the question of whether the public trust doctrine, embodied in Louisiana Constitution article IX, section 1, is self-executing. In 1992, James G. Wilkins and Michael Wascom made a strong case that the doctrine, absent any specific enabling legislation, provided a charge on state actors to ensure the protection of the state's natural resources and environment.⁴⁵ This perspective was quickly countered by Lee Hargrave,⁴⁶ who had served as the official reporter for the 1973 Louisiana Constitutional Convention. Hargrave argued that the public trust doctrine put in place by the 1974 Constitution could only operate through specific legislative action.⁴⁷ The courts have seemed to apply the doctrine in a hybrid manner, never specifically ruling on the question of whether the doctrine is stand-alone enforceable or not.⁴⁸ Nonetheless, in cases such as *State v. McHugh*, the Louisiana Supreme Court has alluded to the probability that the public trust doctrine, in and of itself, is actionable:

The state constitution establishes a public trust doctrine requiring the state to protect, conserve and replenish all natural resources, including the wildlife and fish of the state, for the benefit of its people. Th[is] constitutional provision[] establish[es] a standard of protection which the legislature and all public trustees are required to vigorously enforce. Upon judicial review, a public trustee is duty bound to demonstrate that he has properly exercised his responsibility under the constitution and laws.⁴⁹

45. See James G. Wilkins & Michael Wascom, *The Public Trust Doctrine in Louisiana*, 52 LA. L. REV. 861, 898 (1992).

46. See Lee Hargrave, *The Public Trust Doctrine: A Plea for Precision*, 53 LA. L. REV. 1535, 1542 (1993).

47. See *id.*

48. See, e.g., *State v. McHugh*, 92-1852 (La. 1/6/94); 630 So. 2d 1259; *Mouton v. Dep't of Wildlife & Fisheries of La.*, 95-0101 (La. App. 1 Cir. 6/23/95); 657 So. 2d 622.

49. 92-1852, p. 9; 630 So. 2d at 1265 (citations omitted); see LA. CONST. art. IX, §§ 1, 7.

In fact, in 1984, the Louisiana Supreme Court, in *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, recognized that the public trust doctrine imposes a duty on state actors to undertake meaningful reviews of the impacts of their decisions on natural resources and the environment.⁵⁰ In subsequent cases, the courts have set forth a test, based upon *Save Ourselves*, to determine whether compliance with the public trust doctrine had been accomplished in particular circumstances.⁵¹ Known as the “IT Factors,”⁵² the *Save Ourselves* test asks the following questions of state agency decision making that involves environmental or natural resource matters:

- (1) [Has the agency considered whether] the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible[?]
- (2) [Has the agency performed] a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the project [such that it has] demonstrate[d] that the latter outweighs the former[?] and
- (3) [Has the agency examined whether] there are alternative projects or alternative sites or mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable[?]⁵³

The *Save Ourselves* test, applied absent any statutory mandates in some cases, seems to articulate a jurisprudential assent to Wilkins and Wascom’s public trust doctrine theory.

As demands on surface water increased as a result of Haynesville Shale production in 2008 and 2009, it became apparent that any uses of these waters that were occurring were being done without an IT analysis as to their impacts. In fact, in most cases the state was unaware of such uses until long after the fact and was not part of any decision-making process regarding the use of this resource.⁵⁴ In addition, beyond the very

50. 452 So. 2d 1152, 1156-57 (La. 1984).

51. See, e.g., *In re Rubicon, Inc.*, 95-0108, p. 10 (La. App. 1 Cir. 2/14/96); 670 So. 2d 475, 482.

52. The name for these factors derives from the IT Corporation, whose actions were the subject of examination in the *Save Ourselves* case. See *In re Shintech, Inc.*, 2000-1984, pp. 11-12 (La. App. 1 Cir. 2/15/02); 814 So. 2d 20, 28.

53. *Rubicon*, 95-0108, p. 12; 670 So. 2d at 483 (citing *Blackett v. La. Dep’t of Env’tl. Quality*, 506 So. 2d 749, 754 (La. App. 1 Cir. 1987)).

54. A good example of this is Louisiana Attorney General Opinion 08-0176 from 2010, in which the state was notified that trucks had been siphoning water from Mackeroy Creek in North Louisiana without the state’s knowledge or permission. Thus, there was no state decision to which to apply the IT factors.

basic concepts of water ownership discussed above, the state had no statutory scheme on which to draw to force environmental analyses of such uses. Realizing that some control had to be exercised over surface water use, primarily to ensure the protection of the resource and the environment but also to ensure that things of value belonging to the state were not being donated, the state looked to the public trust doctrine.⁵⁵

Based upon numerous complaints from the public and inquiries from industry, the Louisiana Attorney General and the Louisiana Secretary of the Department of Natural Resources, in February 2010, issued a guidance memorandum asserting that any consumptive use of running waters in the state must be approved by the Louisiana Department of Justice and the Louisiana Department of Natural Resources.⁵⁶ The sole basis for this guidance memorandum was the public trust doctrine.⁵⁷ Both agencies believed, as evidenced by the memorandum, that they had an affirmative duty under the doctrine, as embedded in the Louisiana Constitution, to ensure the consumptive uses of the state's waters were being effected in such a way as not to harm the environment or threaten the resource.⁵⁸ This memorandum was also intended to serve as a legal stop-gap measure until more comprehensive guidance could be formulated and specific legislation could be enacted.

Following the February 2010 memorandum, in response to five separate Attorney General opinion requests in 2010, staff from the Attorney General's Office analyzed whether the state had control over various types of surface waters.⁵⁹ The requests included two privately owned creek beds, the Red River, and two privately owned lake beds. In all five scenarios, the Office opined that as to the "running waters" within these water bodies, irrespective of the ownership of their beds, the

55. Such a resort to the public trust doctrine is consistent with Kundis Craig's assertion that "far more often than occurs in the later-settled West, public trust use rights in the East intrude—and for practical purposes always have intruded—upon privately owned riparian and littoral property." See Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PENN. ST. ENVTL. L. REV. 1, 4 (2007). In fact, in fashioning its approach to the regulation of surface water rights and protections, Louisiana has taken the position that some imposition on private rights may be necessary and is acceptable to protect this resource. The broad language of the state's public trust doctrine appears to support this approach.

56. Memorandum from State of La., Office of the Att'y Gen. & Sec'y of the Dep't of Natural Res. on Management & Sale of State Surface Waters to All State Surface Water Managers (Feb. 5, 2010) (on file with La. Dep't of Natural Res.).

57. See *id.*

58. See *id.*

59. See La. Op. Att'y Gen. 08-0176; La. Op. Att'y Gen. 09-0028 (2010); La. Op. Att'y Gen. 09-0066 (2010); La. Op. Att'y Gen. 09-0291 (2010); La. Op. Att'y Gen. 10-0173 (2010).

state owned the water.⁶⁰ The conclusions from these analyses were based upon the language of the Civil Code, noted above, which classifies “running waters” as a public thing.⁶¹ These conclusions are consistent with the notion that running water is essentially a fugacious thing that is transient when over any one piece of land and thus that the law should treat the water separately from the land over which it runs. In addition to the “running waters” language cited in the Attorney General’s opinions, an alternative basis for asserting that most surface waters in Louisiana are classified as public things under Louisiana Civil Code article 450 is the “waters and bottoms of natural navigable water bodies” language that exists in the same Code article.⁶² Under this portion of Louisiana Civil Code article 450, even stagnant “waters” overlying a “natural navigable water bod[y]” are public things.⁶³ This solves the problem of the classification of water in navigable lakes and other waterways that are difficult to classify as “running water”: the Code covers both running water and water in navigable water bodies.

Thus, the state owns, as a public thing, all surface waters except nonrunning water overlying nonnavigable water bodies. Although this would seem to cover nearly all water in the state, the question still remains: what is “running water”? Mackeroy Creek and the Red River are obviously “running waters.” However, the lakes in the Attorney General Opinions⁶⁴ present a unique situation: are they actually “running”? If these lakes were “naturally navigable water bodies” under Louisiana Civil Code article 450, it would not matter if the water was “running” for the reasons noted above. However, Smithport Lake and Clear Lake are artificial impoundments.⁶⁵ Their bottoms are comprised of private property over which the state has obtained servitudes of flood.⁶⁶ In these situations, the private owners had granted the state a servitude

60. Similarly, in *Chaney v. State Mineral Board*, the Louisiana Supreme Court noted: On the one hand, the bed and bottom of a non-navigable river or stream is a private thing belonging either to the riparian owners or the state (depending upon whether it was originally non-navigable or navigable). On the other hand, the water which traverses that private bed is a public thing. . . . As such, the riparian owner may use the running water for his purposes, but he may not interfere with, nor prevent, its use by the general public.

444 So. 2d 105, 109 (La. 1983) (citations omitted).

61. *See id.* at 109-10; LA. CIV. CODE ANN. art. 450 (2010); LA. REV. STAT. ANN. § 9:1101 (2008).

62. *See* LA. CIV. CODE ANN. art. 450.

63. *See id.*

64. La. Op. Att’y Gen. 09-0028; La. Op. Att’y Gen. 09-0066.

65. La. Op. Att’y Gen. 09-0028.

66. *Id.*

not only to flood their property, but also the authority for the state to control, use, and protect the waters of those privately owned lakes.⁶⁷ Thus, whether the waters were “running” or whether the water bodies were navigable were superfluous questions in these scenarios because the state has control of the waters by contractual agreement regardless of their classification.

Lake Claiborne is also an artificial impoundment.⁶⁸ However, because the waters are connected with numerous bayous that flow in and out of the lake and that are, in turn, connected to other running waters, this lake was considered to be running water of the state.⁶⁹ This result seems logical because lakes are seldom unconnected and thus the water in them is usually flowing to and from other water bodies. Hence, it seems unlikely that there will be scenarios in which lakes will not be considered “running waters.” In fact, it is difficult to imagine a scenario in which lake waters are not connected to some other running water source and are thus running in their own right. Admittedly, the question of how much flow is required for a water body to be considered “running” has not yet been addressed; arguably, even seasonally existing waterways are “running” when there is water in them. Thus it seems that even the water in periodic or seasonal streams, when holding “running water,” should fall under the Civil Code classification of public things and should be subject to state control and ownership.⁷⁰

Along with the question of ownership comes the question of how much control and what kind of control can be exercised over these waters. Certain matters of surface water control are set forth specifically by statute and are delegated to various state agencies.⁷¹ One example of

67. See generally *id.* (discussing area as containing flowing surface water); LA. ADMIN. CODE tit. 33, § 1123 tbl.3 (2013) (listing Lake Claiborne as regulated under “Surface Water Quality Standards” section).

68. See La. Op. Att’y Gen. 09-0066 (2010).

69. *Id.*

70. Admittedly, some jurisprudence has, on a fact-specific basis, determined that some isolated lakes do not meet the qualifications of “running water.” See, e.g., *Verzwyvelt v. Armstrong-Ratterree, Inc.*, 463 So. 2d 979, 985 (La. App. 3 Cir. 1985). However, it should be pointed out that such cases have not been decided in the vein of identifying whether a water body constitutes “running waters” for the purposes of state ownership of the actual waters. See, e.g., *id.*

71. E.g., LA. REV. STAT. ANN. § 34:3261 (2006) (for the Cane River Waterway Lake District). The ownership and use of waters is also regulated by federal statutes touching upon the subject, scattered provisions in the Louisiana Revised Statutes, and a few provisions of the Louisiana Civil Code. Special-purpose districts of the state of Louisiana are clearly authorized in title 38 of the Louisiana Revised Statutes to use and distribute surface water for nonriparian purposes. See, e.g., LA. REV. STAT. ANN. §§ 2101, 2325, 2558 (2005) (establishing authority for irrigation districts, the Sabine River Authority, and water conservation districts); see also LA. CONST. art. IX, § 1 (empowering the legislature to enact laws to protect natural resources). In

this is the Cane River Waterway District's authority over the water in the Cane River. In this regard, the Louisiana Attorney General has opined:

[T]he Cane River Waterway District clearly has the authority to effectuate and maintain proper depths of water, and regulate the use of water from the Cane River Lake as provided in La. R.S. 34:3269 (6) and (13). This authority establishes regulatory control over the waters within the District, but does not grant the District any rights with regard to actually charging for the withdrawal of and/or selling the waters at issue.⁷²

Thus, although an entity may have statutory control and authority over surface water, this does not mean that it has the authority to sell the water. Again, such matters raise the applicability of the public trust doctrine. In the absence of specific legislation, the state is charged with the duty to ensure the protection of its natural resources and environment.⁷³ Accordingly, the Attorney General has correctly asserted that some variation of the "IT Factors" must be applied to every proposed consumptive use of the state's surface waters.⁷⁴ Unfortunately, the public trust doctrine, in the absence of specific legislation, does not identify what entity should undertake such an analysis and what the ramifications are for not adhering to the analysis.

In an effort to fill some of these gaps, in 2010, the Louisiana legislature enacted Act 955.⁷⁵ This law sets forth a scheme for the consumptive use of the state's surface waters and requires that an environmental analysis of any such use be undertaken.⁷⁶ Act 955 vests

addition, irrigation districts (La. R.S. 38:2101), the Sabine River Authority (La. R.S. 38:2321), and water conservation districts (La. R.S. 38:2551) are given authority to control water usage in designated areas. Additionally, La. R.S. 38:218 imposes a penalty if waters are diverted from their natural course and are not returned to it without being unduly diminished. Probably more significant in terms of the volume of water involved have been specific legislative authorizations. *See* LA. REV. STAT. ANN. § 33:841 (repealed 2010); *id.* § 33:3814 (2002) (establishing authority for waterworks districts); *id.* § 38:2501 (2005) (establishing authority to control and regulate all aspects of hunting, fishing, and boating in water conservation districts); *id.* § 45:61 (2007) (establishing power of expropriation for constructing and operating canals).

72. La. Op. Att'y Gen. 10-0289 (2011).

73. As noted in Louisiana Attorney General Opinion 10-0289, "Such uses must also not unduly or unreasonably impair the resource itself under La. Const. Art. IX, § 1" In other words, even those entities charged with controlling surface water by statute must still adhere to their public trust duties under the Louisiana Constitution.

74. La. Op. Att'y Gen. 09-0291 (2010).

75. *See* Act No. 955, 2010 La. Acts 3315.

76. LA. REV. STAT. ANN. §§ 30:961-:963 (2013). It is important to note that prior to the enactment of Act 955 there was at least one somewhat general Louisiana statute that authorized the sale of surface water: La. R.S. 33:4511. This law, which is of questionable utility, was enacted in 1966 and it authorizes:

The governing authority of any parish or municipality, east of the Mississippi River, may grant franchises to private nonprofit corporations for the taking, transporting and

the authority to grant such uses and to conduct such analyses within the Louisiana Department of Natural Resources (LDNR).⁷⁷ Such uses are accomplished by cooperative endeavor agreements (CEAs)⁷⁸ designed and approved by the Attorney General and the State Mineral and Energy Board (SMEB).⁷⁹ The CEAs now in use, in an effort to comply with Louisiana Constitution article VII, section 14(A), acknowledge that the state will receive valuable compensation for the use of its surface waters in the form of increased tax and royalty revenue and increased job creation.⁸⁰ However, this acknowledgment, and indeed the entire concept of a CEA, seems largely unnecessary because the current CEAs also charge a price for the consumptive use of any surface waters under such agreements.⁸¹ The value of the water charged by the state is currently \$0.15 per 1000 gallons—the same amount charged by the SRA for consumptive uses.⁸² It is interesting to note that the SRA does not acknowledge the tangential benefits of such uses nor does it enter into CEAs for the sale of its water. Thus it seems that there is no difference between the two types of agreements except that the SMEB may be setting the CEAs up for a later detachment of the fees based upon its presumption that the tangential benefits are sufficient remuneration to

sale of surface water from within the geographical limits of such political subdivision to other parishes or municipalities outside the limits of such political subdivision.

Id. § 33:4511(A) (2002). From its plain language this law only appears to apply to areas in the Florida Parishes and the Greater New Orleans area. Thus, the bulk of the state is not authorized by this law to sell the state's waters. The lack of reported jurisprudence under this law does not assist in an understanding of the law's purpose. The law is still valid, though. However, any sales undertaken pursuant to this law must comply with the same environmental protections as those undertaken under Act 955 in order not to run afoul of Louisiana Constitution article IX, section 1.

77. LA. REV. STAT. ANN. § 30:963; *see also* La. Op. Att'y Gen. 10-0289.

78. CEAs are permitted under Louisiana Constitution article VII, section 14(C), as a means for the state to obtain some measure of quid pro quo for the use of its things of value in a manner that does not necessarily require the payment of fair market value for such uses. The question of what constitutes reasonable quid pro quo has been a matter of considerable debate. Under the current jurisprudence, it appears to be reasonable that the state receives guarantees of economic development, taxes, and job creation in exchange for certain uses. *See, e.g.*, Bd. of Dirs. of the Indus. Dev. Bd. v. All Taxpayers, 2005-2298, pp. 21-24, 30 (La. 9/6/06); 938 So. 2d 11, 24-25, 28-29. The idea behind the CEA concept for water use was to recognize that the activities for which such uses are claimed are economically beneficial to the state such that reasonable guarantees of the things noted above, in addition to supporting the flow of mineral royalties, would be sufficient to avoid running afoul of Louisiana Constitution article VII, section 14(A).

79. LA. REV. STAT. ANN. § 30:961(B).

80. *Id.*

81. *See* LA. DEP'T OF NATURAL RES., LOUISIANA RUNNING SURFACE WATER USE COOPERATIVE ENDEAVOR AGREEMENT (Dec. 2011), *available at* http://dnr.louisiana.gov/assets/docs/secretary/LA_RUNNING_SURFACE_WATER_USE_CEA.pdf.

82. LA. GROUND WATER RES. COMM'N, *supra* note 3, at 85.

the state for the use of its waters. Aside from the CEA scheme established by Act 955, the law also requires that all CEAs undergo an environmental impacts analysis prior to their approval by the Secretary of LDNR.⁸³

V. RIPARIAN RIGHTS

Much of the Civil Code's contents regarding riparian owners are limited to riparian acquisitions and losses of land caused by accretion, erosion, and dereliction.⁸⁴ Only Louisiana Civil Code article 456 speaks to riparian rights related to access to the water, and this article simply provides that riparian owners' rights are burdened by a public use for the mooring of vessels and the drying of nets along their property.⁸⁵ This provision does not purport to grant riparian owners any specific right to use water from the waterway along which their property is situated.

The only provisions that provide some authority for riparian owners to use water along their property are Louisiana Civil Code articles 657 and 658. Article 657 provides, "The owner of an estate bordering on running water may use it as it runs for the purpose of watering his estate or for other purposes."⁸⁶ Thus some use of surface water by riparian owners is allowed under Louisiana law. It is unclear from this provision what is meant by the word "use" and what is contemplated by the phrase "other purposes." However, Louisiana Civil Code article 658 does appear to limit the amount of water used by riparian owners. This law provides:

The owner of an estate through which water runs, whether it originates there or passes from lands above, may make use of it while it runs over his lands. He cannot stop it or give it another direction and is bound to return it to its ordinary channel where it leaves his estate.⁸⁷

This provision creates a servitude in favor of riparian owners for uses of water that are something less than consumptive. As the article states, the riparian owner is required to return the water to its channel. There is little reported jurisprudence under this article; however, a plain reading of the provision suggests that although water running over a riparian owner's lands can be diverted for the creation of a pond or for the powering of devices while on or adjacent to the riparian's property, it

83. LA. REV. STAT. ANN. § 30:961(D).

84. LA. CIV. CODE ANN. arts. 499, 501, 503, 506, 563 (2010).

85. *Id.* art. 456. This notion is supported by other navigation-supporting restrictions on riparian uses in the Civil Code ancillaries. LA. REV. STAT. ANN. §§ 9:1102-:1102.2 (2013).

86. LA. CIV. CODE ANN. art. 657.

87. *Id.* art. 658.

cannot be diminished through such uses.⁸⁸ Clearly, however, Louisiana Civil Code article 657 allows for some consumptive uses through the statement that such water can be used for “watering his estate.”⁸⁹

The riparian rights defined in the Civil Code are considered “accessory rights,” which attach to riparian lands because of their adjacency to the water source.⁹⁰ It remains to be seen whether the right to use water can be conveyed separately and distinctly from the land.⁹¹ The riparian right to use the water, a natural servitude, cannot be lost by nonuse because prescription of nonuse does not apply to natural servitudes.⁹²

Whether one can transfer a riparian right separately and distinctly from the full ownership (fee title) to riparian land has never been addressed by the courts of this state. However, in *Keeley v. Schexnailder*, the court considered a riparian landowner’s grant of an easement of access to the waterfront to a nonriparian landowner.⁹³ In upholding the right of access via the servitude, the court did not address whether it would uphold a grant of the riparian right to withdraw water.⁹⁴ The nature of the riparian right is important for considering whether a riparian can grant a nonriparian access across his property and the right to use his riparian rights to withdraw water.⁹⁵ In this regard, although access may be granted, a consumptive withdrawal of the water inconsistent with Louisiana Civil Code articles 657 and 658 would violate Louisiana Constitution article VII, section 14(A), and Louisiana Constitution article IX, section 1.⁹⁶

Certain riparian uses came into sharp focus in 2010 when the Attorney General’s Office received notice that one party had exercised what he believed to be his riparian rights by granting a gas production company the authority to use water from a small bayou along the border

88. See *Adams v. Grigsby*, 152 So. 2d 619, 621 (La. App. 2 Cir. 1963). Fleming also notes the lack of guidance on the meanings of these Code articles. Fleming, *supra* note 3, at 388-89.

89. LA. CIV. CODE ANN. art. 657. Arguably, the return of water from crop irrigation to the hydrological cycle avoids the consumptive use problem for the riparian landowner. However, such uses clearly could diminish stream flow and thereby run afoul of Louisiana Civil Code article 658 when large quantities are at issue.

90. *Succession of Delachaise v. Maginnis*, 11 So. 715, 716 (La. 1892).

91. See LA. CIV. CODE ANN. art. 650 (2008).

92. See *id.* art. 758; see also *Cooper v. La. Dep’t of Pub. Works*, 03-1074, p. 10 (La. App. 3 Cir. 3/3/04); 870 So. 2d 315, 326.

93. 97-1609 (La. App. 3 Cir. 4/1/98); 708 So. 2d 838.

94. *Id.* at p. 10; 708 So. 2d at 843.

95. See La. Op. Att’y Gen. 09-0291 (2010).

96. *Id.*

of his property for Haynesville Shale production purposes.⁹⁷ In this case, the riparian owner on the other side of the bayou witnessed the withdrawal of nearly all of the running water from the creek via a pump.⁹⁸ The bayou, which was not a state-claimed navigable waterway, separated “two parcels of land owned by two different individuals, and [it] ha[d] not only acted as a physical barrier between the two owners, separating their livestock, but ha[d] also consistently supplied water for [their] livestock.”⁹⁹

This scenario presented a classic situation of a violation of riparian uses under Louisiana Civil Code article 658, which forbids one riparian owner’s use of running water across or along his estate in a volume that would impair the rights of any riparian owners or would impact the downstream flow of the water. However, as noted above, while the owners of estates bordering running water may use the water as provided above, water that is running in a water body, whether navigable or not, is a public thing subject to public use.¹⁰⁰ Thus, the question of whether one riparian owner may drain running water in a substantial amount without the permission of the other owner is subordinate to the question of what actual rights the riparian owners have with regard to the water. Based upon the review above, it is clear that a riparian owner may access and use the running water for minimal purposes on his estate, but the running water remains a public thing owned by the state under Louisiana law.

In *Buckskin Hunting Club v. Bayard*, the Louisiana Third Circuit Court of Appeal explained, “The obligations arising from water being a public thing requires the owner through whose estate running waters pass to allow water to leave his estate through its natural channel and not to unduly diminish its flow”¹⁰¹

In both the *Buckskin Hunting Club* and the *People for Open Waters, Inc. v. Estate of Gray* cases, the primary issue was public access to private canals that held running water.¹⁰² The Louisiana Third Circuit has consistently held, “No public rights to use of a canal located on private

97. La. Op. Att’y Gen. 10-0173 (2010).

98. *Id.*

99. *Id.*

100. La. Op. Att’y Gen. 08-0176 (citing LA. CIV. CODE ANN. art. 452 (2010); LA. REV. STAT. ANN. § 9:1101 (2008)); La. Op. Att’y Gen. 09-0291 (citing LA. CIV. CODE ANN. art. 452; LA. REV. STAT. ANN. § 9:1101).

101. 03-1428, p. 11 (La. App. 3 Cir. 3/3/04); 868 So. 2d 266, 274 (citing LA. CIV. CODE ANN. arts. 450, 452, 658; *People for Open Waters, Inc. v. Estate of Gray*, 94-301 (La. App. 3 Cir. 10/5/94); 643 So. 2d 415).

102. *Id.* 03-1428, p. 11; 868 So. 2d at 273; *People for Open Waters*, 94-301, p. 1; 643 So. 2d at 416.

property arise[] from the fact that water flows through [the] channel.”¹⁰³ However, when the ownership of the running water itself is at issue, and not access to a stream, the inquiry diverges from the analyses in those cases. In other words, those cases hold useful dicta when it comes to riparian rights, but they do not fully consider the rights to the water itself.

As alluded to above, because Louisiana law states that running water and water in naturally navigable water bodies is a public thing owned by the state, riparian owners only have the right to access the water physically and to use the water in such a manner that its flow, when leaving the user’s estate, is not diminished¹⁰⁴ and to use the water for reasonable agricultural, aquacultural, and other riparian uses.¹⁰⁵

However, in the case of the draining of a creek, it is clear that something more than the typical riparian, agricultural, or aquacultural uses have occurred. Such a use is a clear violation of the idea that riparian owners are bound not to “unduly diminish” the flow of waters running across their estate through their own uses.¹⁰⁶ A complete draining of the water from a creek clearly violates this general tenet of riparian rights.

With regard to this situation, however, the damage done by such a violation of the riparian laws was as much one to the adjacent riparian owner who could no longer water or corral his livestock as it was to the environment and the state treasury. Because the state owns the running water and based upon the public trust obligations outlined in Louisiana Constitution article IX, section 1,¹⁰⁷ situations like this should require compensation to the state for the withdrawal of the water. Compensation should also be required for any damages caused to the nondraining riparian landowners as a result of the withdrawal of the water by one landowner and the inability of the other riparian landowners to use and/or

103. *Buckskin Hunting Club*, 03-1428, p. 12; 868 So. 2d at 274.

104. *Id.* at p. 11; 868 So. 2d at 274.

105. La. R.S. 9:1104 states that the legislature “finds that waters used in agricultural or aquacultural pursuits are not consumed, rather they are merely used, and the movement of the water ultimately provides value to the resource in several ways as these uses provide for additional pathways for integration of the water into the hydrological cycle.” *See also* Act. No. 994, 2010 La. Acts 3534.

106. *See Buckskin Hunting Club*, 03-1428, p. 11; 868 So. 2d at 274; *see also* La. Op. Att’y Gen. 08-0176 (2010); La. Op. Att’y Gen. 09-0028 (2010); La. Op. Att’y Gen. 09-0066 (2010); La. Op. Att’y Gen. 09-0291 (2010).

107. It is important to note, in this regard, that the state was not privy to the knowledge that the creek would be drained beforehand or was the draining part of any state permitting process; thus, in a post-hoc sense, it is unclear that any public trust obligations attach to the state. The water is gone, and no action against the riparian owner will bring it back.

enjoy the water.¹⁰⁸ The calculation of the latter damages is a matter for a tort suit and is outside of the scope of this review.¹⁰⁹ As to the former— injury to the treasury—compensation may be sought at any time from the state as against either the offending riparian owner or the production company.¹¹⁰

As noted above, another gaping hole in Act 955 is the reservation of riparian rights in that law.¹¹¹ This raises the questions of what riparian rights may be in conflict with this law and what activity may be exempted from the purview of the law by this reservation. Thus, it is unclear what, if any, rights have actually been reserved to riparian owners through the exemption in Act 955. Although Louisiana Civil Code article 657 provides for some amount of consumptive use of state waters by riparian owners, such uses, absent payment to the state for the water used, would be inconsistent with both the prohibition against donating state-owned things of value¹¹² and possibly, if such uses are in substantial amounts, the protections provided in the public trust doctrine.¹¹³

VI. HYDROKINETIC USES OF SURFACE WATER

Unlike the consumptive use of surface water, power generation using surface waters raises a different suite of concerns for surface water usage in Louisiana.¹¹⁴ There are two basic truisms, as discussed at length *supra*, that are key to understanding issues related to hydrokinetic power generation in Louisiana. First, under Louisiana law, the beds of naturally navigable water bodies are public things, and the beds of nonnavigable water bodies are private things.¹¹⁵ Second, the running water in a water body, whether navigable or not, and the water in a navigable water body are public things.¹¹⁶ As stated at length above, running water, impounded running water, and water overlying navigable water bottoms cannot be removed from water bodies in Louisiana without some compensation to the state.

108. Louisiana Civil Code article 2315(A) (2010) states, “Every act whatever of man that causes damage to another obliges him by whose fault it happened to repair it.”

109. For a nonexclusive review of tort and other theories, see Louisiana Attorney General Opinion 10-0173 (2010).

110. See LA. CONST. art. XII, § 13.

111. See LA. REV. STAT. ANN. § 30:961(A) (2013).

112. LA. CONST. art. VII, § 14(A).

113. *Id.* art. IX, § 1.

114. See *supra* note 24 and accompanying text.

115. See LA. CIV. CODE ANN. art. 450 (2010).

116. *Id.*; see also *id.* art. 452; LA. REV. STAT. ANN. § 9:1101 (2008).

Additionally, there is an important distinction that must be borne in mind when considering hydrokinetic power generation in Louisiana. That distinction is the difference between: (1) the use of the state's natural resources to create hydrokinetic power and (2) the regulation of the electricity once it is produced by that hydrokinetic process. This distinction is important when considering which agencies might have jurisdiction over hydrokinetic projects. The water that flows through a hydrokinetic generator is a use of a natural resource. Similarly, the land, water bottoms, or bridges to which the hydrokinetic generators might be attached would most likely be state resources. Therefore, as it pertains to the use of the state's natural resources, certain state agencies would continue their traditional roles in the regulating, permitting, and leasing related to these hydrokinetic projects. Further, once the electricity has been generated, the production, transmission, and marketing of the electricity will be regulated by the traditional federal and state agencies charged with the regulation of such activity.

A. *Regulating and Permitting Hydrokinetic Projects*

The distinction between regulating and permitting surface water uses is another important distinction for considering hydrokinetic projects in Louisiana. *Black's Law Dictionary* defines "regulation" as "[t]he act or process of controlling by rule or restriction,"¹¹⁷ whereas *Black's Law Dictionary* defines "permit," when used as a noun, as "[a] certificate evidencing permission; a license" and, when used as a verb, "[t]o consent to formally."¹¹⁸ When analyzing "regulating" and "permitting" of hydrokinetic electricity projects, the regulating and permitting must be broken down into two categories: the use of the state's natural resource to generate the electric power and the regulating of the electricity once it is produced.

1. Regulation of the Hydrokinetic Industry

Before getting to the specific Louisiana laws that may be implicated by hydrokinetic electricity projects, it is useful to first discuss the laws that regulate, generally, the hydrokinetic industry and the federal licensing process involved in these projects. The federal process for licensing hydrokinetic energy is set forth in the Federal Power Act (FPA).¹¹⁹ Congress, through the FPA, delegated to the Federal Energy

117. BLACK'S LAW DICTIONARY 1398 (9th ed. 2009).

118. *Id.* at 1255.

119. Federal Power Act, 16 U.S.C. §§ 791-828 (2012).

Regulatory Commission (FERC) the lead role with respect to the development and regulation of the hydrokinetic industry.¹²⁰ “The FPA’s hydropower licensing scheme is based on the premise that the power potential of the nation’s waterways is a public resource.”¹²¹ Several provisions of the FPA affirm FERC’s jurisdiction over the regulation and development of the hydrokinetic industry. Particularly, section 4 of the FPA provides in part:

[FERC] is authorized and empowered—

- (e) To issue licenses . . . for the purpose of constructing, operating, and maintaining . . . power houses, transmission lines, or other project works necessary or convenient for . . . the development, transmission, and utilization of power across, along, from, or in any of the streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, or upon any part of the public lands and reservations of the United States¹²²

Section 23(b)(1) of the FPA uses similar terminology to explicitly link FERC’s authority to the regulation of hydrokinetic development, stating:

It shall be unlawful for any person, State, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States, or upon any part of the public lands or reservations of the United States¹²³

Additionally, it should be noted that section 3(8) of the FPA defines “navigable waters” to mean:

120. See 16 U.S.C. § 797. The supremacy of FERC over even other federal agencies with regard to hydrokinetic power matters has been solidified with the resolution of a recent dispute between FERC and the Minerals Management Service (MMS). In this regard, although MMS is generally the federal agency charged with managing energy assets in federal waters and on federal lands,

[f]or [Outer Continental Shelf] hydrokinetic (nonwind) activities such as wave and current projects, MMS and FERC agreed that MMS will have authority to issue the leases, easements, and rights-of-way and that FERC will have exclusive jurisdiction to issue the licenses and exemptions for such projects.

Peter J. Schaumberg & Ami M. Grace-Tardy, *The Dawn of Federal Marine Renewable Energy Development*, NAT. RESOURCES & ENV’T, Winter 2010, at 15, 16. Thus, not only is FERC leading the states on all matters hydrokinetic, but it is also leading the federal government in the issuance of licenses and exemptions.

121. 4 GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, PUBLIC NATURAL RESOURCES LAW § 37:4, at 37-9 to -10 (2d ed. 2011); see also Joseph H. Bornong, *The Electric Consumer Protection Act of 1986: Changes in Hydro Licensing?*, 23 GONZ. L. REV. 135, 136 (1988).

122. 16 U.S.C. § 797.

123. *Id.* § 817(1).

[T]hose parts of streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, and which either in their natural or improved condition . . . are used or suitable for use for the transportation of persons or property in interstate . . . commerce.¹²⁴

Based on the powers granted to FERC in the FPA, it is clear that FERC is the lead agency in the development and regulation of the hydrokinetic industry and its projects as a whole when those projects occur in the streams and other water bodies which Congress has jurisdiction to regulate. As discussed *infra*, these powers include the licensing, on a federal level, of all electric energy projects, including hydrokinetic projects, that will generate power and market that power into interstate commerce. Nonetheless, the FPA does not preempt the states' authority to permit and regulate the use of their natural resources. Specifically, when a hydrokinetic project is being developed in state waters, the hydrokinetic project licensee must obtain all applicable permits, licenses, and leases from the relevant state resource agencies.¹²⁵

2. Regulation of the Production, Transmission, and Marketing of Generated Power

As to the question of which Louisiana agency would traditionally be in the position to regulate and permit the production, transmission, and marketing of the generated electric power by these hydrokinetic projects, the inquiry, again, begins with the FPA. The FPA is the starting point because, through the Commerce Clause of the United States Constitution,¹²⁶ Congress has great authority to regulate those industries or items that affect interstate commerce.¹²⁷ Relevant to this matter, Congress has chosen to regulate the production, transmission, and marketing of generated electricity. Specifically, the FPA states, in pertinent part:

- (a) Federal regulation of transmission and sale of electric energy
It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that Federal regulation of matters relating to generation . . . which consists of the transmission of electric energy in interstate

124. *Id.* § 796(8).

125. *See* First Iowa Hydro-Elec. Co-op. v. Fed. Power Comm'n, 328 U.S. 152, 178 (1946); *see also* Jon Wellinghoff, James Pederson & David L. Morenoff, *Facilitating Hydrokinetic Energy Development Through Regulatory Innovation*, 29 ENERGY L.J. 397, 401 (2008).

126. *See* U.S. CONST. art. I, § 8, cl. 3.

127. *See generally* United States v. Lopez, 514 U.S. 549 (1995) (reviewing Congress's reach under the Commerce Clause).

commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States.

- (b) Use or sale of electric energy in interstate commerce
 - (1) The provisions of this subchapter shall apply to the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce, but . . . shall not apply to any other sale of electric energy or deprive a State or State commission of its lawful authority now exercised over the exportation of hydroelectric energy which is transmitted across a State line.
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- (c) Electric energy in interstate commerce

For the purpose of this subchapter, electric energy shall be held to be transmitted in interstate commerce if transmitted from a State and consumed at any point outside thereof; but only insofar as such transmission takes place within the United States.
- (d) “Sale of electric energy at wholesale” defined

The term “sale of electric energy at wholesale” when used in this subchapter, means a sale of electric energy to any person for resale.¹²⁸

As is evidenced by the above-quoted statutes, FERC has the authority to regulate the production, transmission, and marketing of interstate transactions and wholesale transactions. However, under the FPA, certain authority over the production, transmission, and marketing of produced electric energy is maintained by the states.¹²⁹ As such, in Louisiana, regulation of intrastate retail power falls under the jurisdiction of the Louisiana Public Service Commission (PSC).

The Louisiana Constitution vests the PSC with the authority to “regulate all common carriers and public utilities and have such other regulatory authority as provided by law.”¹³⁰ In Louisiana, electric public utilities are defined as:

[A]ny person furnishing electric service within this state, the parish of Orleans excepted, including any electric cooperative transacting business in this state, provided, however, that said term shall not be construed to apply to any person owning, leasing and/or operating an electric generation facility provided such person is not primarily engaged in the generation, transmission, distribution, and/or sale of electricity, and provided that such person: (a) consumes all of the electric power and energy generated by

128. 16 U.S.C. § 824.

129. *See* Duke Energy Trading & Mktg., LLC v. Davis, 267 F.3d 1042, 1056 (9th Cir. 2001).

130. LA. CONST. art. IV, § 21(B).

such facility for its own use at the site of generation or at some other location if mutually acceptable agreements to transport such electric power and energy can be reached with each electric public utility whose transmission facilities would be electrically utilized therefor, provided, however, notwithstanding any provision contained herein, there shall be no obligation or duty, expressed or implied, to purchase, to sell, to transport, or to engage in any other type of transaction with respect to the electric power and energy that may be generated by such person, imposed upon any public utility by this Section except as shall be provided in the cogeneration rules and regulations adopted by the Louisiana Public Service Commission pursuant to the Public Utility Regulatory Policies Act of 1978; or, (b) only consumes a portion thereof in such manner and sells the entire remaining portion of such electric power and energy generated to an electric public utility as herein defined; or, (c) sells the entire production of electric power and energy generated by such facility to an electric public utility as herein defined.¹³¹

It is not possible to know, in a broad sense, whether the licensees of private hydrokinetic projects will be transmitting and marketing the produced electric energy to an end-user for commercial utilization, whether the electric energy will be sold locally in the retail market, or whether the electric power will be placed into the national transmission grid for sale in interstate commerce. Regardless, the electric energy produced from any hydrokinetic projects in Louisiana will be regulated either by FERC if sold interstate or at the wholesale level or, if sold intrastate or at the retail level, by the PSC.

3. Regulating and Permitting the Use of Surface Water for Hydrokinetic Purposes

For the purpose of fleshing out the law applicable to several hydrokinetics scenarios, certain facts must be assumed. The facts that we assume are as follows: (1) hydrokinetic generators will be submerged in running bodies of water in Louisiana, generally navigable rivers; (2) the submerged generators will use the flow of the water to rotate the blades of their turbines; and (3) the kinetic movement of the blades will capture energy that the generator will capture, thereby generating electric power.

With regard to regulating and permitting the use of the state's natural resources, there are two federal laws that require the issuance of permits or certifications by the state when there is a federal project with a federal licensee, as is the case with these FERC-licensed hydrokinetic

131. LA. REV. STAT. ANN. § 45:121 (2007).

projects. Those two laws are the Clean Water Act (CWA)¹³² and, in some situations, the Coastal Zone Management Act (CZMA).¹³³

The CWA provides, “Any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate”¹³⁴ The required certification must provide that any such discharges will comply with the applicable water quality standards of the CWA, as well as with “any other appropriate requirement of State law.”¹³⁵ Any such “appropriate” limitations included in a state certification become a condition on the federal license.¹³⁶ In addition, section 401 clearly states, “No license or permit shall be granted until the certification required by this section has been obtained or has been waived” and that “[n]o license or permit shall be granted if certification has been denied by the State.”¹³⁷

Similarly, the CZMA requires projects that are federally licensed to be in compliance with a state’s approved Coastal Zone Management Plan.¹³⁸ More specifically, the CZMA states:

[A]ny applicant for a required Federal license or permit to conduct an activity . . . affecting any land or water use or natural resource of the coastal zone . . . shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state’s approved program¹³⁹

With language almost identical to that of the CWA, the plain language of the CZMA further provides, “No license or permit shall be granted by the Federal agency until the state or its designated agency has concurred with the applicant’s certification or until, by the state’s failure to act, the concurrence is conclusively presumed”¹⁴⁰

132. 33 U.S.C. §§ 1251-1387 (2006).

133. 16 U.S.C. §§ 1451-1465. Note that the Clean Air Act (CAA) has been precluded from this list, because the hydrokinetic generating devices are said to be “emissions free.” See Salcido, *supra* note 28, at 1074-78 (discussing the generally environmentally friendly benefits of this technology). Should it be discovered during the testing and development of these hydrokinetic devices that emission of air pollutants does occur, then the licensees will have to comply with all relevant federal and state clean air laws, including, but not limited to, the CAA.

134. 33 U.S.C. § 1341(a)(1).

135. *Id.* § 1341(d).

136. *Id.*

137. *Id.* § 1341(a)(1).

138. 16 U.S.C. § 1456(c)(3)(A).

139. *Id.*

140. *Id.*

Applying the CWA within the state of Louisiana, the Department of Environmental Quality (DEQ) is the state agency delegated to implement the state's water quality certification program.¹⁴¹ Therefore, the state agency with the authority to establish water quality standards and permit any potential discharges from federally licensed projects is DEQ. In order for the hydrokinetic projects to be consistent with the requirements of the CWA, the federal licensee must obtain a certification from DEQ that the hydrokinetic project will comply with Louisiana's enforceable water quality standards.

Additionally, in Louisiana the federally approved Coastal Zone Management Plan is under the jurisdiction of the Office of Coastal Management (OCM) within the LDNR.¹⁴² The OCM coastal use permitting program is required to permit uses of "state concern."¹⁴³ Uses of "state concern" are identified as "[t]hose uses which directly and significantly affect coastal waters and which are in need of coastal management and which have impacts of greater than local significance or which significantly affect interests of regional, state, or national concern."¹⁴⁴ Explicitly included in the list of "uses of state concern" is "[e]nergy facility siting and development."¹⁴⁵

Therefore, when a hydrokinetic project is located within the designated "coastal zone," as defined in La. R.S. 49:214.24, then the hydrokinetic project licensee must obtain a coastal use permit from OCM.¹⁴⁶ In sum, the second state agency implicated in the permitting of a hydrokinetic electricity project is OCM.¹⁴⁷

Although outside of the direct scope of this Article, we would be remiss if we did not at least identify several laws that may be implicated by the introduction of hydrokinetic power generation devices into the water courses of this state. In addition to the CWA and the CZMA, it is probable that such projects will also have to be in compliance with the

141. LA. REV. STAT. ANN. §§ 30:2071-:2074 (2013).

142. *See id.* § 49:214.26 (2012).

143. *Id.* § 49:214.25(A)(1).

144. *Id.*

145. *Id.* § 49:214.25(A)(1)(h).

146. The CZMA may not affect all hydrokinetic projects within the borders of the state of Louisiana. The CZMA would only be enforced for projects that affect the "coastal zone" of Louisiana. *See* 16 U.S.C. §§ 1451-1465 (2012); LA. REV. STAT. ANN. §§ 49:214.21-:214.40.

147. It should also be noted that any coastal use permit must be accepted as consistent with Louisiana's Coastal Master Plan for a Sustainable Coast by the Executive Assistant of the Governor's Office—Coastal Activities. LA. REV. STAT. ANN. § 49:214.3.1(B) (2013); *see also* STATE OF LA., LOUISIANA'S COMPREHENSIVE MASTER PLAN FOR A SUSTAINABLE COAST (2012), *available at* <http://www.lacpra.org/assets/docs/2012%20Master%20Plan/Final%20Plan/2012%20Coastal%20Master%20Plan.pdf>.

National Environmental Policy Act,¹⁴⁸ the Endangered Species Act,¹⁴⁹ the National Historic Preservation Act,¹⁵⁰ the Abandoned Shipwrecks Act,¹⁵¹ Louisiana's Scenic Rivers and Streams Act,¹⁵² and any other state analogues to the federal laws mentioned herein. Further, in the permitting, licensing, or leasing related to such projects, it is also important to ensure that navigation on the state's navigable waterways is not impeded. Thus, any hydrokinetic projects will have to be conducted in such a manner as to comply with applicable federal and state navigability laws.¹⁵³

B. Leasing, Rentals, and Royalties Related to Hydrokinetic Projects

The concepts of leasing, royalties, and rentals potentially derivable from hydrokinetic power generation are important to the state and the development of the hydrokinetic industry because these concepts deal with the broader issue of whether and how the state may choose to impose fees and rentals upon the development of hydrokinetic energy sources. Thus, we must consider the relevant law and concepts relating to these matters, as such law and concepts presently exist.

1. Leasing of State Water Bottoms and Property

There are several issues that must be addressed in order to determine who can lease which rights for the purposes of hydrokinetic projects. As mentioned previously, most of the generators required to facilitate hydrokinetic power generation must either be attached to the bottom of the water body or to a structure situated within a water body. If the waterway is navigable, pursuant to Louisiana Civil Code article 450, the waters and the water bottoms are owned by the state. Thus, any attachment to the bottom of the waterway must be accomplished pursuant to a lease from the state.¹⁵⁴ In 2010, the Louisiana legislature addressed the issue of leasing state-owned water bottoms for "alternative

148. 42 U.S.C. §§ 4321-4370(f) (2006).

149. 16 U.S.C. §§ 1531-1544.

150. *Id.* §§ 470 to 470x-6.

151. 43 U.S.C. §§ 2101-2106 (2006); *see also* LA. REV. STAT. ANN. § 41:1601 (2006).

152. LA. REV. STAT. ANN. §§ 56:1840-:1856 (2013).

153. Most matters related to maintaining navigability on the waterways of the United States are left to the federal government, especially the auspices of the United States Coast Guard. *See, e.g.*, 33 U.S.C. §§ 1-12, 401-426(p) (2006). However, any hydrokinetic project in Louisiana would also have to comply with any relevant general and specific provisions of Title 34 (Navigation and Shipping) of the Louisiana Revised Statutes.

154. It is important to note that the water bottoms of navigable waterways cannot be alienated. LA. CONST. art. IX, § 3.

energy sources.” Act 930 of the 2010 Regular Session of the Louisiana legislature amended and reenacted La. R.S. 30:124 to read (in relevant part):

- A. The legislature finds that the state, through the Department of Natural Resources, should promote the generation and use of alternative energy sources, including but not limited to wind energy, geothermal energy, solar energy, and hydrokinetic energy, throughout the state to ensure the viability of the state’s natural resources, to provide a continuing utility-scale clean energy source for the citizens and businesses of Louisiana, to support economic development through job retention and creation in Louisiana, and to promote a clean environment.
- B. The State Mineral and Energy Board, hereinafter referred to as the “board”, has authority to lease for the development and production of minerals, oil, gas, or alternative energy sources, any lands belonging to the state, or the title to which is in the public, including road beds, water bottoms, vacant state lands, and lands adjudicated to the state at tax sale. The board, in consultation with the Department of Transportation and Development, shall adopt rules and regulations in accordance with the Administrative Procedure Act to implement the provisions of this Subpart.
- C. As used in this Section, “alternative energy sources” means energy sources other than oil, gas, and other liquid, solid, or gaseous minerals. It shall include, but not be limited to, wind energy, geothermal energy, solar energy, and hydrokinetic energy. It shall not include the cultivation or harvesting of biomass fuels or the use of state land or water bottoms for facilities which utilize biomass fuel to produce energy.
- D. No lease shall be granted for hydrokinetic energy development that is inconsistent with the terms of a preliminary permit, license, exemption, or other authorization issued by the Federal Energy Regulatory Commission pursuant to its authority under the Federal Power Act, 16 U.S.C. 791a, et seq.¹⁵⁵

Thus, to the extent that any of the hydrokinetic power projects must be located on state water bottoms, the location must be accomplished pursuant to a lease from the SMEB.

If the hydrokinetic power generation equipment is attached to a bridge rather than the bottom of a navigable waterway, a different suite of laws may apply.¹⁵⁶ Although it may be possible for the licensee to lease

155. LA. REV. STAT. ANN. § 30:124 (2013).

156. In addition to waterway bottoms, hydrokinetic devices are often attached to large, fixed structures within the water column. See, e.g., Vlado Halusek, Damir Šljivic & Lajos Jozsa, *Exploitation of the Hydrokinetic Potential of Rivers by Combining the Traditional Water Wheel*

the right to attach its equipment to a private waterway crossing, ditch, or pier, this Article only focuses on those waterway crossings that are owned by the state.¹⁵⁷ Under La. R.S. 48:951, the Louisiana Department of Transportation and Development (DOTD) is authorized to lease state-owned bridges for numerous purposes.¹⁵⁸ With the catch-all language that such a lease may be for “appliances or equipment for any other purposes,” La. R.S. 48:951 clearly encompasses the authority to lease bridges for the purpose of attaching hydrokinetic power generation mechanisms thereto.

The ultimate question of who has the right to grant hydrokinetic leases will turn on whether the thing being encumbered is publicly or privately owned. If it is a navigable waterway, as noted above, the bottom will always be state-owned and the SMEB would be the proper lessor. If it is a nonnavigable waterway, the bottom may be privately owned and the lessor would likely be a private entity. If the structure being encumbered is anything that is publicly owned besides the bridges referred to in La. R.S. 48:951, then the specific legislation applicable to those things must be consulted. If such structures are privately owned, then, again, the private owner will be the proper lessor.

2. Rentals and Royalties

Due to a lack of jurisprudential guidance regarding rentals and royalties stemming from renewable energy sources, it is necessary to examine the terms “rentals” and “royalties.” “Rent” is defined as “[c]onsideration paid, usu[ally] periodically, for the use or occupancy of property (esp[ecially] real property).”¹⁵⁹ “Rental” is an extension of rent and is defined as “the amount received as rent.”¹⁶⁰ “Royalty,” on the other hand, is defined as “[t]he portion of oil, gas, and minerals retained by the lessor on execution of a lease or their cash value paid by the lessee to the

and the Darrieus Turbine, 19 TECHNICAL GAZETTE 659, 659 (2012) (discussing the attachment of power-generating water wheels to anchored pontoon structures). Although we discuss the law applicable to the leases of bottoms and bridges, future factual scenarios encompassing the attachment of these devices to other state-owned things may require the examination and application of different laws than those mentioned herein.

157. The reason that it is unclear from whom such leases must be acquired is due to the vagaries of Act 930, which refers to “road beds” but not to “bridges.” LA. REV. STAT. ANN. § 30:124(B). Thus, it is possible that a lease from the SMEB may be appropriate for bridge-based hydrokinetic attachments, but it is not clear at this time. Further legislation or regulation may be required.

158. *See id.* § 48:951 (2004).

159. *See* BLACK’S LAW DICTIONARY, *supra* note 117, at 1410.

160. *Id.* at 1411.

lessor or to one who has acquired possession of the royalty rights.”¹⁶¹ “Royalty” is also defined by *Black’s Law Dictionary* as “[a] share of the product or profit from real property, reserved by the grantor of a mineral lease, in exchange for the lessee’s right to mine or drill on the land.”¹⁶²

Inherent within the definition of “royalty” is the notion that royalties are paid on the production and depletion of oil and gas or other minerals. Stated otherwise, royalties often go hand-in-hand with the “rule of capture”¹⁶³ and the depletion of fugacious minerals. Conversely, in the case of renewable energy sources, the fuel used to generate electricity is not a fugacious mineral subject to the rule of capture and depletion. The fuel for renewable energy is often wind, waves, and sunlight (i.e., those fuel sources that are not subject to depletion). Therefore, to call any revenues derived by the state from the use of the natural resource by any hydrokinetic project or any other renewable energy project a royalty would be a misnomer under the traditional mineral lease definition.

Further and as discussed above, the running waters of the state are a state-owned resource. Thus, while probably unlikely, if during the course of the production of electricity by a hydrokinetic generation project, the state-owned waters are depleted, then the state must be compensated for that depletion. This conclusion is based on the general premise that water is a thing that is owned by the state and that thing has intrinsic value. Because running water is a thing of value belonging to the state, any depletion of its corpus must result in compensation to the state to avoid running afoul of Louisiana Constitution article VII, section 14. In addition, Louisiana Civil Code article 658 requires that any running water diverted from its original course must be returned to that course without depletion. Thus, the state must be compensated for any depletion of any running waters (subject to allowable riparian uses) occasioned by the hydrokinetic power generation process. However, because these devices allow running water to flow through them without a diminution of the water,¹⁶⁴ it is doubtful that any compensation to the state for the actual use (that is, diminution) of the water would be required. We are unaware of any source of Louisiana law that would require compensation to be paid for the use of water if the use of the

161. See A DICTIONARY FOR THE OIL AND GAS INDUSTRY 233 (1st ed. 2005).

162. See BLACK’S LAW DICTIONARY, *supra* note 117, at 1445.

163. “Rule of capture” is defined as the “rule applied by the courts . . . that gives title to oil and gas produced from a tract of land to the party reducing it to possession.” A DICTIONARY FOR THE OIL AND GAS INDUSTRY, *supra* note 161, at 233.

164. See Eisenstat & Dukes, *supra* note 26, at 14.

water does not diminish its quantity or flow.¹⁶⁵ In other words, the simple passing of water through hydrokinetic devices is not a use of the water for which the state is due compensation because such use results in no diminution or depletion of the water.

While any revenues the state collects from renewable energy projects would not necessarily be deemed royalties, and while the state cannot charge for the use of the natural resource in the absence of a depletion of the resource, the state may charge a rental for the leasing of state-owned things to facilitate the siting of these hydrokinetic projects.

C. Rentals and Ownership of Produced Electric Energy from Hydrokinetic Projects

One matter not yet considered is whether, as the owner of the water, the state has any ownership rights to the power generated by any hydrokinetic electric facilities within its borders. Inherent in this issue is the question of whether hydrokinetic power is to be treated like a mineral, for which the state can exact a fee for a consumptive use.

With regard to this issue, it is important to understand that FERC-licensed hydrokinetic projects are being developed by private companies, not the state.¹⁶⁶ Private companies use a state resource for power

165. This reality is not for want of trying. House Bill 277 of the 2010 Regular Session of the Louisiana legislature sought to do just that: provide the equivalent of royalties to a state entity for the generation of hydrokinetic power. This bill would have established the St. Mary Hydroelectric Authority, a governmental body that would oversee and control hydroelectric and hydrokinetic activities in St. Mary Parish. Although this bill passed in the legislature, Governor Jindal vetoed the bill, commenting:

This bill directly conflicts with another expression of the Legislature this session [(Senate Bill No. 183)] as to how the state should regulate hydroelectric power I am concerned with setting up a regulatory structure that would result in 63 parishes operating under one structure that is managed by the state and one parish operating under a completely different structure.

Letter from Bobby Jindal, Governor, State of La., to Alfred W. Speer, Clerk, La. House of Reps. (July 2, 2010), <http://www.legis.la.gov/legis/ViewDocument.aspx?d=8219>. In this regard, the Governor may have been right. The bill would have awkwardly established a separate set of rules related to hydropower for one parish and such piecemeal legislating is likely not wise. The Governor also noted: “[T]he Attorney General recently issued an opinion after this bill was introduced indicating that water is a natural resource of the state, requiring it to be managed by the state in a similar fashion to our other resources like fisheries, oil, and gas.” *Id.* Presumably, this reference is to Louisiana Attorney General Opinions 08-0176, 09-0028, and 09-0066. None of these opinions have any direct bearing on hydropower. However, an argument can be made that the opinions stand for the premise that a statewide approach to regulating water resources is appropriate and advisable.

166. *See, e.g.*, FFP Project 60, LLC; Preliminary Permit Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Competing Applications, 74 Fed. Reg. 34,320 (July 15, 2009) (providing notice of a private license application for a hydrokinetic facility on the Mississippi River).

generation and place the hydrokinetic generators on state-owned property,¹⁶⁷ but the capital used and the equipment necessary for these projects is privately owned and funded. An analogy would be if a traditional fossil-fuel-fired-generating facility were to be placed on state lands. In both cases, the hydrokinetic project and the traditional fossil-fuel-fired generator, it cannot be legally justified under the current law for the state to take ownership of the generated power simply due to the fact that the facilities are located on state-owned property, insofar as all lease and other legally required payments for the use of the underlying property is received by the state.

Other hydropower sources, such as dams, are traditionally owned and operated by governmental agencies, political subdivisions, or quasi-governmental corporations that are funded by taxpayers.¹⁶⁸ In the case of dams and traditional hydropower sources, the above-listed entities also often distribute the produced electricity.¹⁶⁹ Due to the fact that those entities are public in nature, coupled with the fact that their facilities are supported by tax revenue, those entities are authorized to take ownership of the produced electricity and to benefit financially from its sale.¹⁷⁰ However, the same is not currently the case with the new, privately owned hydrokinetic generators that are the subject of this section. As mentioned, these FERC licensees (including their facilities and

167. See, e.g., Notice of Competing Preliminary Permit Applications by Free Flow Power Corporation and Northland Power Mississippi River LLC Accepted for Filing and Soliciting Comments, 76 Fed. Reg. 53,435 (Aug. 26, 2011) (“proposing to study the feasibility of developing hydropower projects . . . on the Mississippi River, near the town of Point a La Hache, in Plaquemines Parish, Louisiana”).

168. Examples being the Sabine River Authority in Louisiana and the Tennessee Valley Authority at the federal level. LA. REV. STAT. ANN. §§ 38:2321-2337 (2013); Tennessee Valley Authority Act, 16 U.S.C. §§ 831-831ee (2012).

169. See Christine A. Klein, *On Dams and Democracy*, 78 OR. L. REV. 641, 689-90 (1999). In this source, Klein notes:

Currently, there are more than 2300 hydroelectric power plants operating in the United States, with a conventional generating capacity of 74,800 megawatts of power. Of that capacity, forty-four percent is federally owned; thirty-five percent is in private ownership; and twenty-one percent is owned by public agencies such as cities and irrigation districts.

Id. (footnotes omitted). This corroborates the notion that hydrokinetic power generation is substantially different from the historic hydropower model in that dams were, more often than not, publicly owned, as opposed to the hydrokinetic facilities of today that are largely privately owned.

170. See, e.g., Jorge Márquez San Martín, *Puerto Rico Electric Power Authority's Partial Displacement as an Energy Producer in Favor of Privately Owned Renewable Energy Generating Facilities: Effects and Repercussions on the Authority's Ability To Comply with Its Present and Future Debt Obligations*, 81 REV. JUR. U.P.R. 1167 (2012) (referring to a portion of the hydropower dams in Puerto Rico that are publicly owned and the fact that the government receives the benefits (and detriments) of the power sold from these facilities).

equipment) are privately held and funded corporations. Thus, the state could not take ownership of the produced electric energy without potentially being subject to a takings clause challenge for such an action.¹⁷¹

Nonetheless, a state agency or entity may charge a reasonable rent or obtain something of value in exchange for the leasing of state-owned things for the siting of hydrokinetic devices. As such, there do not appear to be any legal restrictions prohibiting a state agency or entity from making a part of its rentals a reasonable percentage of the electricity produced. In other words, due to the fact that the state has the authority to lease the state-owned things, there is nothing in the law that would prevent the state, by contract, from negotiating a share of a reasonable percentage of the electricity produced from any renewable energy source as part of the formula for determining the rental payment owed to the state for the leasing of its things.

In fact, the United States Department of the Interior, Bureau of Land Management, has developed regulations for leases for the development of geothermal power generation,¹⁷² a different but similar renewable energy source, in which the rental is a scaled percentage of the electricity produced. An example of a scaled rental would be 3% of the electricity produced by a renewable energy project for the first through fifth year of the lease and 7% of the electricity produced by a renewable energy project for the sixth through tenth year. This scaling of the percentage of generation as a rental has the added benefit of encouraging the development of renewable energy generation sources because the lower rental percentage in the early stages of development allows the developer to better absorb the initial capital outlay required by these types of projects.

In sum, the state cannot charge a “royalty” for the use of its surface waters unless the use includes a withdrawal or depletion of those waters. On the other hand, the state can, by contract, charge a rental when leasing state-owned things for the siting of hydrokinetic devices. Additionally, there are no legal prohibitions on the state requiring all or part of its rental payment to be a reasonable percentage of the electricity produced from hydrokinetic or other renewable energy projects located on state lands.

171. See generally U.S. CONST. amends. V, XIV; LA. CONST. art. I, § 4(B).

172. BLM Geothermal Resource Leasing, 43 C.F.R. §§ 3200-3279 (2012).

VII. OTHER POTENTIAL IMPACTS TO LOUISIANA'S SURFACE WATERS:
CROSS-BORDER WATER USES

The matter of surface water sales has, in recent years, raised both local and national interest. In 2010, the SRA was negotiating a surface water sale to various Texas interests.¹⁷³ In addition, in 2013, the United States Supreme Court ruled on cross-border water sales and their restrictions under the Red River Compact.¹⁷⁴ Both of these issues are relevant and important to the overall Louisiana surface water law scheme.

A. *The Sabine River Authority*

During negotiations for the proposed SRA sale, the SRA queried the Louisiana Attorney General regarding what bid procedures must be followed prior to entering into a contract or agreement providing for the sale, utilization, distribution, or consumption of water (over which the SRA has jurisdiction or control) to entities located outside the boundaries of the state.¹⁷⁵ In 2010, through Louisiana Attorney General Opinion 10-0297, the Attorney General analyzed the general water sale authority of the SRA, finding, in part, that the SRA has substantial powers that are unusual in the typical state agency situation in Louisiana.

The issue leading to the SRA's request for the Attorney General Opinion was a somewhat unrelated Louisiana Inspector General report from 2005.¹⁷⁶ That report related more generally to the SRA's leasing procedures.¹⁷⁷ However, it raised concern within the agency regarding water sale matters. The inquiry by the SRA prompted a review of both the relevant statutes authorizing the SRA to enter into contracts or agreements for the sale, utilization, distribution, or consumption of water within its jurisdiction and the applicability of the basic bidding and procurement procedures in Louisiana as applied to the SRA, with a review of the procedure to be used by the SRA for entering into contracts for the sale, utilization, distribution, or consumption of water (over which the SRA has jurisdiction or control) to entities located inside and outside the boundaries of the state.¹⁷⁸

173. Vickie Welborn, *SRA Panel OKs Texas Water Sales*, SHREVEPORT TIMES, Dec. 1, 2011, at A1.

174. *Tarrant Reg'l Water Dist. v. Herrmann*, 133 S. Ct. 2120 (2013).

175. La. Op. Att'y Gen. 10-0297 (2011).

176. *See generally* SHARON B. ROBINSON, LA. INSPECTOR GEN., SABINE RIVER AUTHORITY (2005) (on file with La. Div. of Admin.).

177. *Id.* at 7.

178. La. Op. Att'y Gen. 10-0297.

The SRA, under La. R.S. 38:2325 (in pertinent part), shall have the power:

- (3) To make and enter into contracts, conveyances, mortgages, deeds or trusts, bonds, and leases in the carrying out of its corporate objectives
-
- (9) To do all things necessary or convenient to carry out its functions.
- (10) To conserve, store, control, preserve, utilize, and distribute the waters of the rivers and streams of the Sabine watershed including but not limited to all waters flowing through the Sabine River Channel and Diversion System¹⁷⁹

With regard to contracts or agreements that specifically provide for the sale, utilization, distribution, or consumption of water, La. R.S. 38:2325 also states that the SRA shall have the following powers:

- (16)(a) To enter into any and all contracts and other agreements with any person, real or artificial, any public or private entity, any government or governmental agency, including the United States of America, the state of Texas, the Sabine River Authority of Texas, the state of Louisiana, and the agencies, bureaus, departments, and political subdivisions thereof, which contracts and other agreements may provide for the sale, conservation, storage, utilization, preservation, distribution, or consumption, whether within or without the state of Louisiana, of the waters over which the authority has jurisdiction or over which the authority has legal control.
- (b) The written concurrence of the governor shall be required for any contracts and other agreements which provide for the sale, utilization, distribution, or consumption, outside of the boundaries of the state of Louisiana, of the waters over which the authority has jurisdiction or control.
- (c) The written concurrence of the Senate Committee on Natural Resources and the House Committee on Natural Resources and Environment shall be required for any contracts and other agreements which provide for the sale, utilization, distribution, or consumption, outside of the boundaries of the state of Louisiana, of the waters over which the authority has jurisdiction or control.
- (d) In addition, at least two-thirds of the governing authorities of the parishes within the territorial jurisdiction of the authority shall concur before the authority can enter into any contracts or other agreements which provide for the sale, utilization, distribution, or consumption, outside of the boundaries of the state of Louisiana,

179. LA. REV. STAT. ANN. § 38:2325(A) (2013).

of the waters over which the authority has jurisdiction or control. However, the concurrence from each of the parish governing authorities shall be by resolution, adopted by a two-thirds vote of the members of each of the parish governing authorities.¹⁸⁰

This grants the SRA substantial authority to negotiate out-of-state water-sale contracts in the first instance. However, subsequent to the SRA's much publicized 2010 attempts to undertake such out-of-state water sales,¹⁸¹ the law was amended¹⁸² to give final approval authority for such sales to the Senate Committee on Natural Resources¹⁸³ and the House Committee on Natural Resources,¹⁸⁴ in addition to the governor.¹⁸⁵ Also, a procedure was added for the people to participate in such sales decisions through a vote of the governing authorities of the parishes.¹⁸⁶ Thus Louisiana has begun to wake up to the reality that legal checks and balances are necessary for the protection of its water resources.¹⁸⁷

With the existence of the specific sale provisions in the SRA's organic legislation, the Attorney General found the procurement code, the public bid law, the public lease law, the law relating to the sale of surplus movable property, and La. R.S. 39:11 inapplicable to the SRA's sale of surface water in general.¹⁸⁸ Interestingly, although Act 955 is inapplicable to the SRA based upon the language in La. R.S. 30:961,¹⁸⁹ the SRA is not exempt from the mandates of the public trust doctrine. Thus, the Attorney General noted:

[I]t is advisable for the SRA to discuss any agreements which provide for the sale, utilization, distribution, or consumption of water within the SRA's jurisdictional boundaries with DNR to ensure that all State entities are consistently ensuring that "the natural resources of the state, including . . . water . . . [are] protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people," as

180. *Id.*

181. *See, e.g.,* Welborn, *supra* note 173.

182. Act. No. 784, 2012 La. Acts 3160.

183. LA. REV. STAT. ANN. § 38:2325(A)(16)(c).

184. *Id.*

185. *Id.* § 38:2325(A)(16)(b).

186. *Id.* § 38:2325(A)(16)(d).

187. This is also exemplified by Act 955, 2010 La. Acts 3315.

188. La. Op. Att'y Gen. 10-0297 (2011).

189. For example, the language that reads, "[E]xcept as otherwise provided by law, a person or entity may enter into a cooperative endeavor agreement to withdraw running surface water as described in this Chapter." Act No. 955, 2010 La. Acts 3315. "Unless otherwise provided by law" is the operative language exempting the SRA from the purview of Act 955.

required by La. Const. Art. IX, § 1, also known as the “Public Trust Mandate[.]”¹⁹⁰

Based upon the constrictions of the public trust doctrine in the Louisiana Constitution, as interpreted and applied by the *Save Ourselves* case, the SRA must effectively adhere to the environmental reviews of its water sales just the same as any other entity in Louisiana, even absent the specific directives of Act 955.

B. Tarrant Regional Water District v. Herrmann

In a 2012 article, Ryan M. Seidemann reviewed the *Tarrant Regional Water District v. Herrmann* case with regard to the potential threats of that case to Louisiana because of the SRA.¹⁹¹ In that article, Seidemann briefly described the *Tarrant* dispute thusly:

Over several years, various entities in Texas, namely the Tarrant Regional Water District (TRWD) and the City of Irving (Irving) have attempted to challenge Oklahoma’s authority to regulate out-of-state water sales. These challenges have largely revolved around Oklahoma’s rights to restrict or limit out-of-state sales of Red River water under various state laws ostensibly drafted under the authority of the Red River Compact. . . . [T]he cases that have resulted from these challenges may have significant bearing on issues of interstate water sales in Louisiana and especially interstate water sales by the SRA¹⁹²

At the time of the above-quoted writing, the *Tarrant* case had been decided only by the United States Court of Appeals for the Tenth Circuit, and Louisiana was merely a bystander in the out-of-state water debate raging in that litigation. On January 4, 2013, the United States Supreme Court granted certiorari to review the Tenth Circuit’s decision in *Tarrant*, and it immediately became acutely obvious that Louisiana’s opportunity to be heard on these issues was at hand.¹⁹³ Accordingly, Louisiana joined the case as an amicus curiae, along with its cocompacting state, Arkansas, on March 27, 2013.¹⁹⁴

In the Tenth Circuit, the dispute between Texas and Oklahoma over certain waters subject to the Red River Compact revolved around

190. La. Op. Att’y Gen. 10-0297.

191. Ryan M. Seidemann, *Water and Power: The Sabine River Authority of Louisiana—A Review of Property Disputes, Hydropower, and Water Sales*, 25 TUL. ENVTL. L.J. 389 (2012).

192. *Id.* at 405 (footnotes omitted).

193. See *Tarrant Reg’l Water Dist. v. Herrmann*, 133 S. Ct. 831 (2013) (granting certiorari).

194. Brief of the States of Louisiana & Arkansas as Amici Curiae Supporting Respondents, *Tarrant Reg’l Water Dist. v. Herrmann*, 133 S. Ct. 2120 (2013) (No. 11-889) [hereinafter LA/AR Brief].

dormant Commerce Clause issues and the extent to which states can legislate under a compact.¹⁹⁵ Once certiorari was granted, the focus of the case shifted to questions related to whether the Red River Compact preempted Oklahoma's protectionist water laws¹⁹⁶ and whether the Tenth Circuit should have analyzed this case under the Commerce Clause.¹⁹⁷ Tarrant and the United States (as amicus curiae in support of Tarrant) retained small portions of the original Tenth Circuit arguments in their briefs to the Supreme Court, but largely jettisoned those in favor of the above topics.

When Louisiana and Arkansas chimed in on the issues, the states focused on the importance of maintaining state sovereign control over surface waters, noting that such resources are traditionally a sovereign state matter, not lightly conceded in compact negotiations.¹⁹⁸ Louisiana and Arkansas also focused on the appropriate manner for the interpretation of the Red River Compact, noting that Texas's interpretation of the Compact was inconsistent with Supreme Court precedent and interpretational principles.¹⁹⁹ In their amicus brief, both the importance of the Red River and the Sabine River were central themes, as was the emerging legal scheme surrounding the control, protection, and ownership of Louisiana's surface waters (that is, Act 955 and its progeny).²⁰⁰

In an opinion authored by Justice Sotomayor, a unanimous Court upheld the Tenth Circuit's decision in *Tarrant*.²⁰¹ During oral arguments, in response to Tarrant's position, which claimed a right to certain Oklahoma waters, Justice Alito noted, "When you say Texas has the right to go into Oklahoma [for water], just—just think about that phrase. That's—that's very striking. I mean, it sounds like they are going to send in the National Guard or the Texas Rangers."²⁰² This sort of commentary set the tone for the Court's return to the Tenth Circuit's general holding that the Red River Compact did not authorize Texas to reach across state lines to acquire its share of compacted water and that the protectionist laws implemented by Oklahoma pursuant to its authority under the

195. See *Tarrant v. Reg'l Water Dist. v. Herrmann*, 656 F.3d 1222, 1235-50 (10th Cir. 2011); see also Seidemann, *supra* note 191, at 406-08.

196. See LA/AR Brief, *supra* note 194, at 6-8.

197. Brief for the United States as Amicus Curiae Supporting Vacatur and Remand at 31-32, *Tarrant*, 133 S. Ct. 2120 (No. 11-889).

198. LA/AR Brief, *supra* note 194, at 1-2.

199. *Id.* at 14-26.

200. See *id.* at 19-20.

201. *Tarrant*, 133 S. Ct. at 2137.

202. Oral Argument at 11:44, *Tarrant*, 133 S. Ct. 2120 (No. 11-889), available at http://www.oyez.org/cases/2010-2019/2012/2012_11_889.

Compact were not unconstitutional violations of the dormant Commerce Clause.²⁰³

The conclusion of the *Tarrant* case by the United States Supreme Court in Oklahoma's favor has significant implications for Louisiana and the protection of its surface water resources. Not only is Louisiana a signatory to the Red River Compact and thus directly protected from intrusions by the other compacting states on its Red River water rights, as noted by Seidemann in 2012, the challenged portions of the Red River Compact and the Sabine River Compact are substantially similar,²⁰⁴ thus suggesting a convergent outcome in the event that Texas ever attempts to force Louisiana to sell its share of Sabine River water. The *Tarrant* decision, therefore, represents clear support for the primacy of state surface water protection laws, thus acting as a supplement to and support of Louisiana's current surface water legislation efforts.

VIII. DISCUSSION

A. *Post-Act 955—What Is the Law?*

Much of Act 955 remains intact as of the writing of this Article. Although the law was due to sunset in 2012, Act 261 of 2012 extended the Act 955 sunset provision until December 31, 2014.²⁰⁵ Most of the remainder of the changes wrought by Act 261 were nonsubstantive, basically making adjustments to Act 955 to account for the new sunset date. There is also a restriction on DNR's ability to enter into surface water use CEAs for cross-border water uses—consistent with the SRA's new restrictions discussed above.²⁰⁶ Aside from these changes, Act 955 remains unchanged.

The Attorney General's Office has not changed its position from its series of opinions released between 2010 and 2013. The office has maintained that although Act 955 is voluntary in nature, the constraints of Louisiana Constitution article VII, section 14(A), and article IX, section 1, mandate that the state must be compensated for consumptive surface water uses and that environmental reviews of the impacts of such uses must be undertaken.²⁰⁷ Pursuant to this position, the Attorney General's Office has made demands on several water users for both compensation and for post hoc environmental analyses when it has

203. *Tarrant*, 133 S. Ct. 2120.

204. Seidemann, *supra* note 192, at 408-11.

205. Act No. 261, 2012 La. Acts 1712.

206. See LA. REV. STAT. ANN. § 30:961(I) (2013).

207. See, e.g., La. Op. Att'y Gen. 09-0291 (2010); La. Op. Att'y Gen. 10-0173 (2010); La. Op. Att'y Gen. 10-0297 (2010).

become aware of non-Act-955-compliant surface water uses.²⁰⁸ In this regard, no legal challenges to such demands have resulted and all of the demands have been resolved amicably, either by way of post hoc compliance or by a correction of errors.²⁰⁹ These enforcement actions have not occurred without criticism. At least one mineral-industry lobbying group has leveled attacks at the Attorney General's Office for making such demands, and it is unlikely that this type of response will abate anytime soon.²¹⁰ However, the cooperative nature of the resolutions to the demand letters noted above suggests that, aside from these lobbying groups' attacks, the process set forth by Act 955 and required by the Louisiana Constitution is working and that the mineral industry is not, yet, substantially opposed to these constitutional and statutory requirements.

B. Where Do We Go from Here?

Louisiana's substantive foray into legislating the protection and management of its surface water resources is in its infancy. Act 955 was a large first step towards protecting this vital resource, and the combined efforts of the legislature (with Acts 955 and 261), the Attorney General (with his opinions, demand letters, and involvement in the *Tarrant* case), and the Department of Natural Resources (through the Act 955 CEA process) represent a massive change in the state's treatment of surface waters. However, much remains to be done to ensure the long-term viability of this resource.

For all of the advances made by the legislature with Act 955, there are still several problems with this law.²¹¹ In addition, as is noted below, there are also several problems with other laws impacting the issue of

208. *See, e.g.*, Letter from Ryan M. Seidemann, Assistant Att'y Gen., State of La., to Sharon Crain, Chesapeake Operating, Inc. (Nov. 5, 2012) (on file with authors).

209. The correction of errors occurred in cases where demand letters were sent out based upon incorrect information and the letters were simply rescinded.

210. *See, e.g.*, Letter from Don Briggs, President, La. Oil & Gas Ass'n, to Ryan M. Seidemann, Assistant Att'y Gen., State of La., <http://loga.la/letter-to-attorney-general-on-water-usage-and-ceas/>.

211. Fleming rather recklessly characterizes Act 955 as unconstitutional for what he asserts is the law's failure to "give the environmental costs and benefits full and careful consideration." Fleming, *supra* note 3, at 398. However, Fleming overlooks the reality that, under the *Save Ourselves* analysis (which would apply to Act 955 CEAs), it is the permitting (or in this case, the CEA) that is the subject of the IT balancing test analysis and that Act 955, on its face, with its mandatory environmental reviews and cancellation of CEA authority, is not constitutionally defective. In addition, as Fleming notes, "Act 955 is a good addition to Louisiana water law." *Id.* at 395. Thus, it is curious why such a "good addition" would then be the subject of an attack that provides suggestions to undermine that "addition."

surface water use and protection, not all of which can be covered by a simple reliance on the public trust doctrine.

With regard to Act 955, as an initial matter, the law exempts from its coverage agricultural and aquacultural uses.²¹² With the exemption of agriculture and aquaculture from Act 955, the legislature has left unchecked two prominent surface water users in Louisiana.²¹³ In and of itself, this exemption raises concerns for the question of whether the state is (by this exemption) giving away public things of value. This exemption is also troubling because it is questionable whether the law violates the public trust doctrine by instructing the state's trustee agencies to essentially look the other way if these exempted uses are not unilaterally ensuring that the use of the state's surface waters are protective of the resource or the environment. In fact, although there is no violation of the *Save Ourselves* case in this scenario because that case applies only to state actions (of which there are none when permitting and agreements are not allowed), there is a potential violation of the public trust doctrine if these exempted uses are allowed to continue unchecked.²¹⁴

An additional problem with Act 955 is that the law retains existing riparian rights to surface waters without undertaking an excursus of what such rights are or considering whether those rights might be subject to the public trust doctrine analysis of other natural resource uses.²¹⁵ Based upon the above review, it is clear that some of these problems as to riparian rights have been considered by the Attorney General's Office. However, legislation is needed to statutorily clarify the interrelation of the public's and riparian owners' rights as to surface water.

Also, as noted above, the voluntary nature of Act 955 is problematic.²¹⁶ Although it is likely that the voluntary language represents a concession to opposition groups in 2010 in order to pass Act 955, this language is confusing and stands in conflict with multiple provisions of the Louisiana Constitution. This confusing provision may be the most significant shortcoming of Act 955. The fact that water users can elect to submit to the CEAs envisioned by that law undermines both the public trust doctrine and Louisiana Constitution article VII, section 14(A). Clearly, under Louisiana Constitution article VII, section 14(A),

212. This exemption is not actually contained within Act 955. Rather, it is a charge on Act 955 from some companion legislation—Act 994 of 2010. 2010 La. Acts 3534.

213. See SARGENT, *supra* note 6, at 15-22.

214. See *Save Ourselves Inc. v. La. Env'tl. Control Comm'n*, 452 So. 2d 1152 (La. 1984).

215. See LA. REV. STAT. ANN. § 30:961(A) (2013).

216. See *id.*

the consumptive use of the state's running waters mandates payment to the state of the value of the resource used. In addition, because the CEAs developed pursuant to Act 955 require environmental impact reviews to determine consistency with the public trust doctrine mandates, users opting out of such CEAs risk running afoul of the public trust doctrine as well as threatening the analyses undertaken for those who have submitted to the process.²¹⁷

It is difficult to say that there is a positive duty for the state to take action against someone under the public trust doctrine in the absence of clear adverse impacts to the state's resources. Act 955 certainly provides no penal provisions for failure to adhere to the law. Thus, the real stick with regard to the failure to comply with Act 955 is Louisiana Constitution article VII, section 14(A). It is unfortunate that the environmental laws of Louisiana are not substantial enough to provide for a direct enforcement action or to provide for regulatory penalties and fines for the unauthorized use of the state's waters, but they currently do not. As was noted in another recent Attorney General opinion on this subject, the state is left with, in the absence of clear evidence of harm to the environment, general conversion prohibitions in the Louisiana Criminal Code to stop those who opt not to comply with Act 955.²¹⁸ Future legislation should remove the voluntary language currently present in Act 955 to ensure consistency with the Louisiana Constitution.

Finally, although Act 261 has extended the sunset period for Act 955, it did not eliminate that provision. Thus, the law is set to sunset in late 2014.²¹⁹ The general idea behind this sunset provision, in 2010, as was alluded to in the legislative hearings on this bill,²²⁰ is that the law is a temporary provision that allows the use of surface waters to continue through the 2012 (and now 2014) Regular Session of the Louisiana legislature.

217. The latter point is in reference to the watershed-wide nature of the analyses currently being undertaken. If the analyses are based upon the ecological viability of the watershed based upon known uses, unknown uses (that is, the uses of those not submitting to the review process) could undermine and invalidate all of the analyses.

218. La. Op. Att'y Gen. 10-0173 (2010) (citing LA. REV. STAT. ANN. § 14:67 (2010)). This is significant, as criminal actions do not generally lie with the Attorney General at a statewide level, but rather with individual district attorneys. LA. CONST. art. V, § 26(B). Thus, there is little hope, under the current legal structure, for the imposition of penalties aside from unjust enrichment claims against unauthorized water users at the state level.

219. Act No. 261, 2012 La. Acts 1712.

220. *Cooperative Endeavor Agreements for the Withdrawal of Running Surface Water for Certain Purposes: Hearing on H.B. 1486 Before the S. Comm. on Natural Res.*, 2010 Leg., 36th Reg. Sess. (La. 2010) (statement of Scott Angelle, Lieutenant Governor, State of La.) (noting that House Bill 1486 (later Act 955) is a temporary measure until the legislature enacts comprehensive water legislation).

If Act 955 sunsets in 2014, there will not be an open season on the surface waters of Louisiana. The Louisiana Constitution, through the provisions discussed at length above, ensures that this resource will continue to be protected in the absence of Act 955. However, the use and sale of surface waters becomes legally problematic if Act 955 sunsets without a replacement. As noted above, in most cases, absent some legislation authorizing the sale of such waters, the classification of these waters as public things by the Louisiana Civil Code restricts their sale. Thus, for those needing to be able to purchase or otherwise consumptively use surface water in Louisiana, there is no legal mechanism to provide for such activities if Act 955 sunsets and no other authorizing legislation is put in place. Although Louisiana is in dire need of a comprehensive water code, at a minimum, Act 955 should be extended in order to avoid the logistical nightmares that will flow from the lack of a mechanism to authorize the consumptive use of this state resource.

IX. CONCLUSION

It is undeniable that the uses of Louisiana's surface waters have gone largely unchecked for more than 200 years. Although not the primary threat to this resource, the Haynesville Shale natural gas play has brought concerns about the overuse of such resources to the fore of the collective consciousness of the state and has mandated a review of what protections, if any, exist for this resource. Prior to Act 955, no specific protections of the state's surface waters existed by legislation. Even with the enactment of Act 955, as noted above, there are still substantial gaps in the protection of the state's surface waters. Accordingly, the Attorney General has had to resort to the charges of the public trust doctrine to attempt to control surface water use in Louisiana. Unfortunately, due to the lack of penal provisions in the Louisiana Constitution and Act 955, state actors, such as the Attorney General and local law enforcement, are limited to using unjust enrichment and theft of state property laws for the unauthorized use of surface waters.