Ownership of Submerged Land on the Louisiana Coast: Resolving the Dual-Claimed Land Dilemma

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* Professor, LSU Paul M. Hebert Law Center. The author gratefully acknowledges helpful comments he received on this Article from faculty and staff at presentations made before the law faculties of the University of Glasgow, Trinity College Dublin, the University of Essex, and the University of Groningen during the spring of 2023. He specifically appreciates the thoughtful readings and comments of Jill Robbie, Stephen Bogle, Rachel Walsh, Lorna Fox O’Mahoney, Marc Roark, Bjorn Hoops, Peter Byrne, and Tim Mulvaney. All errors are those of the author.
INTRODUCTION

Over the last 90 years, more than 2,000 square miles of former marsh, swamp land, and dry land along the Louisiana coast—an area twice the size of the State of Rhode Island and bigger than the entire State of Delaware—have become submerged beneath the Gulf of Mexico, its bays, and smaller navigable water bodies that join the gulf.\(^1\) Over the next 50 years, another 1,100 to 3,000 square miles of Louisiana’s coast could easily disappear beneath these waters if state or federal governments take no action.\(^2\) Even if aggressive marsh restoration, sediment diversion, and other coastal restoration and protection projects are completed, total future land loss will only be mitigated by a few hundred square miles at best.\(^3\)


\(^3\) If all 65 restoration and 12 risk reduction projects outlined by the State of Louisiana’s Coastal Protection and Restoration Authority (CPRA) in its 2023 Draft Coastal Master Plan (CMP) are completed at an estimated cost of $50 billion
A combination of complex natural and man-made processes has caused coastal land loss in Louisiana. The four most commonly cited forces are: (1) natural and artificially induced deltaic subsidence; (2) sediment starvation attributable to dam building in the upper Mississippi River basin and the construction of levees on the lower Mississippi River; (3) erosion resulting from the dredging of canals in the coastal marsh; and (4) sea level rise associated with global climate change. Scientists who study coastal land loss agree this process is essentially irreversible; the primary scientific question concerns the future rate of land loss.

Over the next 50 years, the total amount of land lost to open waters of the Gulf of Mexico might be reduced by 233 to 314 square miles. COASTAL PROT. & RESTORATION AUTH. OF LA., supra note 1, at 53, 78–81. Thus, assuming all of the state’s coastal restoration projects are completed and work as planned, Louisiana will still likely lose anywhere from approximately 700 to 2,700 square miles of land over the next 50 years depending on other factors including the rate of sea level rise and deltaic subsidence.

4. See Torbjörn E. Törnqvist et al., Tipping Points of Mississippi Delta Marshes Due to Accelerated Sea-Level Rise, 6 SCI. ADV. 1, 3–4 (2020) (observing multiple causes); Douglas A. Edmonds et al., Land Loss Due to Human Altered Sediment Budget in the Mississippi River Delta, 6 NATURE SUSTAINABILITY 1, 1–8 (2023) (observing multiple causes); Mike Blum et al., Land Loss in the Mississippi River Delta: Role of Subsidence, Global Sea-Level Rise and Coupled Atmospheric and Oceanographic Processes, 222 GLOB. & PLANETARY CHANGE 1, 19 (2023) (concluding that the twentieth and early twenty-first centuries trend of Mississippi River Delta land loss reflects “an unfortunate convergence of a subsiding delta plain, acceleration of GMSL [global mean sea level] rise, and greatly reduced sediment dispersal from levee construction”). See generally Oliver A. Houck, The Reckoning: Oil and Gas Dev. in the Louisiana Coastal Zone, 28 TUL. ENV’T L.J. 185 (2015) (providing a comprehensive history of the impact of oil and gas extraction and canal dredging on the Louisiana coast).

5. As one of the leading scientific experts on coastal land loss put it after publication of a ground-breaking, comprehensive geological analysis designed to provide data dating back over 8,500 years to the Holocene, “drowning is inevitable, and conversion back to marsh will be unlikely.” Törnqvist et al., supra note 4, at 4–5. Törnqvist further explained the results of his study to a local reporter in even more accessible terms: “What it says is we’re screwed . . . . The tipping point has already happened. We have exceeded the threshold from which there is basically no real way back anymore, and there probably won’t be a way back for a couple of thousand years.” Id. See also Mark Schleifstein, “We’re Screwed”: The Only Question is How Quickly Louisiana Wetlands Will Vanish, Study Says, NOLA.COM (May 22, 2020), https://www.nola.com/news/environment/article_577f61aa-9c26-11ea-8800-0707002d333a.html [https://perma.cc/B3VB-M5A6].
land loss poses a grave threat to Louisiana’s economy, the natural resources and built environment of communities large and small across the Louisiana coastal zone, and the cultural fabric of Louisiana.

Coastal land loss also creates numerous problems for Louisiana property law. Perhaps the most obvious concerns ownership of coastal land that sinks beneath the sea. A significant amount of coastal marsh, swamp land, coastal dry land, and land that used to lay beneath non-navigable water bodies on or near the Louisiana coast is, or at one time was, privately owned. When those coastal lands become permanently submerged beneath the Gulf of Mexico, its bays, or navigable water bodies connected to the gulf as a result of erosion, subsidence, and sea-level rise, the State of Louisiana and private landowners both typically assert that they own the submerged land, resulting in a new category of Louisiana

Another recently published paper provides some cause for hope with its finding that only 20% of land loss in the Barrataria Bay area is attributable to up-river dam building and that hydrocarbon extraction (including canal dredging) and levee building each account for about 40% of land loss in the area studied. Edmonds et al., supra note 4, at 5–6. The authors of this paper acknowledge the need for more study of the impact of other causes including variations in sea-level rise and further suggested that CPRA projects such as the multibillion dollar Mid-Barrataria Sediment Diversion could produce more land and thus offset more land loss than originally anticipated if oil and gas extraction in the delta continues to decline. Id. at 6.

Blum and his co-authors, however, suggest that the impact of decadal variation of global mean sea level (GMSL) and mean sea level (MSL) rise may be more significant than decadal variation in the rate of hydrocarbon extraction. They also report that “continued land loss is predicted for all environmental scenarios by 2060, with near complete submergence of the MRD by 2100.” Blum et al., supra note 4, at 18 (citations omitted).


7. COASTAL PROT. & RESTORATION AUTH. OF LA., supra note 1, at 48–49, 87 (estimating expected annual damages to natural resources and the built environment from hurricanes and flooding without implementation of the 2023 CMP in the range of $15.2 to $24.3 billion and estimating reductions in damages of $7.7 to $10.7 billion if the 2023 CMP is fully implemented).


9. See infra Part I.A–B.
land now commonly referred to as “dual-claimed land.” Another indirectly related problem arises in other wet places that are not permanently submerged beneath the sea or an arm of the sea but that people interested in fishing and boating can easily access by water. This Article focuses on the first problem—who owns permanently submerged, dual-claimed land when the submergence occurs because of gradual erosion, subsidence, and sea-level rise.

Numerous Louisiana legislators have introduced bills to respond to these conflicts. So far, however, none has come close to gaining enough support.

10. The State of Louisiana asserts its claims officially but indirectly through maps published by the State Land Office and sometimes directly through communication with private landowners when it asserts ownership and claims mineral royalties derived from these lands. See Jacques Mestayer, Saving Sportsman’s Paradise: Article 450 and Declaring Ownership of Submerged Lands in Louisiana, 76 La. L. Rev. 889, 891 (2016) (describing the multi-year development of State Land Office’s mapping process asserting claims to “dual claimed” land); Michael C. Schimpf, Le Deuxième Grand Dérangement: Expelling Louisiana’s Taking of Private Property Through Article 450, 80 La. L. Rev. 1557, 1558–59 (2020) (describing an example of the State of Louisiana directly asserting a claim of ownership and mineral rights against a private landowner).


12. Bills addressing recreational access include: H.B. 391, 2018 Leg., Reg. Sess. (La. 2018) (engrossed) (proposing to permit public navigation over running waters of the state that are navigable by motor boats registered according to state law as long as those waters connect to a state-owned water bottom subject to the ebb and flow of the tide and even if those waters pass over privately owned water bottoms); H.B. 754, 2022 Leg., Reg. Sess. (La. 2022) (original) (same); La. H.R. Con. Res. 102, 2022 Leg., Reg. Sess., 2022 La. Acts 2427 (urging codification of rules defining the public’s right of access over running waters in accordance with Louisiana’s historical civil law tradition); H.B. 4, 2023 Leg., Reg. Sess. (La. 2023) (original) (proposing to amend the criminal trespass statute to permit any person operating a watercraft on running waters of the state in accordance with Civil Code provisions to be immune from trespass prosecution).

Bills seeking to facilitate private landowner and state government agreements to resolve dual-claimed land disputes and to address recreational access include: H.B. 331, 2021 Leg., Reg. Sess. (La. 2021) (reengrossed) (proposing constitutional amendments to allow voluntary agreements between state and
support for passage in the Louisiana House of Representatives, let alone the Senate.\textsuperscript{13} Although landowners and sportsmen have frequently contested recreational access rights to wet places in court,\textsuperscript{14} private landowners and the state seem reluctant to seek resolution of the dual-claimed land problem in Louisiana’s courts.\textsuperscript{15}

Student commentators have not been shy about offering their opinions. Several argue that the State of Louisiana owns all former private lands that have or will become submerged beneath the sea, arms of the sea, seashore, or other navigable water bodies as a result of erosion and subsidence and other natural forces.\textsuperscript{16} Another contends that private riparian landowners to establish permanent boundary settlements over dual-claimed land and to allow the state, accept donations of land or water bottoms and retain sub-surface mineral rights, and establish regulated access rights over affected water bottoms); H.B. 399, 2021 Leg., Reg. Sess. (2021) (original) (proposing a statutory regime to facilitate same).


14. See generally Kyzar Dorr, supra note 11.

15. See Sara Sneath, \textit{As Louisiana’s Coast Washes Away, State Cashing in on Disputed Oil and Gas Rights}, \textsc{Nola.com} (May 31, 2018), https://www.nola.com/news/environment/as-louisianas-coast-washes-away-state-cashing-in-on-disputed-oil-and-gas-rights/article_9894c6d7-794c-5e66-a21e-120f7729527c.html [https://perma.cc/SC2D-587J] (describing lawsuit filed against State of Louisiana over ownership and mineral rights on dual-claimed land that has either been settled or never been resolved); Mestayer, \textit{supra} note 10, at 917 (observing some of the reasons that the State of Louisiana and private landowners have avoided litigation of contested ownership claims); \textsc{Task Force Report, supra} note 11, at 24–25 (explaining typical settlement procedures used by the State of Louisiana and private landowners when disputes arise over dual-claimed land and past and future mineral production).

16. Mestayer, \textit{supra} note 10, at 907–17 (arguing broadly in favor of state ownership of dual-claimed land based on implied reversion theory); Anais M. Jaccard, \textit{Article 450 to the Rescue: How the Louisiana Civil Code Promotes and Prevents Comprehensive Coastal Restoration}, 93 \textsc{Tul. L. Rev.} 681, 688 (2019) (contending that, at least on the seashore, the “state’s property interest creeps inland as the shoreline marches forward, extending public lands up to the new mean high water mark.”); Brandon M. Sprague, \textit{Restoring Land Coast to Coast: Conflicts in Louisiana Classification of Water Bodies for Coastal Restoration and Comparative Civil Law Sources}, 95 \textsc{Tul. L. Rev.} 143, 154–61 (2020) (arguing that state acquires ownership of submerged land under the Louisiana Civil Code and the public trust doctrine).
landowners should continue to own all submerged land, or at least all land adjacent to "newly navigable [inland] water bodies."\footnote{17}

Other academic commentators have also sent mixed signals. Several law professors briefly addressed the dual-claimed land issue and indicated that the State of Louisiana becomes owner of permanently submerged land resulting from erosion or subsidence and does not owe compensation to landowners.\footnote{18} A well-known authority on civil law property, the late A.N. Yiannopoulos, was more enigmatic. In one text, he gave equal weight to the state and private owners’ arguments concerning dual-claimed lands.\footnote{19} In other writings, he offered more unequivocal support for the uncompensated transfer of ownership of submerged land adjacent to lakes and the sea from private owners to the state.\footnote{20}

Though rarely discussed by Louisiana jurists, the law in the rest of the United States clearly supports state ownership of coastal land that becomes permanently submerged beneath the sea as a result of gradual erosion, subsidence, and sea-level rise.\footnote{21} In fact, the dominant American rule holds that when the physical boundary between land and sea changes gradually and imperceptibly, the legal boundary between private and public land shifts along with it, regardless of whether the physical boundary moves seaward because of accretion or dereliction or landward because of

\footnote{17. Schimpf, \textit{supra} note 10, at 1577–87. Schimpf also contends that if the state does acquire ownership of submerging land, the former private landowners should receive monetary compensation for any property or mineral rights they may lose. \textit{Id.}}

\footnote{18. \textit{See} Lee Hargrave, “\textit{Statutory}” and “\textit{Hortatory}” Provisions of the \textit{Louisiana Constitution of 1974}, 43 \textit{L.A. L. Rev.} 647, 661 (1983) (contending that “if a nonnavigable stream becomes navigable, it would cease to be susceptible of private ownership and would become property of the state” and rejecting the argument that “such a change in ownership may be a taking without due process (absent compensation)” because such a loss “is not caused by the state itself” and provided the change of ownership results from “natural changes in water bodies”); Judith Perhay, \textit{Louisiana Coastal Restoration: Challenges and Controversies}, 27 \textit{S. U. L. Rev.} 149, 167 (2000) (stating that “as a general rule, land lost by a private owner to erosion on the shores of the sea or a navigable lake are lost forever, and cannot be reclaimed if they are restored by further changes in the shore due to alluvion or dereliction.”). Hargrave’s views are discussed \textit{infra} notes 254–56 and accompanying text.}


\footnote{20. \textit{See discussion infra} notes 79–81, 91, 220–21.}

\footnote{21. \textit{See generally infra} Part IV.
gradual erosion, subsidence, or sea level rise. Further, when this legal boundary moves landward and private landowners lose land to a state, a state is not required to pay just compensation.

This Article resolves the ambiguities described above and fills the crucial gap in Louisiana academic commentary as to who owns dual-claimed submerged land on the Louisiana coast. When land becomes permanently submerged beneath the Gulf of Mexico, an arm of the sea, or a navigable river or lake as a result of gradual erosion, subsidence, or sea-level rise, that land generally becomes a public thing owned by the State of Louisiana. In addition, when this change in ownership takes place

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23. The Cathedral Engulfed, supra note 22, at 100; Wyman & Williams, supra note 22, at 1970–71, 1985. See generally infra Part IV.C.

24. See infra Part III. Private ownership of land newly submerged beneath the waters of a navigable water body is possible in three other narrow instances. First, when a navigable river or stream changes its course and opens a new channel, the Louisiana Civil Code requires the state to provide in-kind indemnification to the owners of the newly submerged bed by giving them proportionate interests in the abandoned bed, even if that former river bed remains navigable in fact. See LA. CIV. CODE art. 504 (2024), discussed infra note 68 and accompanying text. See also Epstein, supra note 22, at 55 (discussing the Roman law source for article 504 of the Louisiana Civil Code, J. INST. 2.1.23, and
without any affirmative, artificial intervention by the state, the state does not, and should not, owe compensation to the former private landowners.\textsuperscript{25}

This Article explains that this uncompensated shift in ownership rights is justified by basic principles of Louisiana property law and well-established legal precedent that has stood the test of time. Landowners who have acquired marsh, swamp land, or even dry land adjacent to or near the sea, navigable rivers, or navigable lakes have always held it subject to the condition that it could revert to state ownership if the adjacent or nearby water bodies were to expand, or their land were to subside or erode gradually as a result of natural forces. The existence of this implied condition that inheres in all Louisiana land is derived from many sources of Louisiana law, including: (1) the plain text of the Louisiana Civil Code;\textsuperscript{26} (2) the Louisiana Supreme Court’s seminal 1936 decision in \textit{Miami Corp. v. State} holding that that land lost on the shore of a navigable lake because of erosion, subsidence, and other natural forces becomes a public thing as a matter of state law;\textsuperscript{27} (3) numerous Louisiana judicial decisions following \textit{Miami Corp.} and recognizing the state’s immediate acquisition of ownership of submerging land next to other water bodies including the sea;\textsuperscript{28} (4) Louisiana constitutional provisions prohibiting state alienation of the bed of a navigable water body, except for purposes of reclamation;\textsuperscript{29} and (5) an important Louisiana statute, first commenting that “[o]nce again, Justinian gets it exactly right.”). Second, if land becomes permanently submerged beneath a navigable water body as a result of some deliberate human intervention in a waterway, for instance as a result of a government sponsored water-management and navigation project designed to increase water levels in a river basin, a riparian landowner may retain property interests or legal rights in the flooded land, subject, of course, to the operation of other legal doctrines such as acquisitive prescription and liberative prescription. \textit{See, e.g.}, Crooks v. Dep’t of Nat. Res., 340 So. 3d 574 (La. 2020), discussed in John A. Lovett, \textit{Adverse Possession by the State: Toward Remedial Equivalency}, 69 \textit{LOY. L. REV.} 1, 54–55 (2022). Finally, land beneath a man-made canal constructed entirely on private land with private funds may remain privately owned and will not be subject to public use unless the canal diverts and destroys a natural navigable water way. Nat'l Audubon Soc'y v. White, 302 So. 2d 660, 665–68 (La. Ct. App. 3d Cir. 1974); Vermilion Corp. v. Vaughn, 356 So. 2d 551, 552–55 (La. Ct. App. 3d Cir. 1978).

\textsuperscript{25} \textit{See infra} Parts III, IV.A.

\textsuperscript{26} \textit{LA. CIV. CODE} art. 450, discussed \textit{infra} Part II, notes 58–69 and accompanying text.

\textsuperscript{27} \textit{Mia. Corp. v. State}, 173 So. 315, 323 (La. 1936), discussed \textit{infra} Part III.A.1.

\textsuperscript{28} \textit{See infra} Part III.A.2.

\textsuperscript{29} \textit{LA. CONST.} art. IX, § 3, discussed \textit{infra} Part III.B.1.
enacted in 1954, and updated in 2003, that protects parties to existing
mineral leases and existing mineral servitudes when a change in land or
water bottom ownership occurs as a result of subsidence, erosion, and
other natural forces affecting navigable water bodies.\(^{30}\)

Part I of this Article explains why so much coastal land in Louisiana,
particularly swamp land and sea marsh, ended up in private ownership and
provides a glimpse of the highly concentrated state of private
landownership on the Louisiana coast. Part II reviews the key terms and
concepts of Louisiana property law relating to the dual-claimed land
problem and describes the existing formal structure for understanding
ownership claims to water bottoms and land on the Louisiana coast. Part
III demonstrates why Louisiana case law, constitutional law, and statutory
law support the state’s ownership claims to dual-claimed land and explains
why the state does not owe compensation to former private landowners.
Part IV discusses why there is a strong presumption in the rest of the
United States that the legal boundary between the public and private
domain on the U.S. coastline shifts when the physical boundary between
land and water, usually referred to as the mean high water line, moves
seaward or landward and why states are not required to pay compensation
to property owners when the legal boundary between public and private
spheres moves landward in particular.

I. PRIVATE LAND ON THE LOUISIANA COAST

One reason that ownership of submerged land in Louisiana is so hotly
contested is that a significant portion of Louisiana’s coastal land is owned
by private persons. No one knows exactly how much coastal land is
privately owned, but for years journalists, legal commentators, and
government officials have stated that as much as 80% of the Louisiana
coast is privately owned.\(^{31}\) Like many figures that are repeated frequently

\(^{30}\) LA. REV. STAT. § 9:1151 (2024), discussed infra Part III.B.2. The
legislature’s choice not to protect future mineral rights at the time it revised the
so-called “Freeze Statute” in 2003 provides clear evidence that the legislature has
never intended that landowners are entitled to claim some other residual rights
when their land is fully submerged beneath the sea, arms of the sea, or navigable
lakes near the Louisiana coast.

\(^{31}\) Schimpf, supra note 10, at 1559; Sprague, supra note 16, at 146; Jaccard,
supra note 16, at 682; Mestayer, supra note 10, at 897; Perhay, supra note 18, at
153.
without much scrutiny, it is not easy to determine if this estimate is still, or ever was, accurate.\footnote{32}

Perhaps more important than the exact percentage of coastal land held privately is the character and extent of those privately held tracts. Some commentators focus on small holdings of individuals or families.\footnote{33} In many coastal parishes, however, large public or private corporations, wealthy individuals, or family trusts own vast amounts of coastal marsh and wetlands. For example, Conoco-Phillips Corporation admits that it owns approximately 636,000 acres of wetlands in Louisiana, making it the largest private landowner in Louisiana.\footnote{34} Apache Corporation reports that it “manages” 270,000 acres of land in Louisiana “to protect swamps, marshes and the species that call these areas home.”\footnote{35} Continental Land & Fur Company reports that it owns a 127,000 acre contiguous tract of freshwater marsh in Terrebonne, Parish.\footnote{36} Golden Ranch Farms, an entity created by Arlen “Benny” Cenac, owns 52,000 acres of “beautiful trees,

\footnote{32. The origins of the 80\% estimate are obscure. A 1993 environmental impact statement prepared by a task force of five federal agencies and the State of Louisiana under the auspices of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA), otherwise known as the Breaux-Johnson Act, provided the initial version of this estimate. Marc. C. Hebert, \textit{Coastal Restoration under CWPPRA and Property Rights Issues}, 57 \textit{LA. L. REV.} 1165, 1166 n.1, 1181 n.7 (1993) (citing \textit{LA. COASTAL WETLANDS CONSERVATION & RESTORATION TASK FORCE, LOUISIANA COASTAL WETLANDS RESTORATION PLAN} 59 (1993)). See also The Coastal Wetlands Planning, Protection and Restoration Act, 16 U.S.C. §§ 3951–56 (2024). Unfortunately, the crucial 1993 government report only states that “[p]revious estimates indicate that approximately 80 percent of the state’s coastal wetlands are privately owned” but does not provide sources for those estimates. \textit{LA. COASTAL WETLANDS CONSERVATION & RESTORATION TASK FORCE, supra} note 32, at 58.


marsh waters, distinctive swamps, and almost 1000 acres of actively producing sugar cane fields” near Gheens in Lafourche Parish.37

How did so much coastal land in Louisiana, a resource that outsiders might assume is held in some form of public ownership or is at least subject to the public trust because of its interaction with the ebb and flow of the tides, fall into private hands? The answer can be found in several acts of the United States Congress that predate the Civil War and several Louisiana legislative acts that followed soon thereafter. A review of these legislative acts provides essential context for understanding many of the cases and controversies discussed elsewhere in this Article.

A. Swamp Land Grant Acts: 1849–1860

As early as 1826, when the United States was still absorbing the Louisiana Purchase, the U.S. Congress began to consider what to do with the vast expanse of swamp land and other land overflowed with water that did not lie beneath the nation’s navigable waters.38 Many leaders assumed that creating levees next to rivers and lakes and draining nearby wetlands would transform “waste, unhealthful, and unwanted lands” into dry land suitable for settlement, farming, or other productive uses.39 Congress, however, had no intention of paying for these extensive public works.40 Louisiana proposed a practical solution to this dilemma if only Congress would agree to donate these lands to the state. When he introduced the first of three Swamp Land Grant Acts, Representative John H. Harmonson of Louisiana explained that European and American settlers had already constructed levees along the Mississippi River and dykes further inland in Louisiana that protected riparian land from flooding and made “reclamation” of swamp lands and overflowed lands possible.41

38. JOHN L. MADDEN, FEDERAL AND STATE LANDS IN LOUISIANA 260 (1973) (reporting on an 1826 Senate resolution calling for “an investigation of and report on the quantities and locations of the wet, marshy and inundated public lands in the States of Missouri and Illinois.”).
40. Id.
41. Harmonson reportedly estimated that by 1849, Louisiana and its citizens had already created a 1,400-mile system of artificial levees to prevent the Mississippi River from overflowing its banks at a cost of approximately $20 million. GATES, supra note 39, at 321; MADDEN, supra note 38, at 260.
Responding to the promise of swift reclamation and settlement, Congress adopted the Act of March 2, 1849, to “aid the State of Louisiana in constructing the necessary levees and drains to reclaim the swamp and overflowed lands therein” and thus granted Louisiana “the whole of those swamp and overflowed lands, [within the state] which may be or are found unfit for cultivation.” The following year, Congress adopted the Act of September 28, 1850, to give Arkansas, Mississippi, and other states the same opportunity that had been previously afforded Louisiana. The third Swamp Land Grant Act, which was passed on March 12, 1860, and amended in 1874, also enabled the states, with the exception of Kansas, Nebraska, and Nevada, to construct levees and drains for the purpose of reclaiming swamp and overflow lands.

As Paul Gates explains in his monumental study of the history of public land law in the United States, the reality lurking beneath Harmonson’s claims about the suitability of Louisiana’s overflow lands for swift reclamation and settlement was not quite so promising. The actual levees that had been constructed never exceeded five feet in height, were not designed with the benefit of sophisticated engineering, did not extend to the smaller rivers and streams flowing into the Mississippi River, and were frequently breached by floods that caused massive amounts of damage. All of this was well documented in 1850 by John Wilson, a representative of the United States General Land Office who was sent to Louisiana to perform reconnaissance of the swamp and overflowed lands and speed up selection of lands to be made eligible for grant to the state under the 1849 Act.

Despite the discrepancy between boosters’ claims and the actual state of public infrastructure affecting Louisiana’s overflow lands, the Swamp
Land Grants nevertheless gave Louisiana the opportunity to take control of these lands. This was the first step in the process of shifting ownership out of the public and into the private domain.

**B. State Alienation of Swamp Lands, Sea Marsh, and Sea Prairie: 1855–1880**

Eventually, over 9 million acres of swamp and overflowed land in Louisiana were patented as a result of the federal Swamp Land Grant Acts. Soon after those acts vested ownership of swamp and overflow lands in the State of Louisiana, Louisiana began to enact its own legislation authorizing the sale of these lands to private persons. The first Louisiana act, passed in 1855, authorized the alienation of one million acres of swamp or overflowed lands acquired from the United States under the federal Swamp Land Grant Acts and also permitted the sale of “[]any shallow lakes which have become the property of the State, and are susceptible of being reclaimed, wholly or in part, and not navigable, the area of which has been ascertained by survey recognized by the State.”

The next act, passed in 1862, authorized the sale of lakes, “which, by reason of any natural causes whatever, may become dry land.” This act declared these water bottoms to be swamp lands “of the same character” as the lands granted to the state under the Swamp Land Grant Acts. These two acts thus authorized the sale of a vast amount of land covered by water, first, swamp land and non-navigable lakes, both of which comprised non-navigable water bottoms, and, second, navigable lakes that might become dry and would thus be owned by the state in its private capacity.

Finally, in 1880, the legislature authorized the sale of “the public lands donated by Congress to the State of Louisiana, designated as sea marsh or prairie, subject to tidal overflow, so as to render them unfit for settlement and cultivation . . . .” This language was likely intended to refer to the same swamp and overflow lands potentially conveyed under the Swamp

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49. *Id.* at 325.
53. *Id.* Although beds of dried-up, formerly navigable water bodies become private things owned by the state under Louisiana property theory and are thus alienable by the state, one commentator suggests the legislature passed the 1862 act out of an abundance of caution. Yiannopoulos, *supra* note 50, at 1361 n.22.
Land Grant Acts, but it likely created more confusion than light because it seemingly referred to a different category of water bottoms, lands covered by the tide—water bottoms that Louisiana had already acquired directly from the United States in 1812 under the equal footing doctrine.  

The language used in these late nineteenth century Louisiana legislative enactments left much to be desired. Was it even possible for the State of Louisiana to transfer ownership of the bed of a “shallow lake,” or any lake for that matter, if the lake was navigable in fact? Did it have the authority to transfer ownership of marshland subject to the ebb and flow of the tide if some of that marsh contained navigable water bodies? The legislature’s imprecise language would lead to decades of litigation and subsequent legislative attempts at clarification in the twentieth century. The confusion was not finally resolved until 1975 when the Louisiana Supreme Court definitively held in *Gulf Oil Corporation v. State Mineral Board* that any attempted conveyances of navigable water bottoms by the state in the years following these flawed legislative enactments were absolutely null. Nevertheless, despite these flawed and occasionally null

55. Yiannopoulos, *supra* note 50, at 1361. In a 1988 law review article, Professor Yiannopoulos repeated the conventional view that under the equal footing doctrine, as expounded by the U.S. Supreme Court, Louisiana acquired ownership of all navigable waters within the state’s borders and “all lands under waters subject to the ebb and flow of the tide.” *Id.* at 1359 (quoting Phillips Petrol. Co. v. Mississippi, 484 U.S. 469, 471 (1988)). More recently, though, Yiannopoulos questioned this “accepted view” that Louisiana “acquired ownership of [the waters and beds of natural navigable] water bodies from the United States by virtue of the state’s inherent sovereignty and the equal footing doctrine” and instead argued that “the state acquired ownership of navigable water bodies by virtue of provisions of the Louisiana Civil Code,” including provisions in the 1808, 1825, and 1870 Civil Codes. Yiannopoulos, *supra* note 19, § 4:4, at 133–35. Regardless of the theoretical foundation of state ownership of navigable water bodies and the land beneath them, it is now a “well-established proposition of Louisiana property law that the beds or bottoms of navigable water bodies are public things, inalienable by the state and susceptible of private ownership.” Yiannopoulos, *supra* note 19, § 4:5, at 139 (emphasis added).

56. Yiannopoulos, *supra* note 19, §§ 4:5–4:7 (reviewing the long struggle to resolve the conflict between the principle of the inalienability of navigable water bottoms and patents purporting to alienate such water bottoms in the wake of the federal Swamp Land Grant Acts and the Louisiana statutes authorizing alienation of swamp and overflow lands).

57. *Gulf Oil Corp. v. State Mineral Bd.*, 317 So. 2d 576, 580, 583 (La. 1975). In *Gulf Oil*, the court overruled *California Company v. Price*, 74 So. 2d 1 (La. 1953), and several other decisions, expressly holding that Act 62 of 1902, the infamous “Repose Act,” was “not intended to ratify absolutely null conveyances of navigable water bottoms to private individuals” that occurred after the federal
transfers of navigable water bottoms, Louisiana’s problematic and unartful alienation statutes did result in the valid transfer of a vast amount of marsh, swamp land, and sea prairie that was not yet covered by a navigable water body, even though the conveyed tracts often contained, or were adjacent to, fully navigable and inalienable water bodies or arms of the sea.

II. THE LOUISIANA CIVIL CODE AND CATEGORIES OF SUBMERGED LAND POTENTIALLY SUBJECT TO STATE OWNERSHIP

The starting point for any legal analysis of the contested ownership of dual-claimed submerged land in Louisiana is article 450 of the Louisiana Civil Code, which both defines and illustrates the category of public things.\(^5\) According to article 450 and general civilian theory, the term public things has a specific legal meaning: “Public things are owned by the state or its political subdivisions in their capacity as public persons.”\(^5\) Public things, as a legal category, are distinct from public property. In Louisiana, public property consists of public things and private things owned by the state or its political subdivisions in a private capacity but which may serve some public purpose though they may or may not be subject to wide public access.\(^6\) State and municipal office buildings, public school buildings, and vehicles owned and operated by the local police department are classic examples of the second category of public property, that is private things owned by the state or political subdivisions in a private capacity.\(^6\)

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Swamp Land Grant Acts and Louisiana’s confused legislative acts enabling privatization of swamp and overflow lands. \(\text{Id. at 585.}\) The Repose Act, the Court held in \(\text{Gulf Oil,}\) was never intended to do more than “cure formal defects in patents that were essentially valid, in that they conveyed alienable property \(\text{[i.e., non-navigable water bottoms and other dry land or swamp or marshland].}\)” \(\text{Id.}\)

58. \(\text{L.A. CIV. CODE art. 450 (2024).}\) Article 448 divides things, the objects of property law, into “common, public, and private; corporeals and incorporeals; and moveables and immovables.” \(\text{Id. art. 448.}\)

59. \(\text{Id. art. 450.}\)

60. \(\text{Id. art. 453; L.A. CIV. CODE ANN. art. 450 cmt. b (2024).}\) Many other definitions and classifications of public things or public property are possible. \(\text{See, e.g., JOHN PAGE, PUBLIC PROPERTY, LAW AND SOCIETY 10 (2021)}\) (defining “public real property” as “those corporeal and incorporeal interests in land[,] common law or statutory[,] traditional or sui generis, that are used by the public at large, serve public purposes.”).

61. \(\text{L.A. CIV. CODE ANN. art. 453 cmt. b.}\) There are infinite variations on this theme. Roman law, for example, distinguishes between forms of public property that are not necessarily state owned but nevertheless constitute an “open access” resource, such as the sea and seashore, and corporate or state-owned property,
The category of public things owned by the state in its public capacity is further subdivided in Louisiana. One set of public things are “inalienable and necessarily owned by the state.” These include certain things associated in one way or another with water and specifically enumerated in article 450—things “such as running waters, the waters and bottoms of natural navigable water bodies, the territorial sea, and the seashore.” The other set of public things are more contingently public. They “may belong to political subdivisions of the state” (and presumably the state as well) and include things like “streets and public squares.” These contingently owned public things acquire their public status, not because of their inherent inalienability, but because they are applied to some public purpose and are available for wide public use.

Read according to its plain terms, article 450 of the Civil Code would seem to provide a simple solution to the problem of dual-claimed submerged land. Because the article specifically states that “[p]ublic things that belong to the state” include “the waters and bottoms of natural navigable water bodies, the territorial sea, and the seashore,” it would seem that all permanently submerged land lying beneath the sea or a navigable water body, including the sea itself, would belong to the state. However, reading article 450 in this straightforward manner presents one difficulty. The physical world imagined by the article’s drafters seems to be a static one. Water bodies and water bottoms enter the world as public things and remain that way forever. Likewise, private things, and in particular the beds or bottoms of non-navigable rivers or lakes, marsh or such as public buildings and amphitheaters, a sub-category more like Louisiana’s concept of private things that happen to be owned by the state. Epstein, supra note 22, at 49.

62. LA CIV. CODE ANN. art. 450 cmt. c.
63. LA CIV. CODE art. 450.
64. Id. (emphasis added).
65. LA CIV. CODE ANN. art. 450 cmt. c; PAGE, supra note 60, at 10 (emphasizing dual characteristics of use by the public and serving a public purpose). The subject of public things that “may” belong to political subdivisions of the state is beyond the scope of this Article. The contingent “public” status of streets or public squares is illustrated by judicial decisions recognizing that a city can close a public street indefinitely and alienate the underlying land to private persons. See Coliseum Square Ass’n v. City of New Orleans, 544 So. 2d 351, 358–61 (La. 1989) (holding that City of New Orleans could close a city street and lease it to a private school for 60 years provided the city council determined the street was no longer needed for a public purpose and this determination was not arbitrary or capricious).
66. LA CIV. CODE art. 450.
swamp lands, or dry land not covered by any water, could be regarded as retaining their classification indefinitely. Although several provisions of the law of accession in relation to water bodies contemplate physical change in connection with rivers and sometimes reallocate ownership between the state and private persons, neither article 450 nor its revision comments indicate if and how classification, ownership rights, or use

67. That beds of non-navigable water bodies are classified as private things is well established in Louisiana law. See id. art. 506 (“In the absence of title or prescription, the beds of nonnavigable rivers or streams belong to the riparian owners along a line drawn in the middle of the bed.”); LA. CIV. CODE. ANN. art. 506 cmts. c, d (indicating that swamp lands and the beds of non-navigable lakes are also considered to be private things in Louisiana and thus may belong to the state, a political subdivision, or a private person).

68. See generally LA. CIV. CODE. arts. 499–505 (setting forth provisions on accession in relation to water bodies). One example of an ownership change relating to a water body occurs when a river entirely changes its course and leaves behind an abandoned bed, often in the form of an ox-bow lake. In that scenario, the owner of land subsumed by the new river channel receives a form of in-kind compensation by taking a portion of the abandoned river bed even if the latter remains navigable in fact. See id. art. 504. (“When a navigable river or stream abandons its bed and opens a new one, the owners of the land on which the new bed is located shall take by way of indemnification the abandoned bed, each in proportion to the quantity of land that he lost.”); State v. Bourdon, 535 So. 2d 1091, 1097 (La. Ct. App. 2d Cir. 1986) (applying article 504 and holding that an ox-bow lake that did not exist in 1812, but was created in 1902 when the Red River changed course and opened a new channel, “loses its identity as a public thing and becomes privately owned,” even though the abandoned bed is navigable in fact).

Article 502 of the Civil Code addresses another dramatic riverine change, “a sudden action of the waters of a river or stream” that “carries away an identifiable piece of ground and unites it with other lands on the same or on the opposite bank . . .” LA. CIV. CODE art. 502. In this situation, ownership of the piece of ground that has been carried away “is not lost,” and “[t]he owner may claim it within a year, or even later, if the owner of the bank with which it is united has not taken possession.” Id. Article 502 is derived from Roman law. See Epstein, supra note 22, at 55 (discussing Roman law sources addressing same situation). The common law addresses a similar but somewhat more generalized form of sudden and perceptible change in the location of a watercourse boundary under the heading of “avulsion.” Flusman, supra note 22, at 97–98; Powell, supra note 22, § 66.01. This Article returns to common law avulsion in infra Part IV.A.2.

Finally, article 499 of the Civil Code provides the classic civil law rule on accretion and dereliction and establishes an ambulatory boundary between public and private spheres. LA. CIV. CODE art. 499. Articles 503 and 505 address the appearance of islands as the result of a change in course in a river (article 503) or forces like accretion and dereliction (article 505). Id. arts. 503, 505.
rights might change when dry land, marshland, swamp land, or the beds of natural, non-navigable water bodies become permanently submerged beneath the sea, an arm of the sea, or a navigable lake.

Because of this gap in the Civil Code, and especially in article 450, courts and observers have been forced to turn to other sources, including equity, statutes, and jurisprudence, to address property claims that arise when water bodies other than rivers undergo some kind of physical transformation. As the discussion in the sections below and Part III will demonstrate, however, numerous Louisiana legal sources invariably point to the same conclusion. When dry land, marshland, swamp land, or the bed of a natural but non-navigable water body becomes permanently submerged beneath the sea, an arm of the sea, or a navigable lake, the state becomes the owner of the submerged land. Before exploring all of the relevant sources of law addressing the consequences of these physical transformations in water bodies, it will be helpful to understand how Louisiana law defines the geographic scope of the public things enumerated in, or implicated by, article 450. This is not necessarily an easy task. As A.N. Yiannopoulos once warned:

[T]he peculiar geophysical conditions that prevail at the Gulf Coast prevent the drawing of a bright line of demarcation between the seas, rivers, lakes, and other inland non-navigable bodies of water. Thousands of acres of marshlands are traversed by innumerable bayous that empty into lakes, bays, and inlets. Fresh water mixes with salt water on the way to the open Gulf and tides cause salt water to enter into bodies of water further inland and render them brackish. 69

Fully warned of the murky boundaries between various types of water bodies in the proximity of the Louisiana coast, this Part’s definitional and geographic overview begins at the outermost point of state ownership, the territorial sea, and moves progressively landward to consider arms of the sea, the seashore, and finally inland navigable rivers and lakes, whether existing since 1812 or newly formed.

A. The Territorial Sea

The Louisiana Civil Code does not define the term territorial sea, but on several occasions the Louisiana legislature has attempted to indicate the precise horizontal and vertical extent of this explicitly enumerated

69. YIANNOPoulos, supra note 19, § 4:8, at 149.
public thing.\textsuperscript{70} A simple way to visualize the territorial sea in its horizontal dimension is to imagine a belt of seawater and sea bottoms that extends at least three miles from the state coastline.\textsuperscript{71} The problem with this picture is not the three mile distance, but rather locating the coastline itself. One Louisiana statute defines the \textit{coastline} as “the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters.”\textsuperscript{72} This definition, however, comes from a federal statute defining the boundary between federal and state jurisdiction with regard to submerged lands offshore.\textsuperscript{73} Confusingly, the same Louisiana statute attempts to freeze the location of the coastline by reference to a \textit{baseline} defined by coordinates determined by a 1975 U.S. Supreme Court decision that also established the boundary between federal and state jurisdiction offshore.\textsuperscript{74} The motivation for the Louisiana legislature’s somewhat confusing attempt to freeze the horizontal dimension of the coastline likely had more to do with maintaining control of offshore oil and gas exploration and mineral leasing on the outer-continental shelf \textit{vis-à-vis} the federal government than preserving any particular allocation of rights between the state and private, littoral landowners.\textsuperscript{75}

\textsuperscript{70} LA. CIV. CODE art. 450 (listing the territorial sea as a public thing); LA. REV. STAT. §§ 49:1, 49:3, 49:3.1 (2024); La. S. Con. Res. 6, 2016 Leg., Reg. Sess., 2016 La. Acts. 181 (explains that the legislature created these definitions in part to clarify and protect the state’s interest in its “fishing harvest gear laws” and the state’s “Reef Fish Fisheries Management Plan.”).

\textsuperscript{71} Mestayer, \textit{supra} note 10, at 903; YIANNOPoulos, \textit{supra} note 19, § 4:10, at 153.

\textsuperscript{72} LA. REV. STAT. § 49:1.B (emphasis added).

\textsuperscript{73} 43 U.S.C. § 1301(c) (2024); YIANNOPoulos, \textit{supra} note 19, § 4:10, at 152–53.

\textsuperscript{74} LA. REV. STAT. § 49:1.B (“The coastline of Louisiana . . . shall be not less than the baseline defined by the coordinates set forth in \textit{United States v. Louisiana}, 422 U.S. 13 (1975), Exhibit ‘A.’ Under no circumstances shall the coastline of Louisiana be nearer inland than the baseline established by such coordinates.”).


In the context of legal rights to water and water bodies, the term \textit{littoral} refers to a parcel of land bordering the shore of a lake or the sea. JOSH EAGLE, \textit{COASTAL LAW} 74 (Chemerinsky et al. eds., 2d ed. 2015). The word \textit{riparian} refers to a parcel bordering a river or stream. \textit{Ibid.}
Contrary to the statute discussed above which attempts to freeze the location of the coastline for purposes of federal-state conflicts, the State of Louisiana has always claimed water bottoms covered by any portion of the territorial sea that might appear “landward” of the state’s artificially frozen “coastline” because of erosion, subsidence, or other natural forces. Although some earlier judicial decisions mistakenly interpreted the word sea in prior versions of article 450 to refer only to seawater and not sea bottoms, a 1938 statute cleared up this misapprehension about the vertical reach of state ownership underneath the territorial sea by declaring that the state owns in its public capacity not only the waters that make up the territorial sea but also all the land beneath the sea. As Yiannopoulos explains, the current revised Civil Code clarified the vertical reach of state interests in the territorial sea and correctly “codified the prior law: the seabottom, the seawater, and the space above are all public things owned by the state in its capacity as a public person.”

Now consider the possibility that the horizontal dimension of the territorial sea shifts landward. Does this mean that the state’s vertical claim to the seabed beneath an expanding territorial sea also moves landward? Professor Yiannopoulos, at least in one passage of his treatise, certainly thought so. Commenting on the scope of the territorial sea, Yiannopoulos states unequivocally that if the actual shoreline moves landward of the original ordinary high-water mark of the sea as it existed in 1812, the state’s ownership interest in sea bottoms moves landward as well. Referencing the Civil Code article defining seashore, article 451, he explains this key conclusion in the following terms:

Under Louisiana law . . . the state’s ownership of the seabottom may extend landward of that [1812 mean high] water mark. Indeed, according to Article 451 of the Louisiana Civil Code and well-settled jurisprudence, the state owns the seabottom up to the

76. Yiannopoulos, supra note 19, § 4:8, at 146 n.3 (citing cases).
77. La. Rev. Stat. § 49:3 (enacted by Act No. 55, 1938 La. Acts 1002) (“[T]he State of Louisiana owns in full and complete ownership the waters of the Gulf of Mexico and of the arms of the Gulf and the beds and shores of the Gulf and the arms of the Gulf, including all lands that are covered by the waters of the Gulf and its arms either at low tide or high tide, within the boundaries of Louisiana.”) (emphasis added). Act 55 of 1938 was emphatic about the priority of state claims to the beds of state water bodies: “[T]his act shall never be construed as containing a relinquishment by the State of Louisiana of any dominion sovereignty, territory, property or rights that the State of Louisiana already had before the passage of this Act.” Act No. 55, 1938 La. Acts 1002.
78. Yiannopoulos, supra note 19, § 4:8, at 146 (emphasis added).
79. Id. § 4:8, at 147–48.
highest ordinary level of the seawater during the winter season. Article 451 necessarily refers to the present watermark because lands eroded by the seawater become seabottoms and belong to the state in its capacity as a public person. In such a case, state ownership is expanded by the effect of natural causes landward of the 1812 mean high water mark.

Further, lands eroded by the waters of the sea or by inland navigable waters become state-owned beds or bottoms.

Professor Yiannopoulos’s primary jurisprudential source for these crucial propositions is the Louisiana Supreme Court’s 1936 decision in Miami Corp. v. State. Part III of this Article examines that decision in detail.

80. Id. (emphasis added). In this section of his treatise, however, Professor Yiannopoulos also notes that when the actual shoreline moves seaward, either as a result of the sea receding (reliction) or accretion, “the 1812 boundary is immutable.” Id. (citing LA. CIV. CODE. art. 500 (2024)). Yiannopoulos then explains that if new land is formed seaward of the 1812 shoreline boundary, the state owns the sea bottom up to the current highest ordinary level of the sea in its capacity as a public person and owns “accretions that were formed seaward of the 1812 mean high water mark in its capacity as a private person.” Id. (emphasis added). In other words, Yiannopoulos reads the statement in article 500 that “[t]here is no right to alluvion or dereliction on the shore of the sea or of lakes” to mean that that the state or the public, and not a private, littoral landowner, acquires ownership of new land formed on the shore of a lake or the sea. LA. CIV. CODE art. 500. This is consistent with Louisiana case law addressing ownership of alluvion or accretion gradually deposited on the shore of the sea or a lake. Bruning v. City of New Orleans, 115 So. 733, 738 (La. 1928) (stating there is no right to alluvion “on the shore of Lake Pontchartrain, an arm of the sea”); Davis Oil Co. v. Citrus Land Co., 576 So. 2d 495, 501–02 (La. 1991) (holding that a water body near the Atchafalaya River delta known as Little Bay was an arm of the sea and thus the state would own alluvion formed on its shore); State v. Placid Oil Co., 300 So. 2d 154, 172–75 (La. 1973) (holding that the state owns alluvion or accretion built up gradually on the shore of Grand Lake-Six Mile Lake, which the court determined was a lake rather than a river or stream, because the state owns the banks of a lake below the ordinary high water mark and the littoral landowner has no right to accretion on the shore of a lake).

Under U.S. common law, the general rule with respect to accretion on the seashore is different. Accretion formed on the shore of the sea as a result of the gradual and imperceptible deposit of alluvion or as a result of reliction generally belongs to the littoral landowner and thus the legal boundary between private land and publicly owned sea bottoms likewise moves seaward. FLUSHMAN, supra note 22, at 95–98, 129; POWELL, supra note 22, § 66.01. See also infra Part IV.A.

81. YIANNOPOULOS, supra note 19, § 4:8, at 147–48 n.10, n.13 (citing Mia. Corp. v. State, 173 So. 315 (La. 1936)).
and others that follow it, and demonstrates that, just as Yiannopoulos suggested in his writings on the territorial sea discussed here, the state’s ownership of sea bottoms is dynamic and does extend landward as the actual shoreline moves landward, provided this physical change results from natural forces such as erosion, subsidence, or sea level rise. This conclusion fully comports with the rule generally followed in other jurisdictions across the U.S.

**B. Arms of the Sea**

Although the Civil Code does not use the term *arm of the sea*, the term appears frequently in Louisiana revised statutes, case law, and commentary. Several Louisiana Supreme Court decisions have extended the geographic reach of the territorial sea by recognizing that certain water bodies, sometimes denominated as bays or lakes, that are connected to the Gulf of Mexico are “arms of the sea” or “the sea” itself and, therefore, the beds of these water bodies are public things owned by the state.

Some commentators claim that an arm of the sea can be identified by its location “in the immediate vicinity of the open Gulf” and direct tidal influence. In the case law, the distinction between an inland water body that receives some salt water from the sea and an arm of the sea is not

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82. See, e.g., State v. Scott, 185 So. 2d 877, 882–86 (La. Ct. App. 1st Cir. 1966) (relying on Miami Corp. v. State and holding that the State of Louisiana became owner of former marshland patented to private owner in 1883 that subsequently had been eroded, washed away, and submerged by the waters of the Gulf of Mexico). See infra Part III.A.2.

83. See PLUSHMAN, supra note 22, at 96–97; Wyman & Williams, supra note 22, at 1961, 1968–69; The Cathedral Engulfed, supra note 22, at 80, 100. For more details of this rule and justifications for the common law’s Ambulatory Coastline Doctrine, see infra Part IV.A–B.

84. LA. REV. STAT. §§ 49:3, 9:1151 (2024); YIANNOPOULOS, supra note 19, § 4:9, at 150.

85. Zeller v. S. Yacht Club, 34 La. Ann. 837, 839 (La. 1882) (classifying Lake Pontchartrain as either the sea or an arm of the sea); Bruning, 115 So. at 738 (stating there is no right to alluvion “on the shore of Lake Pontchartrain, an arm of the sea, . . . nor in any case as to lands reclaimed by artificial process and with public money.”); Davis Oil Co., 576 So. 2d at 501–02 (holding that a water body near the Atchafalaya River delta known as Little Bay was an arm of the sea and thus the state would own alluvion formed along its shore).

86. YIANNOPOULOS, supra note 19, § 4:9, at 150. Despite judicial rulings to the contrary, Professor Yiannopoulos contends that Lake Pontchartrain is more accurately classified as the sea itself because of its geophysical origin and large size. Id. (citing Milne v. Girodeau, 12 La. 324, 325 (1838)).
always clear. In an 1887 decision, the Louisiana Supreme Court held that a mile-long bayou or inlet, which linked a bay on the open sea with a further inland water body and which was fed both by salt water from the Gulf of Mexico and fresh water from the Mississippi River, was *not* an arm of the sea or seashore but simply an inland water body. In a later decision, the Louisiana Fourth Circuit Court of Appeal employed a more expansive understanding of “arm of the sea” to find that a navigable canal constructed by the State of Louisiana, which was connected to Lake Pontchartrain and through which the sea’s tide regularly ebbed and flowed, was an arm of the sea. In 1991, the Louisiana Supreme Court offered a similar, though perhaps slightly narrower characterization, when it held that a water body known as Little Bay was an arm of the sea because it was “immediately adjacent” to the Gulf of Mexico, was not separated from the gulf by other intermediate bodies of water, and was “washed by the tidal waters of the Gulf of Mexico.” For purposes of this Article, what matters is not whether any particular water body is classified as an arm of the sea, the sea itself, or an inland navigable water body such as a river or lake, but simply the principle that when land is submerged beneath any of these water bodies, the State of Louisiana will generally own it as a public thing.

C. The Seashore

Moving landward, a visitor to the Louisiana coast would next encounter the geographic space falling under the heading of “seashore.” Though originally classified as a common thing not owned by anyone and

87. Morgan v. Negodich, 3 So. 636, 639–40 (La. 1887). In Morgan, the Court failed to address whether Bayou Cook was a navigable river subject to public use. Id.


89. Davis Oil Co., 576 So. 2d at 501. In Davis, the Court cited prior case law for the principle that “the word ‘sea’ applies to ‘arms of the sea,’ which are defined as bodies of water in the vicinity of the open Gulf and which are directly overflowed by the waters of the Gulf.” Id. In Davis, the ultimate question concerned whether alluvion formed near the Atchafalaya River delta had formed along the shores of a navigable river, Shell Island Pass, in which case it would belong to the riparian landowner, or Little Bay, an arm of the sea, in which case it would belong to the state. Id. The Court held that Little Bay was an arm of the sea but remanded the matter to the lower courts to determine the precise location of the disputed alluvion. Id. at 501–02.

90. Yiannopoulos, supra note 19, § 4:9, at 150 (stating that if a water body is a sea or arm of the sea, “its bottom and shores are insusceptible of private ownership; they are public things subject to public use.”).
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accessible to all in early versions of the Civil Code, just as it was under Roman law, seashore is now classified as a public thing. A member of the public, generally speaking, has a “right to land on the seashore, to fish, to shelter . . . to moor ships, to dry nets, and the like, provided that he does not cause injury to the property of adjoining owners.” Furthermore, the current Civil Code appears to define seashore broadly by describing it as “the space of land over which the waters of the sea spread in the highest tide in the winter season,” that is, in a manner reminiscent of Justinian’s understanding.

Louisiana courts, however, have never paid much attention to the literal language of the Civil Code when called upon to resolve disputes about the scope of and public access to the seashore. Instead, ignoring suggestions for a more expansive or flexible geographic conception, Louisiana courts have consistently interpreted article 451 as referring to

91. Under the 1808, 1825, and 1870 Civil Codes, the category of common things included the “sea and its shores,” LA. CIV. CODE art. 3 (1808); LA. CIV. CODE art. 441 (1825); LA. CIV. CODE art. 450 (1870).

92. J. INST. 2.1.1 (classifying “sea-shore” as being, according to natural law, “common to all” and stating that “[n]o one, therefore, is forbidden access to the sea-shore, provided he abstains from injury to houses, monuments, and buildings generally; for these are not, like the sea itself, subject to the law of nations.”).

93. LA. CIV. CODE art. 450 (2024). The legislature shifted seashore to the category of public things in the twentieth century. LA. CIV. CODE ANN. art. 450 cmt. g (2024) (citing LA. REV. STAT. §§ 9:1101, 49:3 (2024)).

94. LA. CIV. CODE art. 452. Public use of the seashore, however, may be circumscribed through “municipal ordinances and regulations” prescribed by a municipality exercising its “police power.” Id.

95. Compare id. art. 451, with J. INST. 2.1.3 (“The sea-shore extends to the limit of the highest tide in time of storm or winter.”).

96. Yiannopoulos, supra note 19, § 4:11. at 154–55 (observing that the highest seasonal tides on the Gulf of Mexico occur in the summer, not the winter as on the Mediterranean Sea, and that tidal variations on the Gulf of Mexico can be quite large whereas the Mediterranean Sea is “almost tideless”; noting the indeterminate interface between the Gulf of Mexico and the many smaller water bodies connected to it; and suggesting that “the seashore might be defined as the space of land between the highest ordinary level and the lowest ordinary level of the sea.”). See also Linton W. Carney et al., The Work of the Louisiana Legislature for the 1977 Regular Session: A Student Symposium, 38 LA. L. REV. 51, 73 (1977) (citing H.B. 213, 1997 Leg., Reg. Sess. (La. 1977) (proposing a redefinition of seashore as “the land between the mean low water stage and the mean high water stage of the sea.”)); id. (discussing proposed revision of article 451).
land “directly overflowed by the tides” and, more importantly, land directly facing the sea or open coast.97

As the disputes that motivate this Article demonstrate, the location of the seashore in Louisiana is rarely static. The seashore can move landward or seaward “when adjoining lands are eroded by the sea or when accretions are formed.”98 When this happens, Yiannopoulos once again emphasizes the State of Louisiana’s preeminent rights: “Lands that have become sea bottoms as well as accretions formed at the seashore belong to the state.”99 Yiannopoulos is quite clear that the littoral property owner in Louisiana does not enjoy the chance to gain new land formed by accretion on the seashore and furthermore assumes the risk of erosion as he or she “may lose a part or the whole of his land.”100 Although Yiannopoulos never offers a detailed justification for these conclusions,101 his basic intuition is fully supported by the extensive case law, constitutional provisions, and statutory law discussed in Part III of this Article.

D. Inland Natural Navigable Water Bodies—Navigable Rivers and Lakes

Traveling further inland, a visitor to the Louisiana coast will next encounter another frequently contested category of public things owned by the state: “waters and bottoms of natural navigable water bodies,”102 or in other words, the water and beds of navigable rivers and lakes.103 On its

97. Yiannopoulos, supra note 50, at 1363; Buras v. Salinovich, 97 So. 748, 750 (La. 1923); Morgan v. Negodich, 3 So. 636, 639–40 (1888); Burns v. Crescent Gun & Rod Club, 41 So. 249, 251 (La. 1906) (“All agree that the shores include only the lands along the sea or the ocean, and do not extend back from the one or the other.”).
98. YiANNOPOLos, supra note 19, § 4:11, at 156.
99. Id. In support of this proposition, Yiannopoulos primarily cites decisions holding that the state owns new land formed by accretion on the sea or arms of the sea such as Zeller v. Southern Yacht Club, 34 La. Ann. 837, 839 (La. 1882), and Bruning v. City of New Orleans, 115 So. 733, 738 (La. 1928). Id. § 4:11, at 156 n.17.
100. Id. at 156.
101. See id. at 156–57. Yiannopoulos’s only caveat to these conclusions is to note that a “temporary inundation . . . does not affect the location of the seashore.” Id. at 157.
102. L.A. CIV. CODE art. 450 (2024).
103. Another kind of inland and navigable water body is a man-made or artificial canal or pond. Louisiana courts have held that the beds or bottoms of man-made canals can remain private things despite the presence of running water, a public thing, and that landowners can exclude the public from access to canals as long as the canals were made with private funds on private lands. Ilhenny v.
face, the category seems clear. Not only is the water flowing in a navigable
river or lake, a public thing subject to public use,104 but so is the land
beneath that water,105 even though public use of the water bottom may be
partially restricted by the state when, for example, it permits reclamation
projects,106 allows encroachments for structures such as piers or
wharves,107 or grants a mineral lease.108

The state’s ownership of natural navigable water bottoms is, generally
speaking, non-alienable.109 Various state statutes make this abundantly
clear, despite anomalous patents issued in the late 1800s and 1900s as a
result of confusion about the scope of the Swamp Land Grant Acts and
Act 75 of 1880.110 Article 9, § 3, of the 1974 Louisiana Constitution also

Broussard, 135 So. 669, 670 (La. 1931); Nat’l Audubon Soc’y v. White, 302 So.
2d 551, 552–55 (La. Ct. App. 3d Cir. 1978). The U.S. Supreme Court has held
that the public may claim the right to exercise the federal navigational servitude
over a man-made canal if the construction of the canal has destroyed or diverted
a natural, navigable water system. Vaughn v. Vermilion Corp., 444 U.S. 206,
208–09 (1979). The controversy over claims for a right of recreational access to
“private canals” and other non-navigable water bodies is beyond the scope of this
Article. Compare Jason P. Theriot, A Historical Perspective on Public Access to
Private Canals—Vermilion Corp. v. Vaughn, 81 LA. REV. 481, 483–84 (2021)
(providing a historical account of leading Louisiana cases addressing access
claims to private canals), with Kyzar Dorr, supra note 11, at 203–34 (arguing that
the public should have a right of recreational access over private canals and non-
navigable water bodies based on an historically informed understanding of
“running water” as a public resource).

104. LA. CIV. CODE art. 452; YIANNOPoulos, supra note 19, § 4:1 (“The
waters of natural navigable water bodies are subject to public use . . . .”).
105. YIANNOPoulos, supra note 19, § 4:1 (noting that the beds or bottoms of
natural navigable water bodies “may only be used or exploited in accordance with
the terms of a lease or license granted by public the authorities.”).
106. LA. REV. STAT. § 41:1702 (2024).
108. Id. §§ 30:121–73.
109. YIANNOPoulos, supra note 19, § 4:5, at 139.
110. LA. REV. STAT. §§ 9:1107–09. As a result of a historical anomaly
produced by the ambiguous language of Act 75 of 1880, see Act No. 75, 1880 La.
Acts 87; Yiannopoulos, supra note 50, at 1361, and accompanying text, some
state patents issued in the 1880s, 1890s, and early 1900s purported to convey not
only “swamp and overflow land” subject to the Swamp Land Grant Acts of 1849
and 1850, but also water bottoms that were subject to the ebb and flow of the tide
or that were simply submerged beneath navigable water bodies connected to the
Gulf of Mexico. YIANNOPoulos, supra note 19, § 4:5, at 140–41. These
conveyances caused great confusion, and thus the legislature enacted a special
emphatically prohibits the state from alienating the beds or bottoms of any natural navigable water body, including the land beneath the territorial sea, except when a riparian landowner physically reclaims land previously lost to the state by erosion.\textsuperscript{111} Finally, Louisiana law requires the state to act as a trustee of the beds and bottoms of all navigable water bodies and thus to protect, administer, and conserve them “to best ensure full public navigation, fishery, recreation, and other interests.”\textsuperscript{112}

To fully understand the legal significance of a natural, navigable water body (including its water and bed or bottoms), it helps to consider the legal status of its correlative twin, a natural but non-navigable water body. Although running water in a natural, non-navigable water body is a public thing,\textsuperscript{113} the bed or bottom of such a water body may still be—and often


After further confusion caused by the much criticized decision in California Company v. Price, 74 So. 2d 1 (La. 1954), the Louisiana Supreme Court concluded that Act 62 of 1912 must be read narrowly, was not intended to ratify “absolutely null conveyances of navigable water bottoms to private individuals,” and only cured “formal defects in patents that were essentially valid, in that they conveyed alienable property” (i.e., land that was not a navigable water bottom itself but simply marshland interspersed with inalienable navigable water bottoms). Gulf Oil Corp. v. State Mineral Bd., 317 So. 2d 576, 585–92 (La. 1974) (providing statutory construction and public policy reasons for overruling Price and concluding that the state owned “the entire property involved in this case,” namely land submerged beneath navigable water bodies connected to the Gulf of Mexico). The law, as one commentator explains, is now clear: “state patents conveying navigable water bottoms to private persons are absolute nullities; and, to that extent, they may not be cured by the repose statute of 1912.” Yiannopoulos, supra note 19, § 4:6, at 143; Act No. 727, 1954 La. Acts 1275 (now incorporated in La. Rev. Stat. §§ 9:1107–09) (confirming this narrow interpretation of Act 62 of 1912). For discussion of the state patents to which Act 62 of 1912 does apply, see Yiannopoulos, supra note 19, § 4:7.

111. La. Const. art. IX, § 3 (“The legislature shall neither alienate nor authorize the alienation of the bed of a navigable water body, except for purposes of reclamation by the riparian owner to recover land lost through erosion.”). This statement of the core principle of Louisiana’s public trust doctrine originated in the 1921 Louisiana Constitution. See La. Const. art. IV, § 2 (1921), discussed infra note 204 and accompanying text.


113. La. Civ. Code art. 450 (2024).}
is—a private thing. Thus the bed of non-navigable water body can be owned by a private person or by the state or one of its political subdivisions acting in its private capacity.

This distinction between natural, navigable water bodies, on one hand, and natural, non-navigable water bodies, on the other hand, is thus critical in Louisiana because the owner of a non-navigable water bottom can prevent another person—whether a neighbor or a member of the general public—from entering that water body, even though running water flowing through the water body remains a public resource. Consequently, despite the presence of running water entering from a navigable river or lake or salt water entering through passages subject to the ebb and flow of the tide, many landowners have been able to prevent members of the public from boating or fishing on water bodies that are arguably non-navigable. The important point for now, however, is that normally when a water bottom lies below an inland natural navigable water body such as a river or lake, it is a public thing owned by the state.

III. STATE OWNERSHIP OF SUBMERGED LAND ON THE LOUISIANA COAST: THE ESSENTIAL LOUISIANA LEGAL SOURCES

With this Civil Code framework in place, the primary questions raised by this Article can now be addressed. Who owns land or water bottoms on or near the Louisiana coast when they were formerly privately owned but have become permanently submerged beneath the territorial sea, arms of

114. LA. REV. STAT. § 9:1115.2 (providing that “[i]nland non-navigable water beds or bottoms are private things and may be owned by private persons or by the state and its political subdivisions in their capacity as private persons.”).

115. Id. See also LA. CIV. CODE art. 506 (“In the absence of title or prescription, the beds of nonnavigable rivers or streams belong to the riparian owners along a line drawn in the middle of the bed”); LA. CIV. CODE ANN. art. 506 cmts. b–d (2024).

116. Parm v. Shumate, 513 F.3d 135, 145 (5th Cir. 2007) (holding that running water in a non-navigable lake does not create public access rights); Buckskin Hunting Club v. Bayard, 866 So. 2d 266, 273–75 (La. Ct. App. 3d Cir. 2004) (holding that running water in private but navigable canal does not create public access rights). For a critical analysis of this jurisprudential principle, see Kyzar Dorr, supra note 11, at 203–34.

117. See Parm, 513 F.3d at 145; Buckskin, 866 So. 2d at 273–75. But see Kyzar Dorr, supra note 11, at 203–13 (criticizing cases). One recent Louisiana appellate court decision, however, has cast doubt on the continuing viability of this line of authority. See State v. Wagley, No. 22-KW-668, 2022 WL 3572789 (La. Ct. App. 1st Cir. Aug. 18, 2022), writ denied, 352 So. 3d 81 (La. 2022). The issues raised in Wagley are beyond the scope of this Article.
the sea, or even navigable rivers or lakes? Does the state take ownership under a straightforward application of article 450 of the Louisiana Civil Code? Do former private landowners retain ownership? If the state acquires ownership as a matter of law, are former private owners entitled to some type of compensation from the state?

One commentator asserts that private landowners can maintain ownership and control over all submerged land—or at least submerged land adjacent to a category of waterways he calls “newly navigable water bodies”—and further claims that such landowners deserve compensation from the state even if they do not maintain ownership of water bottoms.\textsuperscript{118} Several other commentators argue that the state owns all permanently submerged coastal land and all landowners in Louisiana acquire land subject to article 450.\textsuperscript{119} Professor Yiannopoulos sowed confusion about these questions for years by incorporating an enigmatic statement in one portion of his civil law property treatise,\textsuperscript{120} a statement that contradicts other pronouncements in his treatise suggesting that the state becomes owner of eroded land on the shore of the sea.\textsuperscript{121} It is now time to resolve these debates and clear up the confusion once and for all.

This Article’s analysis of the relevant judicial decisions, constitutional provisions, and statutes demonstrates that the State of Louisiana indisputably acquires ownership of all former land or water bottoms permanently submerged beneath the sea or arms of the sea or beneath natural navigable lakes. These authorities further reveal that the state does not owe former private owners any compensation if the submergence occurs because of large-scale natural processes such as erosion, subsidence, or sea-level rise, rather than specifically identifiable human interventions that changed the hydrological condition of a particular water

\textsuperscript{118} Schimpf, supra note 10, discussed infra notes 260–68 and accompanying text (criticizing implied reversion theory).

\textsuperscript{119} Mestayer, supra note 10, at 907–17 (offering the most extensive argument in favor of state ownership of dual-claimed land based on implied reversion theory); Sprague, supra note 16, at 154–61 (arguing that state acquires ownership of submerged land under Miami Corp. v. State, 173 So. 315 (La. 1936), and the public trust doctrine); Jaccard, supra note 16, at 668 (asserting state ownership of eroded lands on the shores of the sea (citing Perhay, supra note 18, at 167)).

\textsuperscript{120} YIANNOPoulos, supra note 19, § 4:2 (titled “Waters that became navigable after 1812 or ceased to be navigable”), discussed infra notes 239–53 and accompanying text.

\textsuperscript{121} As discussed above, Yiannopoulos repeatedly recognized that the State of Louisiana acquires ownership of water bottoms covered by the sea as the seashore moves landward because of natural forces like erosion. See discussion supra notes 78–81, 98–101. See also discussion infra notes 220–21.
body. Mineral lessors and mineral lessees will be entitled to some protection when land ownership changes because of these processes. They will maintain their interests in existing mineral leases and receive the benefits of any derivative mineral rights if the underlying mineral leases are in effect at the time of permanent submergence.\footnote{122}

Section A of this Part analyzes the seminal judicial decision, \textit{Miami Corp. v. State},\footnote{123} that decision’s extensive judicial progeny, and two decisions that offered aberrant dicta inconsistent with its holding. Section B addresses one constitutional provision and several statutory provisions that support state ownership of permanently submerged water bottoms. Finally, Section C addresses Professor Yiannopoulos’s enigmatic statement on dual-claimed navigable water bottoms and contrasts it with the often-over-looked commentary of another leading Louisiana scholar, Professor Lee Hargrave. The final Section also responds to arguments raised by the lone recent commentator who supports retained private ownership over permanently submerged water bottoms or at least favors state compensation for private, littoral landowners who lose land on the Louisiana coast.

\textit{A. Louisiana Jurisprudence}

\textbf{1. Miami Corp. v. State (1936)}

To disentangle the dual-claimed land dilemma in Louisiana, one cannot avoid \textit{Miami Corp. v. State}.\footnote{124} In that case, the Louisiana Supreme Court unambiguously held that the State of Louisiana acquires ownership of eroded or submerged land on the shore of a navigable lake when the erosion or submersion occurs as a result of natural forces.\footnote{125} Careful consideration of the factual context and the court’s reasoning underscores the relevance of the ruling for today’s controversy over dual-claimed land on the Louisiana coast.

\textit{Miami Corp.} began as a boundary action brought by a littoral landowner, Miami Corporation (Miami), which owned land along the eastern shore of Grand Lake, a large navigable water body in Cameron Parish, against the State of Louisiana.\footnote{126} Miami traced its title to the disputed parcel to a patent issued by the state in 1883, which had fixed the tract’s western boundary with reference to Grand Lake’s then existing

\footnote{122. \textit{See infra} Part III.B.3.}
\footnote{123. \textit{See generally} Mia. Corp. v. State, 173 So. 315 (La. 1936).}
\footnote{124. \textit{Id.}}
\footnote{125. \textit{Id.} at 319–27.}
\footnote{126. \textit{Id.} at 316–17.}
The problem that sparked the lawsuit was that Grand Lake’s shoreline had moved eastward.127 By the time of the lawsuit, “a large part of several of the original sections of land [had become] inundated and permanently covered by the waters of the lake.”129 Miami petitioned the district court to declare it to be the owner of all lands east of the original shoreline, regardless of whether that land had become inundated or not.130

Miami’s legal claim relied principally on the Louisiana Supreme Court’s then relatively recent decision in State v. Erwin, a 1931 decision involving similarly eroded land on the western shore of Calcasieu Lake.131 In Erwin, the Court had held that private, littoral landowners still owned land that had been washed away by waves and become permanently submerged beneath the lake’s waters after 1812.132 In Erwin, the Court justified this holding by observing that the Civil Code’s articles granting riparian landowners the right to claim new land formed by accretion and dereliction on river banks did not apply to new land formed on the shore of a lake.133 Although the Civil Code’s articles on accretion and dereliction also said nothing about the loss of land resulting from erosion adjacent to any kind of water body,134 the Court in Erwin was apparently impressed by commentary offered in Portalis’s Exposé des Motifs of the Code Napoleon, which had been quoted by the Court in an 1892 decision,

127. Id. at 317. The state issued the original patent on May 24, 1883, to an individual named Jabez B. Watkins. Id.
128. Id.
129. Id.
130. Id.
132. Id. at 85–87. In Erwin, the Court also held that Calcasieu Lake was a lake rather than a river. Id. at 86
133. Id. at 86 (citing LA. CIV. CODE arts. 509–10 (1870)).
134. In fact, neither article 509 nor article 510 of the 1870 Civil Code mention lakes at all. See LA. CIV. CODE arts. 509–10 (1870). Article 510, which was the crucial provision, states as follows:

The same rule applies to derelictions formed by running water retiring imperceptibly from one of its shores and encroaching on the other; the owner of the land, adjoining the shore which is left dry, has a right to the dereliction, nor can the owner of the opposite shore, claim the land which he has lost.

This right does not take place in case of derelictions of the sea.

LA. CIV. CODE art. 510 (1870) (emphasis added). The implication of the italicized language in the first paragraph of article 510 in the context of a river is that when the owner of a riparian tract loses land because of “encroaching” water on his or her side of the river, he or she cannot “claim the land” that now becomes submerged beneath the river’s running water.
Delachaise v. Maginnis, addressing ownership of newly formed batture on the banks of the Mississippi River.135

According to the Court in Delachaise, Portalis speculated “quaintly” that in the context of rivers there must be some kind of “aleatory contract between the riparian owner and nature, whose action may at any moment despoil or increase his estate.”136 In its lawsuit against the state, Miami mimicked but slightly modified this argument, arguing now that a supposedly “aleatory contract” existed between the riparian landowner and the state (not nature), such that “in the event one party [the riparian landowner] loses by the encroachment of the stream and the other [the state] gains, the loss is offset by the possibility of a reversal of the condition.”137 Miami then argued that the Civil Code’s denial of accretion and dereliction rights to littoral property owners implies that when the physical boundary between water and land moves on the shore of a lake, the boundary between the state and a private, littoral landowner must be a fixed rather than ambulatory, even though the Civil Code only specified that a littoral landowner did not enjoy the right to claim new land formed by accretion or dereliction on the shore of the sea and said nothing about the consequences of erosion at all.138

In Miami Corp., the district court and then the Louisiana Supreme Court both decisively rejected the reasoning of Erwin and its reliance on the limited reach of accretion and dereliction rights under the 1870 Civil Code.139 Before reaching the legal issues in the case, though, the district

136. Id. (quoting Portalis). The Court did not provide any citation for its reference to Portalis. Portalis, however, might have been thinking about the equal possibility of gain or loss for riparian owners on the bank of a meandering river that arises when alluvial deposits build up gradually on the inside or concave bank of a bend in a river and increased water velocity in the river produces erosion on the outer or convex bank. This geological assumption might explain the Court’s comment in Delachaise: “If it [the river] takes away, the owner must bear the loss: if it gives, justice accords him the gain.” Id. at 716. The Court’s thinking here echoes the “reciprocity rationale” that had long circulated in English common law as an explanation for its rules supporting ambulatory boundaries on the shores of water bodies more generally, but which has generally been discarded in more recent common law jurisprudence. See infra Part IV.B. Of course, the Court in Delachaise said nothing about boundaries on the shores of lakes, which do not follow the same patterns as fast-flowing rivers in a deltaic plain.
138. Id. See LA. CIV. CODE art. 510 (1870) (providing that the right to claim new land formed by accretion or dereliction “does not take place in case of derelictions of the sea”).
139. See generally Mia. Corp., 173 So. at 318–27.
court made several important factual determinations. First, the district court determined that Grand Lake was navigable in 1812, continued to be navigable at the time of the lawsuit, and was fed by a river whose current flowed through the lake with enough force to carry sediment from one end of the lake to the other.\(^\text{140}\) Next, the district court found that the erosion or “recession” on the lake’s shore was caused by a “combination of natural forces and conditions,” including the river current flowing through the lake, the force of wind-driven waves, and subsidence—all of which, the court noted, were occurring throughout Cameron Parish.\(^\text{141}\)

The district court next rejected the reasoning of Erwin. On a purely formal level, it clarified that it was not bound to follow \textit{Erwin} because the common law doctrine of \textit{stare decisis} does not apply in Louisiana courts.\(^\text{142}\) In any event, the court also observed that \textit{Erwin} itself overruled many prior decisions which had held that “the beds of \textit{navigable lakes of any class} were public things, and the property of the State.”\(^\text{143}\) Finally, the district court concluded that the \textit{Erwin} rule was “impracticable” in two crucial respects.\(^\text{144}\) Not only would it lead to inconsistent water boundaries for a landowner that owned land adjacent to both Grand Lake and the river that flowed into it,\(^\text{145}\) but also it would produce “a public thing partially owned by the State and partially owned by private individuals.”\(^\text{146}\) The latter result would mean that an innocent waterborne traveler could easily become a trespasser by passing beyond the lake’s 1812 high water mark and crossing over portions of the lake’s newly expanded bed.\(^\text{147}\)

After the landowners appealed, the Louisiana Supreme Court affirmed the district court’s ruling, explicitly overruled \textit{Erwin}, and established a new rule specifically applicable to eroded lands on the shores of navigable

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\(^{140}\) Id. at 317.

\(^{141}\) Id. at 317–18. The parties agreed that currents and wind were causing erosion and submergence, but the trial court settled their dispute about the role of subsidence, finding that the evidence “irrefutably established” that land in the area was “gradually subsiding and has been subsiding for thousands of years.” \textit{Id.} at 318.

\(^{142}\) Id. at 319.

\(^{143}\) \textit{Id.} (emphasis added) (citing New Orleans Land Co. v. Bd. of Levee Comm’rs, 132 So. 121, 123 (La. 1930)).

\(^{144}\) \textit{Id.}

\(^{145}\) \textit{Id.} (observing that “[i]n the case of encroachment of both, [the riverside and lakeside tract] which is the case here, up to a certain point the owner would lose the land covered by the water, and beyond that point he would retain it, and neither the owner nor any court could definitely fix the point of offset.”).

\(^{146}\) \textit{Id.}

\(^{147}\) \textit{Id.}
Importantly, the Court discarded the Erwin Court’s attempt to rationalize the aleatory contract theory of a riparian owner’s right to claim accretion on the banks of rivers and its non-application to lakes and other water bodies. In essence, the Court peered through the vagaries of outdated French commentary and, like the district court below, saw the reality of the situation.

After minimizing the formal precedential value of Erwin in the same manner as the district court, the Supreme Court turned to the precise legal problem presented and declared, based on decisions preceding Erwin and “sound principles of public policy,” that:

[i]t appears to be the rule that where the forces of nature—subsidence and erosion—have operated on banks of a navigable body of water, regardless of whether it be a body of fresh water or
the sea, or an arm of the sea, the submerged area becomes a portion of the bed and is insusceptible of private ownership. 152

The “sound principles of public policy” the Court referenced here mirrored the concerns raised by the district court. If the state did not become owner of water bottoms submerged beneath an expanding navigable lake, a rim of privately owned water bottoms would emerge around the lake’s circumference that would “deprive the public of the use of the lake under State laws.” 153 The Court’s recognition of this principle, which this Article will denominate as the unitary submerged navigable water bottom principle of Louisiana property law, allowed the Court to see beyond its prior attempts to rationalize the aleatory contract understanding of accession rights regarding new land on river banks with the Civil Code’s silence regarding eroded land on the littoral shores of lakes and the sea. 154

As it turned out, the Court’s newly announced unitary submerged navigable water bottom principle also rested on firmer jurisprudential ground than Erwin. 155 Three previous Louisiana Supreme Court decisions addressing disputes about submerged land on the shores of Lake Pontchartrain all uniformly recognized that the ownership of that lake’s water bottoms was indivisible and held by the state regardless of whether those bottoms lay below the lake’s waters in 1812 or became permanently submerged at a later date. 156 Meanwhile, the Court easily distinguished

152.  Id. at 322.
153.  Id. at 323.
154.  As the Court correctly recognized near the end of its opinion in Miami Corp., neither Erwin nor Miami Corp. concerned the allocation of new land formed gradually and imperceptibly on the bank of a river or the shore of a lake through either accretion or dereliction and thus articles 509 and 510 of the 1870 Civil Code were irrelevant. Id. at 327.
155.  Id. at 323–34.
156.  See Milne v. Girodeau, 12 La. 324, 325 (La. 1838) (holding that the former owner of shorefront property next to Lake Pontchartrain that was later submerged below the lake could not bring a petitory action against defendant who constructed a house on the disputed lake bed because the “ground in question, lies much below [the ordinary] high water mark, and forms part of the bed of the lake, and is not, therefore, susceptible of private ownership.”); Roussel v. Grant, 14 Teiss. 57, 59 (La. Ct. App. 1916) (recognizing as a “matter of public knowledge that the waters of Lake Pontchartrain have constantly gained upon the shore at this point, during the last one hundred and fifty years,” and acknowledging that “land below the low water mark [of the lake] is not susceptible of private ownership,” and therefore holding that the plaintiff, relying on purported Spanish land grant, could take nothing beyond the current low water mark of the lake); New Orleans Land Co. v. Bd. of Levee Comm’rs, 132 So. 121, 122–23 (La. 1930)
three decisions Miami relied upon because they either supported the unitary submerged navigable water bottom principle, recognized that state ownership of lake beds extended to the ordinary high water mark even in unusual circumstances, or concerned changes to water bodies brought about “suddenly and over a large area” by artificial works of man.

(holding that a company suing to recover the value of lands near the shore of Lake Pontchartrain could not recover 28.2 of disputed 39.43 acres because those lands had fallen below the ordinary high water mark of the lake as result of “erosive action of the waters”). In addition to citing and discussing these three decisions, _Mia. Corp._, 173 So. at 323–24, the Court cited with approval a law review article that had criticized _Erwin_ for deviating from established jurisprudence and allowing private ownership of the beds of navigable waters of any kind. Arthur C. Watson, _Alluvion and Dereliction in Lakes_, 7 Tul. L. Rev. 438, 445 (1933).

The article cited by the Court reviewed all the decisions addressing alluvion, dereliction, and erosion on the shore of lakes preceding _Erwin_ and observed that “the various cases seem to contradict each other in principle and to reach no definite conclusion.” _Id_. However, it did find that when erosion occurs on the shore of a lake, courts, except for _State v. Erwin_, had applied articles 509 and 510 and had held that new water bottoms created by erosion belonged to the state. _Id_. It thus criticized _Erwin_ for establishing “bad policy,” _id_., and setting a “dangerous precedent, contrary to the whole spirit of the Code which forbids private ownership of the beds of navigable waters.” _Id_. at 441. Interestingly, the article also pointed out that the supposed symmetry of potential gain and loss is “not essential to the idea of dereliction, alluvion and erosion” even in the case of rivers because dereliction can sometimes produce new land on both sides of a river if there is a diminution in the volume of water in a river and that sometimes batture can be formed simultaneously on both sides of a river. _Id_. at 444.

157. _Mia. Corp._, 173 So. at 324–25 (noting that _Zeller v. Southern Yacht Club_, 34 La. Ann. 837 (La. 1882), held that new land formed on the shore of Lake Pontchartrain was public property and that only riparian owners on the banks of rivers, not littoral landowners on the shores of lakes, had the right to claim accretion or alluvion).

158. _Id_. at 325 (observing _Sapp v. Frazier_, 26 So. 378 (La. 1899), an odd case about Lake Bistineau in North Louisiana, in which the Court held that large portions of that lake’s bed, which were left uncovered and used as communal pasture land by nearby farmers during the summer, could not be claimed by an adjacent riparian landowner because “relliction, in the true sense of the word, had not taken place,” and observing that _Sapp_ had been followed by numerous other decisions “establishing the rule that the bed of a navigable lake extends to the high-water mark.”).

159. _Id_. (distinguishing _Slattery v. Arkansas Natural Gas Co._, 70 So. 806 (La. 1916), concerning sudden draining of large lakes because of the federal government’s successful efforts to break up the great raft in the Red River).
The majority opinion in Miami Corp. also justified its departure from Erwin in another important respect. It explained that the majority in that decision might have been motivated by a desire to produce an “equitable” result by freezing a lake’s shoreline as of 1812 and thus preventing the littoral landowner from losing any property.\textsuperscript{160} In Miami Corp., the Court was not swayed by this kind of ex post equitable reasoning and saw itself engaging in a disciplined act of self-correction that restored the state’s inherent sovereignty over navigable water bottoms and avoided the practical difficulties of transforming innocent waterborne travelers into trespassers simply because they were passing across a navigable lake whose shores had expanded gradually over time.\textsuperscript{161}

In the end, the Court stated its new position with perfect clarity:

It is our opinion that the doctrine of stare decisis, as establishing a rule of property, is not applicable in the instant case, and that the case of State v. Erwin, supra, is erroneous and hereby overruled. We are further of the opinion that the bed or bottom of Grand Lake, a navigable body of water, including the area in controversy, which has been submerged since 1883, belongs to the State of Louisiana, by virtue of its sovereignty, it being a public thing and insusceptible of private ownership under the provisions of articles 450 and 453 of the Revised Civil Code.\textsuperscript{162}

In this concluding passage, the Court clarifies that its holding rests on the interconnected principles of state sovereignty over navigable water bottoms and the inalienability of such water bottoms. The Civil Code’s rules on accretion and dereliction on the banks of navigable rivers were simply inapposite.\textsuperscript{163}

In another interesting twist, the Court also dispensed with Miami’s constitutional due process argument that it was entitled to rely on Erwin as a rule of property by pointing out that Miami had actually purchased its littoral property in 1917, 14 years before Erwin was decided, at a time when the operable property rule was consistent with the state’s claim of ownership to all eroded land on the shore of navigable lakes.\textsuperscript{164} Thus,

\textsuperscript{160} Id. at 326.
\textsuperscript{161} Id. (observing that the overruled rule in Erwin “was more harmful and destructive of the rule of property and public welfare than the correction of an alleged inequitable situation in the jurisprudence or law.”) (emphasis added).
\textsuperscript{162} Id. at 327.
\textsuperscript{163} Id.
\textsuperscript{164} Id.
Miami had no justifiable reliance interests upon which to base a claim resting on deprivation of property rights without due process.

2. Miami Corporation’s Progeny

Not only did Miami Corp. correct the confused decision in Erwin, but also, by articulating the unitary submerged navigable water bottom principle, it established a clear rule that has stood the test of time. No subsequently reported Louisiana appellate court decision has ever questioned its authority. Moreover, in two important subsequent decisions, the Louisiana First Circuit Court of Appeal and the Louisiana Supreme Court extended the key principle of Miami Corp. to the erosion, subsidence, and eventual submergence of marsh adjacent to the Gulf of Mexico. Numerous other state and federal court decisions involving formerly privately owned land that has become submerged beneath navigable water bodies have also continuously affirmed Miami Corp.’s central lesson.

The first crucial decision, State v. Scott, concerned a dispute between, on one hand, the State of Louisiana and its mineral lessees, who had been in possession of a large tract of submerged former marsh near the Louisiana coast for a number of years, and, on the other hand, an individual named Albin Scott who claimed to be the owner of the submerged land. In Scott, the Louisiana First Circuit Court of Appeal affirmed the district court’s decision holding that the state became owner of the former marshland, originally granted to the state through the 1849 Swamp Land Grant Act and patented to Scott’s ancestor in title in 1883 by virtue of Act 75 of 1880. Crucially, the parties in Scott agreed on two key facts: (1) at the time of the 1883 patent, the disputed area was privately owned marsh, not the bed of navigable water body; and (2) by the time of the lawsuit, and in fact at least six years earlier, the disputed area was “no longer land” as it had been eroded, washed away, and submerged by the waters of the Gulf of Mexico and thus formed “a part of the bed of the Gulf of Mexico.” These stipulated facts, the First Circuit held, brought

166. See discussion supra notes 157–64.
167. Scott, 185 So. 2d at 878–80. The case began as a jactitory (or slander of title) action brought by the state and its mineral lessees but was converted into a petitory action by the defendant when he claimed to be the owner of 1326.26 acres. Id.
168. Id. at 881–87.
169. Id. at 881, 885.
the case clearly “under the rule” in *Miami Corporation v. State of Louisiana*. Thus the court rejected Scott’s assertion of ownership, which rested on the contention that the disputed area had already become part of the bed of the Gulf of Mexico at the time of the 1883 patent.

In the second crucial decision, *Chevron U.S.A., Inc. v. State*, the Louisiana Supreme Court reaffirmed its primary holding in *Miami Corp.* in a concursus proceeding that once again involved dual-claimed land. *Chevron* concerned a long-simmering dispute between the Plaquemines Parish Government (PPG), the successor to the Buras Levee District (BLD), and the State of Louisiana, over various tracts of land that the state had previously transferred to the BLD in 1938 and that the BLD leased to Chevron’s predecessor for oil and gas development the same year. In the first part of its ruling, the Court reversed an intermediate appellate court decision in favor of Chevron and PPG on res judicata grounds. Then, turning to Chevron and PPG’s alternative arguments for dismissal, the Court acknowledged the validity of one of those arguments but in so doing recognized that the rule of *Miami Corp.* applies to all lands submerged beneath territorial waters or arms of the sea, not just lands submerged beneath a navigable lake.

In this part of the decision, the Court addressed a special statute, Louisiana Revised Statutes § 9:1152, which provides that when a political subdivision of the state grants mineral leases on land that later becomes the bed of a navigable water body, the state becomes the owner of the new water bottom, but the mineral rights created by the political subdivision are retained by the mineral lessee as long as the mineral lease is in effect. On this issue, the Court agreed with an earlier Louisiana Fourth Circuit Court of Appeal decision which had held, in the context of Louisiana Revised Statutes § 9:1152, that ownership of land and ownership of

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170. *Id.* at 885.
171. *Id.* at 885–86.
173. *Id.* at 188–94.
174. *Id.* at 194–97. In this part of the decision, the Louisiana Supreme Court held that the current concursus proceeding before it concerned ownership and the validity of mineral leases of a different tract of land (Unit Tract 1) than the tract involved in a prior concursus proceeding involving the same parties (Unit Tract 87) and thus the two lawsuits did not arise out of the same “transaction or occurrence,” thus precluding application of res judicata. *Id.*
175. *Id.* at 198–99.
mineral rights are “not necessarily one and the same.”177 Relying expressly on Miami Corp., the Court explained its key rationale:

The ownership of the water bottoms on any part of the Unit Tract 1 that later became inundated by the waters of the Gulf of Mexico did in fact revert to the State. However, BLD continued to enjoy the “impresscriptible and inalienable servitude” granted by La.Rev.Stat. § 9:1152, and BLD is entitled to the royalties from any part of Unit Tract 1 that has, since 1938, become inundated by the waters of the Gulf of Mexico.178

Although the Court eventually held that Chevron and PPG were not entitled to summary judgment for other reasons,179 the Court’s explicit reliance on Miami Corp. to explicate Louisiana Revised Statutes § 9:1152 and explain that the state becomes owner of any water bottom that “later became inundated by the waters of the Gulf of Mexico” indicates the Court’s embrace of Miami Corp.’s unitary submerged navigable water bottom principle. In other words, Chevron teaches us that when formerly dry land, marshland, or non-navigable water bottoms held in private ownership become permanently submerged beneath the sea, an arm of the sea, or a navigable lake as a result of erosion, subsidence, or other natural causes, ownership transfers to the state, even if then-existing interests of mineral lessors and lessees are protected by other applicable law.

In numerous other decisions involving formerly privately owned land or non-navigable water bottoms that became submerged beneath navigable lakes, the sea, or arms of the sea, the Louisiana Supreme Court,180

177. Chevron U.S.A., 993 So. 2d at 199 (citing Plaquemines Par. Gov’t v. State, 826 So. 2d 14, 22 (La. Ct. App. 4th Cir. 2002)).
178. Id. (emphasis added).
179. Id. at 200–02 (explaining why the state’s alternative argument that it was entitled to receive royalties from portions of the Unit 1 tract that were water bottoms at the time of the 1938 conveyance “such that the mineral rights were never transferred to BLD because those portions of the property were not included in the 1938 conveyance” might have merit).
180. State v. Placid Oil Co., 300 So. 2d 154, 173–78 (La. 1973) (citing Mia. Corp. v. State, 173 So. 315 (La. 1936), favorably in context of determining that Grand Lake-Six Mile Lake was a navigable lake, not a navigable river, and thus alluvion deposited gradually and imperceptibly in the lake belonged to the state, not owners of adjacent land); Gulf Oil Co. v. State Mineral Bd., 317 So. 2d 576, 583 (La. 1975) (citing Mia. Corp., 173 So. 315, as standing for the proposition that “private ownership of the beds of navigable waters is forbidden” and stating “a rule of public policy that the State, as a sovereignty, holds title to the beds navigable bodies of water.”).
Louisiana intermediate appellate courts,\textsuperscript{181} and federal courts,\textsuperscript{182} have continuously affirmed the same central teaching of \textit{Miami Corp.}\textsuperscript{183} Given the consistency of this jurisprudence, it is fair to say that the fundamental principle underlying \textit{Miami Corp.} has evolved into a pillar of Louisiana property law. \textit{Miami Corp.} unequivocally establishes that the State of Louisiana acquires ownership of all land or non-navigable water bottoms that become permanently submerged beneath the sea, arms of the sea, or navigable lakes.

3. The Perils of Aberrant Dicta: Ramsey River Road and Dardar I

Two reported judicial decisions have failed to recognize the lessons of \textit{Miami Corp.}\textsuperscript{184} In these decisions, courts implied in poorly reasoned dicta that the navigable or non-navigable status of a water body in 1812—when Louisiana officially became a state—fixes the classification and ownership of the water body and its bed for all time.\textsuperscript{185} These decisions, in

\begin{enumerate}
\item \textsuperscript{181} Vermilion Bay Land Co. v. Phillips Petrol. Co., 646 So. 2d 408, 411 (La. Ct. App. 4th Cir. 1994) (citing \textit{Mia. Corp.}, 173 So. 315, in support of proposition that legal classification of a thing can change from a “private thing” susceptible of alienation to a “public thing” insusceptible of private ownership in dispute over whether mineral servitudes had terminated because of ten-year prescription of non-use and whether tracts subject to such servitudes were contiguous or not; also noting that “when a formerly non-navigable waterbed within tidal overflow lands acquired by the State becomes navigable in fact . . . The bed of the waterbed . . . becomes a public thing subject to public use and insusceptible of private ownership.”); Gaudet v. City of Kenner, 487 So. 2d 446, 448 (La. Ct. App. 5th Cir. 1986) (citing \textit{Mia. Corp.}, 173 So. 315, for the propositions that if a tract of land existed as dry land at time of a 1966 patent, “any subsequent submersion would serve to vest title to it, or parts of it, in the State,” and that “[o]nce lost, lake bed remains State property until otherwise alienated; it does not vest in a private riparian owner should it reappear.”); Winkler v. State, 239 So. 2d 484, 486 (La. Ct. App. 4th Cir. 1970) (describing \textit{Mia. Corp.}, 173 So. 315, as holding that “title to land area covered by navigable water through natural causes of subsidence and erosion reverts to the State once the natural phenomenon occurs.”).
\item \textsuperscript{182} Cutrer v. Humble Oil & Refining Co., 202 F. Supp. 568, 574 n.32 (E.D. La. 1962) (citing \textit{Mia. Corp.}, 173 So. 315, and stating any portion of a disputed tract “which became submerged after issuance of the patents in 1911 presumably reverted to public ownership.”).
\item \textsuperscript{183} \textit{Mia. Corp.}, 173 So. at 326–27.
\item \textsuperscript{184} Dardar v. Lafourche Realty Co., Inc., 985 F.2d 824, 831–32 (5th Cir. 1993); Ramsey River Rd. Prop. Owners Ass’n v. Reeves, 396 So. 2d 873, 875 (La. 1981).
\item \textsuperscript{185} See infra notes 187–202 and accompanying text.
\end{enumerate}
own confusion in the minds of other judges and commentators.\textsuperscript{186}

In \textit{Ramsey River Road Property Owners Association v. Reeves}, the Louisiana Supreme Court addressed a non-profit association’s suit to enjoin the construction of a bridge over a small river, the Bogue Falaya River, that the association claimed was a navigable water body.\textsuperscript{187} In that case, the district court agreed with the association’s contention that the Bogue Falaya was navigable and enjoined completion of the bridge until the defendants proved compliance with governmental regulations concerning constructions that interfere with a navigable waterway.\textsuperscript{188} Affirming the district court’s decision and rejecting defendants’ arguments attacking the association’s standing to bring the lawsuit and the defendants’ assertions that the river was actually not navigable,\textsuperscript{189} the Louisiana Supreme Court stated in dicta that because Louisiana’s original ownership of the beds and water bodies within the state is based on the equal footing doctrine, its inquiry regarding the navigability of the river must “focus upon the status of the river in 1812, the year Louisiana entered the Union, and the means of navigation available at that time, because navigability to fix ownership of the river bed is determined by the year of admission to statehood for states other than the original thirteen.”\textsuperscript{190} This statement is problematic in a number of ways.

First, this statement appears to have been largely unnecessary because the Court actually determined that the river was navigable both in 1812 and at the time of the dispute.\textsuperscript{191} However, even if there had been a change in the river’s navigable status, the statement conflates the original ownership of a water body, which was never an issue in the case and is determined as of 1812, with all of the possibilities that arise thereafter. Finally, and most important, Louisiana law is clear that the navigability of a water body can change over time because of natural forces and that these changes may affect its classification and may or may not affect ownership. For instance, if a river that was navigable in 1812 later becomes non-navigable, the classification of the underlying river bed shifts from being a public thing necessarily owned by the state to a private thing owned by

\begin{footnotes}
\item[186] See \textit{infra} notes 262–64 and accompanying text.
\item[187] \textit{Ramsey River}, 396 So. 2d at 874.
\item[188] \textit{Id.}
\item[189] \textit{Id.} at 874–77.
\item[190] \textit{Id.} at 875 (citing United States v. Appalachian Elec. Power Co., 311 U.S. 377 (1941)).
\item[191] \textit{Id.} at 877 (stating “there are indications in the record before us that, as is the case at the present time, in 1812 there was no substantial difference in the nature of the river at the respective locations.”).
\end{footnotes}
the state in its private capacity. Conversely, if a water body that was non-navigable in 1812 subsequently becomes navigable, then the analysis of Miami Corp. and the many decisions following it, along with the analysis prompted by the Freeze Statute, discussed below, clearly indicate that the water body and its water bottom become a public thing owned by the state. The dicta in Ramsey Road completely ignores this extensive body of law, perhaps because the Court was more focused on the narrow issue of the non-profit association’s standing to sue or perhaps because it was convinced there was no material issue concerning the river’s navigability in 1812 or at the time of the case. Either way, the Court’s dicta in Ramsey River Road should be ignored.

Another misleading obiter dicta statement occurred in Dardar v. Lafourche Realty Co., Inc., a case concerning a dispute between commercial fishermen who sued a private land company claiming they had a right to use a system of navigable waterways that were controlled by the company. After the State of Louisiana intervened in the suit asserting both the public’s right to use the waterways and state ownership of the respective water bottoms, the private land company responded by asserting that all the waterways and water bottoms were private, regardless of whether the waterways were currently navigable or not.

The United States Court of Appeals for the Fifth Circuit affirmed most of the federal district court rulings in favor of the private land company on

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192. Yiannopoulos, supra note 19, § 4:2, at 131 (noting that when a formerly navigable body of water “ceases to be navigable,” the water body is no longer a public thing, but “there is no reason to assume that the water body ceases to belong to the state. The formerly navigable water body is a private thing that belongs to the state in its capacity as a private person.”). See also id. § 4:12 (making the same point about river beds: “a river that was navigable in 1812 but has subsequently ceased to be navigable or dried out is a private thing” and noting that article 506 of the current Civil Code “is not to be applied so as to deprive the state of its ownership of the bed of a river that ceased to be navigable or completely dried out”). See also Puder et al., supra note 75, at 147.

193. See supra Part III.A.2 (Miami Corp.’s Progeny) and infra Part III.B.2 (Freeze Statute).

194. Dardar v. Lafourche Realty Co., Inc., 985 F.2d 824, 826 (5th Cir. 1993) [hereinafter Dardar I].

195. In Dardar I, the defendant land company contended that all of the lands at issue were originally swamp lands transferred to the state under the 1849 and 1950 Swamp Land Grant Acts, that any water bodies existing on these lands in 1812 were at most non-navigable lakes, and that the current system of navigable waterways on the land were all artificial creations and thus, following Louisiana’s jurisprudence on man-made canals, should be treated as private things despite their navigability in fact. Id. at 826–29.
relatively narrow grounds, relatively narrow grounds, but it then made one crucial error. The error crept into the Fifth Circuit’s ruling when the court briefly addressed another argument apparently raised, but not adequately briefed, by the state: “whether ‘waters which are today saline, subject to ebb and flow of the tide, and de facto used in commercial navigation’ are State owned.” Perhaps because of the state’s poor briefing efforts, the U.S. Fifth Circuit suggested that the district court properly focused its inquiry regarding the impact of “subsequent navigability” or tidal influence on water bottom ownership on the status of the waterways in 1812, citing, first, the same mistaken, misleading dicta in Ramsey River Road discussed above, and second, a 1935 decision that was impliedly overruled in Miami Corp.

196. Initially, the U.S. Fifth Circuit affirmed three distinct district court’s factual rulings: (1) in 1812, the land in dispute did not include any land covered by navigable water bodies or waters influenced by the ebb and flow of the tides to such a degree that they would have been considered tidelands subject to the public trust doctrine, id. at 827–29; (2) the land in dispute did not include navigable water bottoms or tidelands between 1812 and 1901, when the last state patent of the lands in dispute occurred, id. at 829; and (3) none of the land in dispute constituted “seashore or sea bottoms,” that is, part of the tidelands or public trust property that the State of Louisiana acquired under the Equal Footing Doctrine and retained despite the state’s transfer of swamp land subject to overflow in the wake of the Swamp Land Grant Acts, even though some of the lands were covered by non-navigable water bodies subject to indirect tidal overflow but not direct coastal ebb and flow, id. at 830–31.

The U.S. Fifth Circuit’s affirmation of these factual findings led it to affirm the district court’s legal determination that the State of Louisiana had not improperly granted patents to the private land company’s predecessors in interest between 1861 and 1901 with respect to any of the land in dispute. Id. at 831 (holding that at the time of the issuance of the patents, “the property consisted of only inland non-navigable water bodies and swamp land subject to overflow—neither of which is inalienable public property under the Code.”).

197. Id. at 831.

198. Id. (quoting Ramsey River Rd. Prop. Owners Ass’n v. Reeves, 396 So. 2d 873, 875 (La. 1981) (“[N]avigability to fix ownership of the river bed is determined by the year of admission to statehood.”)).

199. See id. (citing State v. Jefferson Island Salt Mining Co., 163 So. 145, 153 (La. 1935)). Jefferson Island Salt Mining, decided a year before Miami Corp., did not concern a navigable water body whose dimensions had changed over time or a water body that changed its status from non-navigable to navigable. Rather, it concerned a trespass claim asserted by the state that simply called for a determination of the extent of the state’s title to the bed of Lake Peigneur in 1812. Jefferson Island Salt Mining, 163 So. at 53. Jefferson Island Salt Mining was cited in Miami Corp., but only in Justice O’Neil’s dissenting opinion in support of the position, rejected by the majority, that the boundary between a state-owned bed
Further, the Fifth Circuit completely ignored the lessons of *Miami Corp.* and its progeny.\textsuperscript{200} Unfortunately, the Fifth Circuit never recognized or corrected its misstatement of the law, even though it penned many more pages about other issues in the case, both in its initial ruling\textsuperscript{201} and in a later decision addressing whether any navigable streams on the disputed land were subject to the federal navigational servitude.\textsuperscript{202}

*Ramsey River Road* and *Dardar I* are the only two reported decisions that have failed to apply the central lessons of *Miami Corp.* In a future case in which the ownership of dual-claimed land is squarely before a Louisiana or federal court, that court should follow the well-established *jurisprudence constante* of *Miami Corp.* and its progeny. Fortunately, a Louisiana court presented with the question of ownership of dual-claimed land can also look beyond this *jurisprudence constante* to other sources of positive law, for instance key provisions of the Louisiana Constitution and special statutes that support the unitary submerged navigable water body principle.

### B. Constitutional and Statutory Sources

The principle that all navigable water bottoms are public things that are both inalienable by the state and insusceptible of private ownership dates far back in the history of Louisiana property law to earlier versions of the Louisiana Civil Code and judicial decisions from the late nineteenth and early twentieth centuries.\textsuperscript{203} However, beginning in 1921, three of a navigable lake and surrounding privately owned land is fixed in 1812 and is never affected by shoreline ambulation. Mia. Corp. v. State, 173 So. 315, 329 (La. 1936) (O’Neil, J., dissenting). In short, in this portion of its decision, the Fifth Circuit erroneously relied almost exclusively on a decision that was impliedly overruled in *Miami Corp.*

\textsuperscript{200} *Dardar I*, 985 F.2d at 831–32 (failing to even acknowledge *Miami Corp.*). See supra Part II.A.2 (discussing *Miami Corp.* and its progeny).

\textsuperscript{201} *Dardar I*, 985 F.2d at 832–34 (addressing the state’s claim that navigable streams were subject to the federal navigational servitude under *Kaiser Aetna v. United States*, 444 U.S. 164 (1979), and *Vaughn v. Vermilion Corp.*, 444 U.S. 206 (1979), and holding that the Tideland Canal was not subject to this servitude but remanding to district court for determination if “other navigable water bodies at issue in this case” were subject to it).

\textsuperscript{202} *Dardar v. Lafourche Realty Co.*, 55 F.3d 1082 (5th Cir. 1995) [hereinafter *Dardar II*] (affirming the district court ruling that none of the water bodies in dispute were subject to federal navigational servitude).

\textsuperscript{203} YIANNOPoulos, *supra* note 19, § 4:5, at 139 n.1 (collecting cases both preceding and succeeding the 1921 Louisiana Constitution). Three articles from the 1870 Civil Code can also be read in pari materia as supporting the conclusion
additional statements of positive law bolster the principle that any land or non-navigable water bottom that becomes permanently submerged beneath the sea, an arm of the sea, or a navigable river or lake becomes a public thing owned by the state.

1. La. Const. Art. 9, § 3

Louisiana enshrined the inherently public and inalienable character of navigable water bottoms into its state constitution for the first time in 1921 when Article 4, § 2, was adopted to provide that:

Nor shall the Legislature alienate, or authorize the alienation of, the fee of the bed of any navigable stream, lake or other body of water, except for purposes of reclamation.\(^\text{204}\)

Despite the awkward common law reference to the “fee” of a water bottom, the intent of the framers of this constitutional provision is clear. The state may not give away or sell any navigable water bottom except for the purpose of reclamation, a concept that was then not well understood legally.

Almost 50 years after Miami Corp., Louisiana strengthened and significantly clarified this constitutional principle by again devoting an entire section of the state’s new constitution to the subject. Article 9, § 3, of the 1974 Constitution provides:

The legislature shall neither alienate nor authorize the alienation of the bed of a navigable water body, except for purposes of reclamation by the riparian owner to recover land lost through erosion. This Section shall not prevent the leasing of state lands or water bottoms for mineral or other purposes. Except as provided in this Section, the bed of a navigable water body may be reclaimed only for public use.\(^\text{205}\)

that the beds or water bottoms of natural navigable water bodies are inherently inalienable and insusceptible of private ownership. See LA. CIV. CODE arts. 499, 450, 453 (1870).

\(^{204}\) LA. CONST. art. IV, § 2 (1921). In this section, the Constitution also provided that mineral rights for any property sold by the state “shall be reserved,” except when a property owner redeems property sold at a tax sale. \textit{Id.} It also stated that the previous provisions “shall not prevent the leasing of such lands and rights for mineral or other purposes.” \textit{Id.}

\(^{205}\) LA. CONST. art. IX, § 3 (1974).
This constitutional statement of one of the core principles of the public trust doctrine lends even greater support to this Article’s primary contention that the state acquires ownership of all land and water bottoms that become permanently submerged beneath navigable waters of the sea, arms of the sea, or lakes in the vicinity of the coast. The constitutional text supports this conclusion in three distinct ways.

First, Article 9, § 3, confirms the wide geographic scope of the non-alienability of navigable water bottoms as including not just “any navigable stream, lake or other body of water,” as stated in 1921, but “any navigable water body,” thus encompassing the sea, arms of the sea, or a navigable river within the text’s reach. Although this interpretation was probably implicit in 1921, the 1974 version makes this more certain by referring to the general concept of “a navigable water body,” and omitting any reference to particular kinds of water bodies as in the 1921 Constitution.

Second, and just as important, the 1974 constitutional text expressly provides that the state will acquire—and private landowners will lose—navigable water bottoms that become submerged beneath navigable water bodies when it states its sole constitutional exception to the non-alienability rule, an exception that applies if land is “[reclaimed] by the riparian owner to recover land lost through erosion.” Consider this text carefully. The exception stated at the end of the first sentence of Article 9, § 3, instructs that land lost to the state “through erosion” can be reclaimed by a former landowner through that owner’s expenditure of private funds.

206. The public trust doctrine means different things to different scholars and courts. However, in its most general sense, it stands for the proposition “that the public has the right to access and to use public waterways.” Eagle, supra note 75, at 194. As a leading scholar of coastal law in the United States puts it, the public trust doctrine thus imposes two core duties on states: (1) “the duty not to dispose of public trust submerged lands”; and (2) “the duty to protect basic public access to public waterways.” Id. at 194–95 (emphasis in original).

207. The only exceptions to this extension of the non-alienability principle concern: (1) a previously navigable “stream” that later becomes non-navigable and thus becomes a private thing that may be subsequently alienated by the state, see discussion supra notes 114–15; and (2) a man-made canal. Nat’l Audubon Soc’y v. White, 302 So. 2d 660, 665–68 (La. Ct. App. 3d Cir. 1974); Vermilion Corp. v. Vaughn, 356 So. 2d 551, 552–55 (La. Ct. App. 3d Cir. 1978). Both exceptions were effectively excluded from the scope of article 450 in the 1978 revision of the Civil Code, which defined public things to include “natural, navigable water bodies” and their bottoms. See La. Civ. Code art. 450 (2024); Hargrave, supra note 18, at 661.


209. La. Const. art. IX, § 3 (emphasis added).
subject to an exacting regulatory scheme that is set forth elsewhere in the revised statutes.\textsuperscript{210} It follows logically that until a private reclamation authorized under Louisiana law occurs, all land lost through erosion, at any point in time, belongs to the state. Professor Lee Hargrave, an active participant in the 1974 Constitutional Convention, explains that the reclamation exception in Article 9, § 3, was clearly intended to apply to land lost by erosion to the state at any point in the past, not just the past ten years as originally conceived by the convention, and that the provision does not require reclamation of eroded land by former riparian landowners; it merely allows for it.\textsuperscript{211}

Finally, the third sentence of Article 9, § 3, which applies to any reclamation efforts—those undertaken by an adjacent private riparian or littoral landowner or by the state or political subdivisions—clarifies that whenever the bed of a navigable water body is reclaimed and transformed into land that could be classified as a private thing because it is no longer an inherently public navigable water bottom, the reclaimed land must still be subject to “public use.”\textsuperscript{212} In other words, the public trust doctrine status of any publicly reclaimed water bottom must endure, and neither a private person nor the state or a political subdivision can restrict public access to the reclaimed land.\textsuperscript{213} In sum, the state’s most authoritative statement of positive law regarding public rights to navigable water bottoms clearly supports this Article’s primary argument that the state acquires ownership of all land or water bottoms that become submerged beneath the sea, arms of the sea, or navigable lakes as a result of erosion and subsidence and that the state can only lose ownership of such water bottoms in the special case of private reclamation.

\textsuperscript{210} LA. REV. STAT. § 41:1702 (2024). \textit{See also} Jaccard, \textit{supra} note 16, at 689 (discussing reclamation of eroded land under Article 9, § 3, of the Constitution and the demanding administrative process for the owner of riparian land adjacent to the submerged land to obtain a permit to reclaim eroded land under Louisiana Revised Statutes § 41:1702, and stating “[b]ecause the state owns the bottom of natural navigable water bodies under article 450, the state owns eroded land the moment it merges with the seabed.”).

\textsuperscript{211} Hargrave, \textit{supra} note 18, at 662.

\textsuperscript{212} LA. CONST. art. IX, § 3.

\textsuperscript{213} \textit{See} EAGLE, \textit{supra} note 75, at 195 (stating the second core duty of the public trust doctrine as requiring a state to protect basic public access to public waterways); Jaccard, \textit{supra} note 16, at 689 (observing that the pertinent text of Article IX, § 3 “prohibits a private landowner from restricting access to the reclaimed land or using it for his sole, private benefit.”). The state itself, of course, may also reclaim submerged land as it already owns it. \textit{Id.} Because of the significant costs associated with reclamation efforts, the state is more likely to exercise this right than a private landowner. \textit{Id.}
Another source supporting the unitary submerged navigable water bottom principle appears in Title 49 of Louisiana’s Revised Statutes and, in particular, Chapter 1, addressing the administration of state water boundaries. These statutory provisions initially clarified the geographic scope of the “the territorial sea” for purposes of Louisiana Civil Code article 450 and were later modified in light of the state’s conflict with the federal government over jurisdictional sovereignty in the Gulf of Mexico, which culminated in the federal Submerged Lands Act.

Section 49:1 defines the territorial sea’s geographic reach in terms of the three-mile belt extending seaward from the “coastline” and then defines that coastline as falling along the “seaward limit of inland waters,” a concept derived from the federal statute. Next, § 49:3 further clarifies that the “State of Louisiana owns in full and complete ownership” not only the waters that make up the Gulf and all its arms, but also “the beds and shores of the Gulf and the arms of the Gulf, including all lands that are covered by the waters of the Gulf and its arms either at low or high tide, within the boundaries of Louisiana.” Notably, the legislature enacted these statutes in 1938, soon after the Louisiana Supreme Court’s decision in Miami Corp. became final, but did not contradict its holding in any way by limiting the state’s ownership of sea bottoms to territorial waters as of 1812 or any subsequent date.

To this day, these provisions have never been repealed and, moreover, have only been revised to reflect the “continuing effects of coastal erosion, subsidence, and land loss” and to assert the state’s interest in preserving maximum authority over the territorial sea and submerged lands vis-à-vis the United States within the limits of the federal Submerged Land Act and

217. L.A. Rev. Stat. § 49:3 (“The State of Louisiana owns in full and complete ownership the waters of the Gulf of Mexico and of the arms of the Gulf and the beds and shores of the Gulf and the arms of the Gulf, including all lands that are covered by the waters of the Gulf and its arms either at low tide or high tide, within the boundaries of Louisiana.”) (emphasis added).
United States Supreme Court decisions.\textsuperscript{219} That Yiannopoulos cites these provisions as standing for the proposition that the "coastline is the modern, ambulatory coastline resulting from erosion and accretion,"\textsuperscript{220} and also cites \textit{Miami Corp.} as standing for the proposition that "lands eroded by the waters of the sea or by inland navigable waters become state-owned beds or bottoms,"\textsuperscript{221} provides further support for this Article’s general proposition that the State of Louisiana owns all land that becomes permanently submerged beneath the sea, arms of the sea, or navigable lakes.

3. \textit{Louisiana Revised Statutes} § 9:1151 (The Freeze Statute)

One more often overlooked statutory data point in the debate about shifting ownership rights on the Louisiana coast emerges from a \textit{Louisiana Revised Statute} now widely known as the Freeze Statute.\textsuperscript{222} The legislature enacted this statute in 1952 to address the impact on mineral rights caused by changes in ownership of land or water bottoms that in turn resulted from the actions of a navigable "stream, bay or lake" or a change in the course of such a water body resulting from "accretion, dereliction, or [some] other condition."\textsuperscript{223} Significantly, in 2001, the legislature amended the statute by referring to changes in land or water bottom ownership resulting from the action of a "navigable stream, bay, lake, sea, or arm of the sea" caused by "accretion, dereliction, erosion, consolidation, destruction, or state action."\textsuperscript{224} The original version of the Freez Statute likely reflects the legislature’s concern with state acquisition of land on the shores of navigable lakes because of the Louisiana Supreme Court decision in \textit{Mia. Corp.}, 173 So. 315.

\textsuperscript{219} See \textit{La. Rev. Stat.} § 49:3.1(C) (recognizing the geological facts of "coastal erosion, subsidence, and land loss" along the Louisiana coast and providing that the legislature intends for the state’s coastline vis-à-vis the United States to be recognized as “consisting of at least and not less than that coastline defined by the coordinates set forth in United States v. Louisiana, 422 U.S. 13 (1975), Exhibit 'A'”’ (emphasis added).
\textsuperscript{220} Yiannopoulos, supra note 19, § 4:10, at 153.
\textsuperscript{221} Id. § 4:8, at 148 (citing and relying upon \textit{Mia. Corp.}, 173 So. 315).
\textsuperscript{223} Act No. 341, 1952 La. Acts 882. The focus of the original version of the Freeze Statute on “accretion, dereliction or other condition resulting from the action of a navigable stream, bay, or lake” likely reflects the legislature’s concern with state acquisition of land on the shores of navigable lakes because of the Louisiana Supreme Court decision in \textit{Mia. Corp.}, 173 So. 315.
subsidence or other condition” and thus significantly widened the statute’s scope.\textsuperscript{224}

The statute’s significance for the questions addressed in this Article lies in how it balances the mineral development interests of a private landowner whose land becomes submerged beneath one of the named water bodies with the interests of the state. When the ownership “of land or water bottoms” changes because of some natural force, including “erosion or subsidence” related to a “navigable stream, bay, [] lake, sea, arm of the sea,” the amended Freeze Statute provides that:

\textit{the new owner of such lands or water bottoms, including the state of Louisiana, shall take the same subject to and encumbered with any oil, gas, or mineral lease covering and affecting such lands or water bottoms, and subject to the mineral and royalty rights of the lessors in such lease . . . .} \textsuperscript{225}

As one experienced commentator observes, the Freeze Statute’s primary purpose is to protect parties’ “contractual rights from the laws associated with changes in water courses.”\textsuperscript{226} In other words, it protects mineral lessors, mineral lessees, and other fractional mineral and royalty owners under existing leases at the same time that it recognizes that the surface of land or non-navigable water bottoms submerged beneath the sea or other natural navigable water bodies as a result of erosion or subsidence will become a public thing owned by the state.\textsuperscript{227}

Notably, the Freeze Statute’s protections for mineral rights flow both to the state and to private landowners. When, as often happens today on the Louisiana coast, private land erodes or subsides and becomes submerged beneath a natural navigable water body and the state acquires ownership under article 450 of the Civil Code, the Freeze Statute will protect the rights of mineral interest holders in the formerly privately


\textsuperscript{225}. LA. REV. STAT. § 9:1151 (emphasis added).

\textsuperscript{226}. Seidemann, supra note 222, at 121.

\textsuperscript{227}. Id. (“What the freeze statute does is to protect existing mineral leases over such property from being subject to this change in the status of surface ownership. This law effectively freezes everyone’s mineral rights where they are at the time a lease begins and insulates them from shifting surface rights (i.e., water or land) for the duration of the lease.”) (footnotes omitted).
Sometimes, however, new land can be formed naturally adjacent to a water body in Louisiana, particularly along the bank of a river or stream as a result of accretion or dereliction. In that case, under article 499 of the Civil Code, the newly emerging land will belong to the owner of the bank to which the new land is attached. In this situation, the Freeze Statute protects mineral rights in the former river bed that were created when the state owned the bed, even though a private riparian landowner acquires surface ownership of new land that emerges as a result of accretion and dereliction.

In addition to providing an equitable solution for mineral interest holders affected by changes in land or water bottoms caused by natural forces, the Freeze Statute reflects an important practical reality. Once land erodes or subsides to such a degree that it now lies beneath a large navigable water body such as a river, lake, or an arm of the sea, the original landowner’s ability to exploit the new navigable water bottom will likely be limited to mineral exploitation. The land owner might try to limit public access over the submerged land, but that would present significant practical challenges and would certainly interfere with the general right of the public to access the navigable waters of the United States under the federal navigational servitude and with the state’s public trust doctrine duty to guarantee public access to public waterways.

228. Id. at 119 (noting that as “private lands erode into navigable water bodies, that the new water bottom becomes property of the State.”); id. at 120 (“This law provides that the mineral rights held by the riparian owner at the time erosion occurs are retained by the riparian owner for as long as existing mineral leases on that land are in effect.”).

229. See LA. CIV. CODE art. 499 (2024) (stating that accretion or alluvion belongs to the owner of the bank of a river or stream, whether the river or stream is navigable or not). When accretion occurs on the shores of a navigable lake, however, the newly formed land belongs to the state by virtue of Louisiana Civil Code article 500 and Louisiana jurisprudence. PUDER ET AL., supra note 75, at 352–53; YIANNOPoulos, supra note 19, § 4:19, at 183–85.

230. Seidemann, supra note 222, at 120–21. When changes in a river course result from artificial engineering projects, such as those built by the United States Army Corps of Engineers, the analysis can be quite different and requires consideration of the particular property rights acquired by the entity that constructed the project. Id. at 121–29.

231. Perhaps other kinds of economic exploitation of a submerged water bed, such as seaweed or oyster harvesting, would be technically possible, but the legislature has chosen not to protect those rights under the Freeze Statute. See LA. REV. STAT. § 9:1151 (2024).

232. See Rivers and Harbors Appropriation Act of 1899, 33 U.S.C. § 403 (2024) (prohibiting creation of any obstruction not authorized by Congress to the
In short, the Freeze Statute protects the reasonable expectations of both parties to an existing mineral lease, the landowner-lessee, whether that happens to be the state or a private person, and the mineral lessee.\textsuperscript{233} It offers a balanced solution to the problem of shifting land ownership and mineral rights along Louisiana’s threatened coast. It recognizes that the State of Louisiana now owns the bed or bottom of a navigable water body under article 450 of the Civil Code but protects the primary use-based interest of the former owner of the land or non-navigable water bottom.\textsuperscript{234}

Some landowners may still complain that the Freeze Statute’s protections for mineral interests do not go far enough because the statute only protects mineral rights associated with a mineral lease in effect at the time the underlying change of ownership occurs.\textsuperscript{235} If land or water bottoms are inundated and transformed into the bed of a navigable water body and the land or water bottoms were not subject to a mineral lease at the time of the ownership change, then the former landowner may not receive any protection.\textsuperscript{236} In fact, two judicial decisions interpret the Freeze Statute in precisely this manner.\textsuperscript{237} Unhappy with this limitation of

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“\textit{navigable capacity of any of the waters of the United States}”); \textit{EAGLE}, \textit{supra} note 75, at 193 (stating the second core duty of the public trust doctrine).
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\begin{quote}
\textsuperscript{233} The Freeze Statute also has the virtue of assuring the mineral lessee that it can continue to make monthly royalty payments to just one party under an existing mineral lease rather than dual claimants. \textit{Seidemann, supra} note 222, at 121 n.174.
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\textsuperscript{234} \textit{See John A. Lovett, Oil, Trees, and Water: Evaluating the Transition from Natural Property Rights to Property Conventions, 9 TEx. A&M J. Prop. L. 613, 633–35 (2023) (offering a natural rights justification for application of the Freeze Statute to solve the dual-claimed land dilemma).}
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\textsuperscript{235} This view was expressed by several landowner representatives on the Public Recreation Access Task Force and was one of the reasons so much attention was given to potential pathways that involved facilitating private landowner donations of surface rights to the state while maintaining landowners’ sub-surface mineral rights in perpetuity. \textit{See PUB. RECREATION ACCESS TASK FORCE, supra} note 11, at 38–44, 60–61.
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\textsuperscript{236} \textit{Martin, supra} note 222, at 681 (interpreting the Freeze Statute in light of \textit{Cities Service Oil & Gas Corp. v. State}, 574 So. 2d 455, 463 (La. Ct. App. 2d Cir. 1991)).
\end{quote}

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\textsuperscript{237} \textit{See Cities Serv. Oil & Gas Corp.}, 574 So. 2d at 463 (holding, in a case involving a change in the course of the Red River, that the initial version of the Freeze Statute only applies if a change of ownership occurs and a mineral lease is in effect covering lands or water bottoms at the time of the ownership change, but noting that mineral production from leased land is not required for the mineral lease protection to be effective, and also noting that the Freeze Statute does not establish imprescriptible mineral rights); \textit{Plaquemines Par. Gov’t v. State}, 826 So. 2d 14, 21–22 (La. Ct. App. 4th Cir. 2002) (holding that trial court correctly applied
the Freeze Statute, some advocates of the maximalist landowner position on submerging land might claim, notwithstanding article 450 and the Freeze Statute, that an owner of land that is now already or will become submerged beneath the sea or arms of the sea because of erosion and subsidence should have an eternal, imprescriptible right to exploit that land for mineral development even if the landowner never granted a mineral lease before submergence or if a prior mineral lease has expired because of prescription of non-use. As this Article demonstrates, however, such a position has no foundation in Louisiana jurisprudence, constitutional law, the Louisiana Civil Code, or statutory sources.

C. Yiannopoulos-Hargrave Dialogue and Other Louisiana Commentary

Commentary by legal academics has always been an important source of authority for Louisiana private law. As noted in the Introduction to this Article, commentary on the legal status of land or the beds of non-navigable water bodies that become permanently submerged beneath the waters of natural navigable water bodies is not particularly consistent. Two prominent Louisiana property law scholars, A.N. Yiannopoulos and Lee Hargrave have commented directly on this subject. Initially, their views seemed to contradict one another, but over time their positions converged, with Yiannopoulos eventually adopting a position closer to Hargrave’s position—one that supports the primary thesis of this Article.

Yiannopoulos’s equivocal position emerges from a passage in his Louisiana property law treatise addressing the classification of water bodies whose navigability changes over time. Initially in this passage, Yiannopoulos states: “[a] literal application of Article 450 of the Louisiana Civil Code may lead to the conclusion that a body of water, which, though

Freeze Statute, and a related statute, Louisiana Revised Statutes § 9:1152 (1984), to claims regarding a tract of land that became inundated under the open waters of the Gulf of Mexico, and also holding under Louisiana Revised Statutes § 9:1152 that the mineral rights of a parish government, the successor to a local levee district, were retained as long as a mineral lease granted in 1938 was still in effect at the time of the change in ownership resulting from erosion and subsidence. See also Martin, supra note 222, at 681 (commenting on Cities Service Oil & Gas Corp.).

238. The author of this Article has not located any published arguments making this particular claim but heard it voiced during deliberations of the Public Recreation Access Task Force, of which the author was a member representing the Louisiana State Law Institute and for which the author served as Drafting Committee reporter. PUB. RECREATION ACCESS TASK FORCE, supra note 11.

239. YIANNOPOULOS, supra note 19, § 4:2, at 129.
non-navigable in 1812, subsequently became navigable by operation of
natural forces, is a public thing. So far, so good. In the next sentence,
however, Yiannopoulos offers another view: “This interpretation may give
rise to a question of constitutionality” under the United States and
Louisiana Constitutions. Yiannopoulos explains this hypothesis by
stating:

Strong argument may be made that the acquisition by the state of
the ownership of the beds of formerly non-navigable water bodies
is a taking of property without compensation.

Puzzlingly, the sources that Professor Yiannopoulos cites for this
provocative taking theory are either inapposite or actually contradict his
speculation entirely. What is perhaps more noteworthy are the sources that Yiannopoulos
does not cite in this portion of his treatise. He ignores all the Louisiana
case law, Louisiana constitutional law, and statutory law discussed in this
Article. He also fails to acknowledge, as Part IV of this Article shows, that
everywhere else in the United States when the physical line between land
and sea moves landward or upland gradually and imperceptibly because
of natural forces such as erosion or subsidence, the public domain or public

240. Id. at 129–30.
241. Id. at 130.
242. Id.
243. Id. Yiannopoulos first cites Deltic Farms and Timber Co., Inc. v. Board
of Commissioners for Fifth Louisiana Levee District, 368 So. 2d 1109 (La. Ct.
App. 2d Cir. 1979), a decision that addresses compensation for expropriation
under the Louisiana levee servitude found in article 665 of the Civil Code, a
provision that has no relevance to changes in water bodies. Id. at 129–30. He then
cites a federal district court decision from Florida, Goodman v. City of Crystal
River, 669 F. Supp. 394 (M.D. 1987), in which the court states that a water body
which becomes navigable after the state’s admission to the union should be
subject to the federal navigational servitude as navigable waters of the United
States. Id. This decision arguably supports the thesis of this Article. Finally, after
attempting to acknowledge the effect of the Freeze Statute, or more accurately its
corollary that applies to political subdivisions of the state, Louisiana Revised
Statutes § 9:1152(A), Yiannopoulos cites the Louisiana Supreme Court’s decision
in Chevron U.S.A., Inc. v. State, 993 So. 2d 187 (La. 2008), which, as this Article
has already demonstrated, follows Miami Corp. and says nothing at all about
compensation being owed to former private landowners. Id. See discussion supra
notes 172–79.
trust expands and the littoral property owner who loses land is not entitled to any compensation.\textsuperscript{244}

One suspects that Yiannopoulos may have been aware of the weakness of the provocative takings theory he had just launched. For this reason, he acknowledges an alternative view. Citing his one-time colleague Professor Hargrave, Yiannopoulos notes that the takings theory he just announced “may be countered by the observation that the acquisition of land in Louisiana is subject to the terms of Article 450 of the Civil Code, namely, should the land ever become the bed or bottom of a navigable water body, it would be acquired by the state.”\textsuperscript{245} In short, he admits that the \textit{Miami Corp.} doctrine may well provide the relevant rule of decision.

The presentation of Yiannopoulos’s equivocal position above is based on the current version of the Civil Law Property Treatise. It should be noted, however, that Yiannopoulos first developed this equivocal view on the fate of beds of non-navigable water bodies that later become navigable in a 1971 law review article concerning the public servitude over the banks of navigable rivers.\textsuperscript{246} It appears that Yiannopoulos then transposed a passage from this article into an early supplement to his treatise.\textsuperscript{247} He eventually repeated the exact same equivocal view of the impact of article 450 in the section of his current treatise dealing with rivers and streams,\textsuperscript{248} and he used only a slightly different formulation in the section addressing changes in water bodies more generally.\textsuperscript{249}

In the first edition of his treatise on Louisiana property law, Yiannopoulos also sent mixed signals about newly submerged land more generally. On one hand, he did not see any constitutional problems with reversion of newly submerged land to state ownership with respect to navigable rivers. Citing \textit{Miami Corp.}, he stated: “Newly submerged lands, covered by navigable rivers, become state property of the public domain” and further observed that “[t]his solution accords with Roman sources.”\textsuperscript{250}

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\textsuperscript{244} See infra Part IV (outlining ambulatory coastline rules in American common law).
\textsuperscript{245} Yiannopoulos, \textit{supra} note 19, \$ 4:2, at 130 (emphasis added).
\textsuperscript{246} See A.N. Yiannopoulos, \textit{The Public Use of the Banks of Navigable Rivers}, 31 L.A. L. REV. 563, 567 (1971) (addressing the consequences of a “literal application” of article 455 of the 1870 Civil Code to the bank of a river that was non-navigable in 1812 but later becomes navigable in language almost identical to that used in the Civil Law Treatise).
\textsuperscript{247} A.N. Yiannopoulos, \textit{Property} \$ 31, in \textit{2 Louisiana Civil Law Treatise} 86 (1967) (section titled “Navigable Rivers”).
\textsuperscript{248} Yiannopoulos, \textit{supra} note 19, \$ 4:13, at 169.
\textsuperscript{249} Id. \$ 4:2, at 129–30.
\textsuperscript{250} Yiannopoulos, \textit{supra} note 247, \$ 31, at 89 n.101.
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On the other hand, a few pages later in the first edition of his treatise, Yiannopoulos criticized the majority ruling in *Miami Corp.* as “obviously inequitable” in the context of lakes, bays, and sounds and indicated that it had been cast in doubt by the Louisiana Supreme Court’s 1954 decision in *California Co. v. Price.* Over time, and especially after the Louisiana Supreme Court overturned *Price* in its 1975 decision in *Gulf Oil Corp. v. State Mineral Bd.*, Yiannopoulos appeared to change his views about *Miami Corp.* and eventually cited it frequently for the proposition that the state becomes owner of newly submerged land along the shores of the sea. In summary, perhaps the most accurate statement of Professor Yiannopoulos’s views on state ownership of the beds of expanding navigable water bodies resulting from naturally occurring erosion and subsidence is that they ebbed and flowed along with the views of Louisiana courts.

Compared to Yiannopoulos, Professor Hargrave’s views are much easier to depict. In a 1983 law review article, Hargrave explained the bases for his *no-takings* theory:

> [I]f a nonnavigable stream becomes navigable, it would cease to be susceptible of private ownership and would become property of the state. The argument that such a change in ownership may be a taking without due process . . . probably falls because such a loss is not caused by the state itself. Rather, the loss is part of the natural changes in water bodies. Indeed, if this is a taking without due process, the entrenched institution of loss of land by dereliction and by natural expansion of water bodies to cover more area should be equally unconstitutional.

Hargrave’s intervention is striking in a few respects. First, he correctly points out the most basic fallacy in the takings theory suggested by Yiannopoulos when he observes that the change in ownership that takes place when a non-navigable water body becomes navigable occurs not because of any direct state action but as a result of natural processes beyond the control of any particular branch of government. Second, although he illustrates his own position with the example of a non-navigable stream becoming navigable and a reference to land loss by

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251.  *Id.* § 32, at 98–99 (citing Cal. Co. v. Price, 74 So. 2d 1 (La. 1954)).
253.  *See discussion supra* notes 78–81, 98–101, 220–21 (relying upon *Miami Corp.* to discuss the impact of expansion of territorial sea and littoral landowner’s assumption of the risk of erosion at the seashore).
He concludes with a reference to land loss caused by, among other things, “natural expansion of water bodies” and cites, correctly, Miami Corp. v. State. In short, Hargrave clearly approved of the unitary submerged navigable water body principle articulated in Miami Corp.

Who has the better view? Given that Yiannopoulos first developed his theory in an off-hand remark in a 1971 law review article focused on the public servitude over banks of navigable rivers, never mustered any pertinent authority for the view that newly submerged land can only be acquired by the state if it pays compensation, and eventually recognized that when the boundary of a navigable lake or the sea moves landward, the public domain follows suit, it appears that Yiannopoulos’s view eventually converged with the position Hargrave staked out in 1983. Hargrave’s view is also consistent with the overwhelming body of Louisiana case law, statutes, and constitutional provisions and with the view of courts and commentators throughout the United States.

Only one other commentator, Michael Schimpf, has attempted to make an extensive argument for continued private ownership of some, but not all, submerging land on the Louisiana coast. Schimpf first acknowledges, as he must, that the state “most likely owns land that submerges . . . beneath historically navigable water bodies or the territorial sea,” that is, water bodies that were navigable in 1812 or at the time the State conveyed adjacent land to private persons. However, Schimpf then

255. Id. (citing LA. CIV. CODE art. 499 (2024) (the rule for accretion and dereliction along rivers and streams)).
256. Id. (citing Mia. Corp. v. State, 173 So. 315 (La. 1936)).
257. See discussion supra notes 246–48 (discussing Yiannopoulos, supra note 246, at 567).
258. See discussion supra notes 78–80, 99–101, 220–21 (explicating Yiannopoulos’ reliance upon Miami Corp. to explain state acquisition of submerged land when territorial sea expands and littoral landowner’s assumption of risk of erosion at the seashore).
259. See infra Part IV.
261. Id. at 1561 (emphasis in original). Schimpf justifies this concession by suggesting that landowners and the state are parties to an “aleatory contract” with respect to historically navigable water bodies and the territorial sea, acknowledging the controlling authority of Miami Corp., and suggesting that landowners’ ability to bring takings claims against the state with respect to land adjacent to such water bodies is constrained by background principles of state law in the same way that Louisiana Civil Code article 665 imposes a levee servitude on riparian landowners. Id. at 1561, 1573–80. Schimpf fails to note that the Louisiana Supreme Court rejected the “aleatory contract” conception of riparian
argues that land beneath newly navigable water bodies—presumably land beneath inland water bodies, that is, rivers or lakes, which became navigable after 1812 or after severance from the sovereign—should not be considered public things, even if water above these lands can sustain commerce in its natural state and even if the non-navigable water body becomes navigable as a result of erosion, subsidence, or other natural forces.262

The basis for Schimpf’s purported distinction between historically and newly navigable water bodies is not always clear as he tends to rely on sources that have little relevance to whether the principles of Miami Corp. apply to land submerged beneath the territorial sea, arms of the sea, or other water bodies directly connected to the Gulf of Mexico or inland. For instance, Schimpf cites: (1) a narrow decision that addresses whether mineral servitudes granted over tracts of land containing water bottoms are subject to ten-year prescription of non-use and that actually recognizes the holding of Miami Corp.;263 (2) the misguided and erroneous statements

rights as applied to navigable lakes and other bodies of water in Miami Corp. and its progeny. See supra Part III.A.1–2.


263. Id. at 1567, 1583 (citing Vermilion Bay Land Co. v. Phillips Petroleum Company, 646 So. 2d 408, 411 (La. Ct. App. 4th Cir. 1995), for the propositions that the state can “reclassify its own property from private to public” after 1812, and that courts determine ownership of the bottoms of navigable water bodies only in 1812 or before the state sold the land to private persons). In fact, the court in Vermilion Bay merely held there is “no sound reason to distinguish between the inalienable character of navigable waterbeds which existed in 1812 and were acquired under the equal footing doctrine and natural navigable waterbeds which, though non-navigable at the time such bottoms were acquired by the State of Louisiana under federal grant or other means of acquisition, become naturally navigable prior to segregation by the State.” Vermilion Bay, 646 So. 2d at 411 (emphasis added). In short, in Vermilion Bay Land Co., the court did not address the ownership status of land beneath water bodies that became navigable after severance from state ownership, but it did cite Professor Hargrave’s law review article on this topic favorably. Id. at 411–12 (quoting Hargrave, supra note 18, at 660–61).

Schimpf also states that in State v. Two O’Clock Bayou Land Co., 365 So. 2d 1174 (La. Ct. App. 3d Cir. 1979), the Court of Appeals reiterated that ownership of water bottoms is determined solely as of 1812. Schimpf, supra note 10, at 1683. In fact, the court in Two O’Clock Bayou pretermit ted any determination of ownership of the bed of the bayou at issue in that case, while simply noting that the “question of navigability of [the bayou] in 1812 is only pertinent to the question of ownership of the bed of the bayou.” Two O’Clock Bayou, 365 So. 2d at 1178. Although the court in Two O’Clock Bayou eventually found that the bayou at issue was navigable and thus subject to public use, it never addressed the
in Ramsey River Road and Dardar I suggesting that changes in navigability after 1812 should be ignored when determining water bottom ownership; and (3) an intermediate appellate court decision, later reversed in substantial part by the Louisiana Supreme Court, addressing the consequences of a joint federal-state water management project that transformed the flood basin of a navigable river, known locally as Catahoula Lake, into a permanently enlarged water body. Finally, after asserting other strained arguments, Schimpf quite remarkably suggests legal consequences of the possibility that it might have been non-navigable in 1812. Id.

264. Schimpf, supra note 10, at 1583 (citing Ramsey River Rd. Prop. Owners Ass’n v. Reeves, 396 So. 2d 873, 874 (La. 1981); Dardar I, 985 F.2d 824, 833 (5th Cir. 1993)). See supra Part III.A.3 for a detailed critique of these decisions.

265. Schimpf, supra note 10, at 1583, 1589 (citing Crooks v. Dep’t of Nat. Res., 263 So. 3d 540, 556–67 (La. Ct. App. 3d Cir. 2018), aff’d in part and rev’d in part, 340 So. 3d 574 (La. 2000). The Third Circuit decision in Crooks concerned the classification of Catahoula Lake as a river or lake and other questions such as whether the State of Louisiana can acquire land by acquisitive prescription and the running of liberative prescription on an inverse condemnation claim. Crooks, 263 So. 3d at 554–57, 560–62. The Third Circuit decision in Crooks was criticized severely by an important dissent authored by Judge Mark Amy. Id. at 567–76. For a detailed discussion of why U.S. courts and leading civil law jurisdictions in Europe almost universally recognize that governmental entities can acquire land by adverse possession or acquisitive prescription, see generally John A. Lovett & Björn Hoops, Adverse Possession by the State: Toward Remedial Equivalency, 69 LOY. L. REV. 1 (2022). For a discussion of the flawed reasoning of the Louisiana Third Circuit Court of Appeal in Crooks, see id. at 54–55.

266. Schimpf, supra note 10, at 1584–87 (citing Kaiser Aetna v. United States, 444 U.S. 164 (1979) and Brown v. Rougon, 552 So. 2d 1052 (La. Ct. App. 1st Cir. 1989), in support of the claim that recognizing state ownership of submerged land would upset landowners’ expectations that their right to exclude the public is immutable). Both of these decisions concern public navigational access over water bodies, not ownership of water bottoms, and both involve artificially extended or created water bodies, not changes in navigability or shoreline location caused by natural forces such as erosion, subsidence, or sea level rise. Kaiser Aetna, 444 U.S. at 166–69 (extension of lagoon and fishpond to create marina); Brown, 552 So. 2d at 1059–60 (asserted claim to use private drainage canal for fishing). Schimpf also attempts to limit Miami Corp. by asserting that its reasoning “is not applicable to newly created navigable water bodies because the public never had a right to access the land or prior non-navigable water bodies.” Schimpf, supra note 10, at 1587. Schimpf offers no specific authority for this claim and ignores the significant jurisprudence applying Miami Corp. in other contexts. See supra Part III.A.2.
that taxpayers all across Louisiana should be taxed to provide *gratuitous* compensation to coastal landowners who lose ownership when their land adjacent to historically navigable water bodies erodes or subsides. Schimpf suggests this is fair even though these lands have always been at risk of becoming submerged beneath adjacent or nearby navigable water bodies and even though such landowners may well have contributed to their own land loss.

Even if Schimpf’s argument distinguishing between rights of landowners adjacent to historically and newly navigable water bodies had support—and there is no evidence it does—it is still not clear whether the distinction would make much practical difference. After all, most dual-claimed land in Louisiana that is already or soon will be submerged beneath navigable waters will be covered by the territorial sea or arms of the sea, that is, historically navigable water bodies. The category of newly created navigable water bodies appears to consist solely of former non-navigable ponds or streams located further inland that grow in size and depth so that they become navigable in fact but somehow remain distinct and separate from the territorial sea or the bays and estuaries of the Gulf of Mexico. In short, even if Schimpf’s distinction between historical and newly created navigable water bodies had some jurisprudential or positive

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267. Schimpf, *infra* note 10, at 1592–94 (suggesting the Louisiana legislature and the state’s voters approve a constitutional amendment similar to LA. CONST. art. VI, § 42, which provides compensation for “lands and improvements . . . actually used or destroyed for levees or levee drainage purposes,” but which preserves Louisiana’s long-standing exception to the just compensation requirement for the appropriation of “batture”). For a detailed discussion of the levee servitude under article 665 of the Louisiana Civil Code and the “batture” exemption from just compensation, see John A. Lovett, *Batture, Ordinary High Water, and the Louisiana Levee Servitude*, 69 TUL. L. REV. 561 (1994).

268. For detailed histories of the impact of oil and gas development and canal dredging on coastal wetland loss, see generally Houck, *infra* note 4; JASON P. THERIOT, AMERICAN ENERGY, IMPERILED COAST: OIL AND GAS DEVELOPMENT IN LOUISIANA’S WETLANDS (LSU Press ed., 2014). Of course, some coastal landowners may have been innocent victims of poor canal construction, maintenance, and backfilling practices, but it should be remembered that most coastal landowners (or their predecessors) initially granted permission to oil and gas companies to extract hydrocarbons from beneath their lands or gave pipeline companies permission to construct pipeline and navigation canals in exchange for substantial private compensation. In some cases, of course, pipeline companies and other entities with expropriation power may have used that power to acquire rights of way involuntarily, but even then landowners would have been entitled to just compensation at the time of expropriation. See LA. REV. STAT. §§ 19:2(5), 19:2(8)–(12), 19:9 (2024).
law support, it is unlikely to have any bearing on most coastal land in Louisiana that has already disappeared or will disappear in the future beneath the open waters of the Gulf.

IV. LESSONS FROM U.S. AMBULATORY COASTLINE DOCTRINE

As shown above, some Louisiana commentators have suggested that if the State of Louisiana acquires ownership of permanently submerged land by virtue of article 450, the state should be required to compensate former private landowners under the Fifth Amendment to the United States Constitution or under the Louisiana Constitution. As the previous Part has demonstrated in detail, those suggestions have no support in Louisiana law. If a Louisiana court were to reach such a conclusion, however, and require compensation because the Gulf of Mexico’s coastline has moved permanently landward, it would put Louisiana at odds with the well-established law in the rest of the United States.

This Part of the Article demonstrates that in the rest of the United States when the physical line separating land from sea—typically referred to as the “ordinary high-water mark” or “mean high-water line” (MHWL) or sometimes simply “the water’s edge”—moves either landward or seaward, the legal boundary between land that can be privately owned and land that is either publicly owned or subject to the public trust moves along with it. This Part explains the key elements of this ambulatory coastline

269. YIANNOPoulos, supra note 19, § 4:2, at 130; Schimpf, supra note 10, at 1592–97 (arguing that Louisiana should amend its Constitution to require payment of “gratuitous compensation” to landowners whose land becomes permanently submerged beneath navigable waters or that Louisiana should be liable for just compensation based on a “passive takings” theory because the state has allegedly failed to protect the coast).

270. Wyman & Williams, supra note 22, at 1958 (referring to the “boundary between what is privately and publicly owned along U.S. ocean shores” as the “ordinary high water mark,” or as, in many coastal states, the “mean high water line”); FLUSHMAN, supra note 22, at 119–21 (providing rich account of how the term “mean high-water line” gained currency in U.S. law and the decisive U.S. Supreme Court ruling in Borax, Ltd. v. Los Angeles, 296 U.S. 10, 26–27 (1935)); Sax, supra note 22, at 311 (referring to law regarding movement at the “water’s edge”).

271. Eagle, supra note 22, at 883 (“The trend in American law is to favor migrating boundaries over immobile ones.”); Wyman & Williams, supra note 22, at 1962–63; FLUSHMAN, supra note 22, at 92–100 (providing an overview of ambulatory coastline rules and presumption in favor of gradual accretion or erosion).
rule, the traditional justifications that have been given for the rule, and the three justifications that dominate today: (1) a littoral property owner’s interest in preserving access to the water’s edge or water adjacency; (2) the public’s interest in preserving traditional public trust activities on navigable waters along the coast without threat from putative private owners; and (3) administrative efficiency and reduction of transaction costs. This Part concludes with a brief demonstration of why current American law does not require states to pay just compensation to littoral property owners when the legal boundary between land and sea moves landward because of normal erosion or subsidence or as a result of unidirectional sea level rise.

A. Background Terminology and the Ambulatory Coastline Doctrine

Many legal systems have developed rules to address the consequences of shifting physical boundaries between land and water along the edge of the sea. In the United States, interest in these questions revived in recent decades for several reasons. First, the United States Supreme Court addressed a Florida statute designed to enable local governments to undertake beach renourishment and stabilization projects and a judicial application of that statute to a group of Florida beachfront property owners. Second, the Texas Supreme Court addressed whether public access easements on Texas beaches roll landward after a sudden event like a hurricane causes a dramatic landward shift in the location of the MHWL. Finally, widespread recognition of the impact of rising sea levels and coastal erosion resulting from climate change has led many

Eagle explains that determining the “specific location of the legal coastline, that is, the line marking the landward extent of state trust lands,” is a “two-step process,” the first, a technical one involving use of “datums,” such as the “mean high-tide line,” and the second, an inherently legal one that “requires objective knowledge of state law as well as subjective judgments about legal facts.” Eagle, supra note 22, at 873–74.

272. Flushman, supra note 22, at 95 (contrasting different physical characteristics of the British Isles and countries bordering the Mediterranean Sea and noting that, despite different legal traditions, those countries have “subscribed to similar rules of law for determining the effect of the dynamics of shoreline movement on adjacent property boundaries.”).


scholars to take a closer look at physical change on our nation’s coasts as well as potential private and governmental responses to that change.275

Thanks to this unusual flowering of case law and scholarship, we now have a clear picture of how the law responds to littoral change at the land-water interface outside of Louisiana. In the rest of the United States four elements—technically three rules and a presumption—govern this area of law. This Article refers collectively to that body of law as the Ambulatory Coastline Doctrine.276

A few recurring terms of art are used in the following discussion. All refer to gradual and imperceptible change at the land-water interface: **accretion** refers to the “gradual and imperceptible deposition of sand, soil, or other solid material on the margin of a watercourse”; **erosion** generally means “the opposite of accretion” and refers to “the gradual and imperceptible wearing away or loss of littoral or riparian land by the action of water”; **reliction** is the process whereby “land that was once covered with water becomes exposed or uncovered by the imperceptible recession of the water”; and **submergence** is “the reverse of reliction” and denotes the “gradual and imperceptible disappearance of land under water.”277 A sudden, rapid, immediately perceptible, or even violent change at the land-water interface is referred to as **avulsion**, regardless of whether it results in an addition or loss of land or a complete change in a watercourse’s location.278

**Accretion and Erosion:** The first element of the Ambulatory Coastline Doctrine, which is often described using the term **accretion** but which also includes **reliction**, **erosion**, and **submergence**, is that when the boundary between land and water changes **gradually and imperceptibly** as a result of natural forces and the MHWL permanently moves either seaward or landward, the boundary between a littoral property owner—usually, but not always, a private person or entity—and the state’s interest

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275. See generally Flournoy, supra note 22; The Cathedral Engulfed, supra note 22; Eagle, supra note 22; Wyman & Williams, supra note 22.

276. Another scholar refers to this collection of common law rules and presumptions as the “Ambulatory Boundaries Framework.” Flournoy, supra note 22, at 111.

277. Flushman, supra note 22, at 92–93; Powell, supra note 22, § 66.01[1] (defining same terms in a slightly more general manner and thus defining, for example, **erosion** as “the process by which land is gradually covered by water”).

278. Flushman, supra note 22, at 94; Powell, supra note 22, § 66.01[1] (defining **avulsion** as “the process by which there is a sudden and perceptible change in the location of a body of .”).
in the submerged sea bed shifts along with the water’s edge. Many scholars call this rule the ambulatory coastline or migratory coastline rule and agree that it is universally followed in the United States.

Consider the statement of a leading scholar of coastal law explaining the accretion and erosion rules as they apply across the U.S., but especially in Louisiana’s Gulf Coast neighbor, Florida:

Although different processes may cause the apparent effect, the land/sea boundary may migrate either landward or seaward. The gradual and imperceptible addition of material to a beach is known as accretion and results in the legal boundary moving seaward. Conversely, and as is more often the case in Florida, the slow and imperceptible encroachment of the sea on the land, erosion, moves the boundary landward. This is the general rule when the sea erodes the coastline by removing material from the shore, but the gradual subsidence (or submergence) of land or rising sea level will bring about the same result.

Joseph Sax, the author of a widely cited article on the accretion and avulsion distinction, agrees: “The law provides that when the water’s edge shifts ‘gradually and imperceptibly’ (accretion), the property boundary moves with it.” Peter Byrne likewise observes that “[n]ormal erosion or sea level rise will move the ownership boundary landward, and private land will become public when tidewaters normally lap over it.”

279. Flournoy, supra note 22, at 103–04 (explaining that gradual changes are termed either accretion, reliction, or erosion, depending on which of the shoreline processes is involved); Christie, supra note 22, at 26–27; Sax, supra note 22, at 306; The Cathedral Engulfed, supra note 22, at 80. Very often the littoral property owner is a private individual or entity, but of course, the littoral property owner could be a federal, state, or local governmental entity. Wyman & Williams, supra note 22, at 1958, 1962–63 nn.30–31.

280. Sax, supra note 22, at 306, 313–50; Wyman & Williams, supra note 22, at 1959; Eagle, supra note 22, at 882–83; Flournoy, supra note 22, at 103–04.

281. Christie, supra note 22, at 26–27 (footnotes omitted); Flournoy, supra note 22, at 103 (“In Florida, as in many jurisdictions, the law permits the seaward boundary of littoral property to change in circumstances when the line between water and dry land moves.”).

282. Sax, supra note 22, at 306 (footnotes omitted).

283. Byrne, supra note 22, at 631. In another article, Byrne states the rule even more formally and links it with concept of accretion:

As rising seas move the line between public tidelands and private dry lands farther upland, private owners will lose land to the public as it becomes subject to tidal wash. This is the effect of the ancient doctrine
Confirmation of the general rule of accretion and erosion, which embraces gradual movements either seaward or landward and on both riparian and littoral shores, comes from numerous judicial decisions over the last two centuries\(^\text{284}\) and learned treatises on water law and water boundaries.\(^\text{285}\)

In fact, just two years ago, a Texas court applied these same doctrines in a dual-claimed land case and rejected quiet title and just compensation claims asserted by owners of two partially submerged lots on the bayside of Galveston Island.\(^\text{286}\) In that case, the landowner claimants traced title to their partially submerged lots to patents issued in 1839 and 1840 by the Republic of Texas.\(^\text{287}\) However, as over half of the lots had since been eroded by the passage of time and were now submerged under the waters of \textit{accretion}, which provides that slow or imperceptible changes in physical boundaries set by water courses change legal ownership.

\begin{quote}
\textit{The Cathedral Engulfed, supra} note 22, at 80 (emphasis in original).
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284. Accardi v. Regions Bank, 201 So. 3d 743, 746–47 (Fla. Dist. Ct. App. 2016) (“The rule at common law still exists today—gradual changes in shoreline result in a scenario where ‘the owner of the [upland] [property] loses title to the land that is lost by erosion and ordinarily becomes the owner of the land that is added to his land by accretion [or reliction] . . . .’); Walton Cnty. v. Stop the Beach Renourishment, Inc., 998 So. 2d 1102, 1117 (Fla. 2008); County of St. Clair v. Lovington, 90 U.S. 46, 68 (1874); Banks v. Ogden, 69 U.S. 57, 67 (1864); New Orleans v. United States, 35 U.S. 662, 717 (1836); Jeffries v. East Omaha Land Co., 134 U.S. 178, 189–90 (1890); Nebraska v. Iowa, 143 U.S. 359, 368–70 (1892) (holding that law of accretion governs changes in the location or mean high water line of the Missouri River despite rapidity of its current, susceptibility of its banks to erosion, and often relatively rapid and significant amount of change that can occur).
\end{quote}

\begin{quote}
285. FLUSHMAN, \textit{supra} note 22, at 96 (summarizing property boundary effect of erosion and accretion and observing that “[t]he rule that the riparian or littoral owner’s property boundary continues to change as the geographic location of the shoreline moves by the process of accretion and erosion has been adopted, in one form or another, by many later cases considering the issue”); \textit{POWELL, supra} note 22, § 66.01[2] (“Where the change in location of a body of water is caused by accretion, reliction, or erosion, the boundary line between the abutting landowners moves with the waterway. Thus the riparian or littoral landowner is given title to lands that are gradually added by accretion or reliction. . . . Similarly, a riparian owner loses title to lands that are submerged through the process of erosion.”) (footnotes omitted).
\end{quote}

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286. W. Gulf Marine, Ltd. v. Tex. Gen. Land Office, 636 S.W.3d 268, 281 (Tex. App. 2021). In its decision, the court observed the general rule that a riparian or littoral owner “acquires or loses title to the land gradually or imperceptibly added to or taken from his shoreline.” \textit{Id.} at 273 (quoting Natland Corp. v. Baker’s Port, Inc., 865 S.W.2d 52, 57 (Tex. App. 1993)).
\end{quote}

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of Galveston Bay, the court held that the submerged land reverted to the State of Texas and rejected arguments seeking to assert limited exceptions to Texas’s version of the Public Trust Doctrine.\textsuperscript{288}

**Avulsion:** The second element of the Ambulatory Coastline Doctrine provides the major exception to the previous rule.\textsuperscript{289} It applies when a sudden and immediately perceptible change in the physical boundary between land and water occurs or the location of the water body itself changes rapidly or perceptibly. In these instances, some U.S. courts hold that the legal boundary between the littoral property owner and the state may remain fixed at the historical boundary.\textsuperscript{290}

Uncertainty remains, however, about the extent to which this exception actually persists in practice and over its significance even if it does survive.\textsuperscript{291} In Texas, for instance, that state’s highest court recently ruled that the public’s recreational easement over dry sand beaches rolls landward if the MHWL moves upland as the result of gradual erosion but simultaneously stated that the state owns all land seaward of the current MHWH regardless of whether that line moves upland as the result of either gradual erosion or sudden avulsion.\textsuperscript{292} In North Carolina, statutes have

\textsuperscript{288} Id. at 271, 275–81.

\textsuperscript{289} A minor exception to the accretion rule occurs in the unusual case of reemergence of previously submerged land. See FLUSHMAN, supra note 22, at 97 n.122 (“In certain cases the doctrine of reemergence may apply. That doctrine provides that riparian or littoral owners whose land has become submerged may not lose title to such land if the land later reemerges.”). See also POWELL, supra note 22, § 66.03[2] (Powell discusses the reemergence doctrine in the context of riparian land and describes it as a “rule of construction.”).

\textsuperscript{290} FLUSHMAN, supra note 22, at 97 (“Where there is an avulsion, a sudden and perceptible change in geographic location of a boundary watercourse, the rule is that the geographic location of the ordinary high-water mark property remains unaltered.”); Christie, supra note 22, at 27 (“Avulsive events—sudden and perceptible changes in the location of the seashore—however, do not alter the boundary”); Sax, supra note 22, at 306 (stating that when a shift in the “water’s edge” is “‘sudden or violent’ (avulsion), the boundary stays where it was”); The Cathedral Engulfed, supra note 22, at 80 (“A sudden, perceptible change in a water boundary, known as avulsion, does not change ownership, which remains at the line of the prior physical boundary.”) (emphasis in original).

\textsuperscript{291} Christie, supra note 22, at 27 (noting that there is “some question as to whether the doctrine of avulsion should apply to ocean shorelines” but recognizing that it does apply in Florida); Flournoy, supra note 22, at 92.

\textsuperscript{292} Severance v. Patterson, 370 S.W.3d 705, 723, 724–25 (Tex. 2012). In Severance, the Court held that, unlike in the case of accretion, an avulsive change in the MHWL caused by a hurricane does not result in a “rolling easement” allowing the public use of a private dry beach. Id. at 724–25. However, the Court
effectively erased the accretion-avulsion distinction when it comes to determining the effect of changes in the MHWL. As one commentator explains, North Carolina law now provides that the legal boundary between private, littoral land and the public trust migrates with the MHWL in all cases, regardless of whether the change is caused by accretion, erosion, submersion, or avulsion.

In Florida, if a court finds that an avulsive event has caused the littoral coastline to move, a landowner does not necessarily maintain title to the submerged land. Instead, the landowner acquires a “right to reclaim” the lost land within a reasonable time. This time-limited right to reclaim the submerged land reflects the reality that submerged land has limited practical value to a littoral landowner but still serves important public interests such as facilitating the public’s rights to navigate and fish—rights which should not be extinguished permanently simply because littoral land is submerged because of an avulsion.

**Deliberate Human Intervention:** The third prong of the Ambulatory Coastline Doctrine functions more in the nature of a caveat or second exception to the accretion rule. When changes in the land-water interface also clarified that the legal boundary between public and private domains actually migrates in all cases of naturally occurring change:

This holding shall not be applied to use the avulsion doctrine to upset the long-standing boundary between public and private ownership at the mean high tide line. The division between public and private ownership remains at the mean high tide line in the wake of naturally occurring changes, and even when boundaries seem to change suddenly.

Id. at 725 (emphasis added). See also id. at 723 (stating that “losing property to the public trust as it becomes part of the wet beach or submerged under the ocean is an ordinary hazard of ownership for coastal property owners.”).

293. N.C. GEN. STAT. § 146-6(a) (2024) (stating that “[i]f any land is, by any process of nature . . . raised above the high watermark of any navigable water, title thereto shall vest in [the riparian or littoral land] owner”); id. § 77-20(a) (providing that “[t]he seaward boundary of all property… which adjoins the ocean, is the mean high water mark”).

294. Joseph J. Kalo, North Carolina Oceanfront Property and Public Waters and Beaches: The Rights of Littoral Owners in the Twenty-First Century, 83 N.C. L. REV. 1427, 1440–42 (2005) (interpreting the two statutes cited above as rejecting the traditional accretion-avulsion distinction and establishing a “uniform approach to all natural changes in ocean shorelines” in which the MHWL is always the legal boundary between privately owned and public land on the coast).

295. Flournoy, supra note 22, at 105, 140 (commenting on Walton County v. Stop the Beach Renourishment, Inc., 998 So. 2d 1102, 1117 (Fla. 2008)).

296. Id.

297. Id. at 105, 140–41.
are caused by intentional human intervention—whether the action of the upland owner or the government—the legal boundary between private upland owner and the state does not always change.\textsuperscript{298} In this circumstance, other considerations, such as whether the change in the water body or MHWL was caused by the party claiming the benefit of the change or by another party, can displace the ambulatory coast line rule.\textsuperscript{299} In Florida, when state-funded beach renourishment projects are undertaken to stabilize beaches and prevent future erosion, a state statute requires the fixing of “an erosion control line” keyed to the “pre-existing mean high-water line,” and that erosion-control line then replaces the “fluctuating mean high-water line” that normally demarcates the boundary between privately owned littoral property and state property.\textsuperscript{300}

\textbf{Presumption in Favor of Accretion:} The final piece of the Ambulatory Coastline Doctrine constitutes a presumption, not a rule, and addresses the distinction between gradual and imperceptible additions or subtractions from the shore (accretion or erosion) and sudden and perceptible changes in the physical land and water interface (avulsion). Over the centuries, judges and jurists have tried to articulate the often subtle distinction between accretion and avulsion and have emphasized concepts such as whether or not a witness could “perceive” a change “while the process was going on,” resulting in a characterization of avulsion versus seeing “from time to time that progress has been made,” resulting in a characterization of accretion.\textsuperscript{301} Others have recognized the inherent difficulty—or indeed impossibility—of drawing such fine lines.\textsuperscript{302}

\begin{itemize}
\item \textsuperscript{298} Powell, supra note 22, § 66.04[1]; Christie, supra note 22, at 27 n.47 (noting “[a] second circumstance where the boundary does not change is when the upland owner fills in state lands or causes artificial accretions”). See also Epstein, supra note 22, at 56 (noting that the accretion and avulsion rules at Roman law only applied to natural events).
\item \textsuperscript{299} Powell, supra note 22, § 66.04[1] (explaining that one reason for this exception is that “the filling of streams, lakes, or land below ordinary high-water marks would in essence transfer land from the government to the riparian or littoral owner,” but noting that it is “often difficult . . . to prove whether the accretive process was caused by natural or artificial means or by both.”).
\item \textsuperscript{301} County of St. Clair v. Lovington, 90 U.S. 46, 68 (1874).
\item \textsuperscript{302} Flushman, supra note 22, at 265 (noting that distinctions based on concepts such as from “time to time” beg the question because it is not clear whether the time interval is year to year, day to day, or from one instance to
In any event, courts and commentators now agree there is a “strong presumption in favor of accretion.”303 In Nebraska v. Iowa, the United States Supreme Court illustrated the strength of this presumption in favor of classifying riparian change as accretion when it found that relatively rapid changes in the location of the channel of the Missouri River constituted accretion and erosion but not avulsion.304 In more recent times, the United States Supreme Court has managed to escape what one scholar calls “the doctrinal prison” of the accretion-avulsion distinction when it ignored facts about the rate of change on the Colorado River and characterized all of the changes along that dynamic, often chaotic river as accretion.305 As a result of this strong presumption, when courts confront naturally occurring changes in the physical boundary between land and water on our nation’s seacoasts today, they typically find that the legal boundary between private, littoral land and the public domain shifts along with the physical boundary between land and water.306

B. Policy Justifications for the Ambulatory Coastline Doctrine

Over many centuries of common law development and scholarly study, courts and jurists have articulated a number of sometimes overlapping rationales for the Ambulatory Coastline Doctrine. Traditionally courts and jurists have tended to focus on five rationales for the doctrine:

303. Sax, supra note 22, at 346, 349–54 (offering a rich discussion of how U.S. courts moved in the direction of an almost universal presumption of accretion and erosion such that even cases that appeared to be factually quite close to avulsion were re-characterized as accretion or erosion). Other writers have also observed the strong presumption in favor of accretion over avulsion. Flushman, supra note 22, at 100, 134–35, Christie, supra note 22, at 27; Wyman & Williams, supra note 22, at 1968–69.

304. Nebraska v. Iowa, 143 U.S. 359, 368–70 (1892).

305. Sax, supra note 22, at 349–50 (commenting on Bonelli Cattle Co. v. Arizona, 414 U.S. 313, 315–16 (1973)).

306. See, e.g., W. Gulf Marine, Ltd. v. Tex. Gen. Land Office, 636 S.W.3d 268, 281 (Tex. App. 2021) (holding that parts of bayside lots that became submerged beneath waters of Galveston Bay belonged to State of Texas); Accardi v. Regions Bank, 201 So. 3d 743, 746–48 (Fla. Dist. Ct. App. 2016) (holding that new land built up on the ocean-front side of a parcel became part of original parcel and thus was encumbered by the mortgage that encumbered the original parcel).
(1) **De minimis impact:** Because accretion and erosion happen, by definition, only gradually and imperceptibly, the law should not trifle with contextually small, incremental changes in legal title, particularly when the changes have a negligible effect on the sovereign’s nationwide interest in controlling the coast and submerged lands.  

(2) **Lost boundary:** As gradual and imperceptible changes in the location of the physical coastline necessarily occur over a long period of time, it is often impractical or even impossible to determine the original boundary between the private and public domain, and therefore courts should set the current legal boundary at the current high-water line.

(3) **Reciprocity:** The doctrine of accretion and erosion is substantively fair or just because a littoral or riparian property owner faces an equal and symmetrical chance of gaining or losing land.

(4) **Long-term use or prescription,** also known as the “productivity” or “social utility” rationale: When new land is formed along the water’s edge as a result of accretion or reliction, the littoral or riparian property owner begins to put the new land to productive, often agricultural use, inch by inch and foot by foot, and meanwhile the state—or the Crown in Great Britain—gradually loses any meaningful connection with the former public trust property as it is gradually transformed into upland.

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307. Flournoy, supra note 22, at 107; Sax, supra note 22, at 320, 332; Wyman & Williams, supra note 22, at 1973; Powell, supra note 22, § 66.01[3]. See also 2 William Blackstone, Commentaries on the Law of England *260, *262 (commenting that because alluvion or dereliction, by its very nature, occurs “by little and little, by small and imperceptible degrees,” it should belong to the riparian owner “*de minimis non curat lex*”).

308. Sax, supra note 22, at 313, 332; Wyman & Williams, supra note 22, at 1973–74.

309. Sax, supra note 22, at 312, 340; Wyman & Williams, supra note 22, at 1974–76; Powell, supra note 22, § 66.01[3] (calling this a “compensation or equity theory” and noting that it has “received only modest judicial support and has been criticized as being tautological and based on erroneous assumptions.”). Flournoy calls this the “fairness” rationale and notes that it could also be used to justify the avulsion rule as well considering that a landowner affected by a sudden loss of land caused by an avulsion has a temporally limited right to reclaim the lost land if feasible. Flournoy, supra note 22, at 108–09; Blackstone is often credited with this rationale though his statement of the idea is quite difficult to follow. Blackstone, supra note 307, at *262 (“and, besides, these owners being often losers by the breaking in of the sea, or at charges to keep it out, this possible gain is therefore a reciprocal consideration for such possible charge or loss.”).

310. Sax, supra note 22, at 323, 325; Wyman & Williams, supra note 22, at 1976–77; Powell, supra note 22, § 66.01[3] (labeling this the “productivity or efficiency theory” and noting two branches: one concerned with the inefficiency
(5) Water adjacency: Because riparian or littoral land provides the owner with direct physical access to the water as a means of transportation, an unimpeded view over the water, or other use rights in the water, and because those access or use rights are often the most valuable aspects of riparian or littoral land, the law should preserve a littoral or riparian landowner’s water adjacency to maintain the owner’s reasonable expectations in those access and use rights.\textsuperscript{311}

Unsurprisingly, the importance and explanatory power of these various rationales has shifted from century to century and country to country. In his rich historical account of the accretion-avulsion distinction, Joseph Sax points out that in the early period of English common law, courts were particularly fond of the lost boundary, the reciprocity, and the prescription-productivity rationales.\textsuperscript{312} During the seventeenth and eighteenth centuries, the time of the great treatise writers on the subject, Robert Callis and Chief Justice Mathew Hale, the long-term use and prescription rationale, with its Lockean labor theory undertones, aided by elements of the \textit{de minimis} change rationale, became more prevalent.\textsuperscript{313} In of small slivers of land surrounded by water, and another focused on the utility of an adjacent owner being in a “better position to use the land [presumably new alluvion] than the state or the non-adjacent owner”); Flournoy, \textit{supra} note 22, at 110–11 (labeling this the “social utility” rationale and noting its “fairness and utilitarian strains”).


312. Sax, \textit{supra} note 22, at 315–20. Sax observes judicial concern about lost or not easily discoverable historical boundaries as early as the middle of the fourteenth century, an era well before modern surveying techniques were available. \textit{Id.} at 315–16. He also notes that the seemingly intuitive fairness of reciprocal opportunities for gain and loss and the utility of expanding a littoral or riparian landowner’s use of newly emerging alluvion may have partially explained the pervasiveness of local customs favoring an ambulatory legal coastline. \textit{Id.} at 318–20.

313. \textit{Id.} at 321–27. According to Sax, Callis shrewdly saw the connection between the prescription and \textit{de minimis} change rationales because he (Callis) “seems to have concluded that when the process is slow enough, the diminution is so small as it happens, and occurs over so long a period, that it makes the loss of little consequence to the loser.” \textit{Id.} at 324 (commenting on ROBERT CALLIS, \textsc{The Reading of the Famous and Learned Robert Callis, Esq., Upon the Statute of Sewers, 23 Hen. VIII c.5, as It Was Delivered by Him at Gray’s Inn in August 1622} (William John Broderie ed., 4th ed. 1824)). When writers turned to the “more troublesome question . . . a rising sea that inundates what was formerly privately owned upland,” Sax notes that “[i]t was apparently agreed by
the nineteenth century and early twentieth century, the *de minimis* impact and lost boundary rationales became less persuasive, as English courts recognized shifting legal coastlines in cases that sometimes involved significant amounts of land or historical boundaries that were known or at least easily discoverable.\(^{314}\)

In the United States, the mix and flavor of the rationales are somewhat different with a steadily increasing focus on the importance of water adjacency, appreciation of the administrative efficiency of a migrating legal coast line, and the increasing recognition of the importance of protecting public trust doctrine interests in navigable waters.\(^{315}\) The *de minimis* impact rationale never seemed particularly salient here as U.S. cases sometimes involved relatively large amounts of new acreage or land with valuable mineral interests.\(^{316}\) More recently, the prescription-productivity rationale has also lost some of its explanatory power. Some critics note that riparian or littoral land can serve important social and ecological functions even when it is not put to active agricultural or industrial use.\(^{317}\) Further, the theory does little to explain why legal title should shift in favor of the state in the case of erosion.\(^{318}\)

Perhaps because of the fading power of several of these traditional rationales in light of the increasingly widespread impact of sea-level rise,\(^{319}\) in recent decades courts and scholars have tended to emphasize the importance of maintaining a littoral property owner’s physical access to water as the strongest justification for the Ambulatory Coastline

all that in such cases the king would have jurisdiction of the land newly submerged.” *Id.* at 325 (citing *THE READING OF THE FAMOUS AND LEARNED ROBERT CAILIS*, *supra* note 313, at 61). Hale’s contribution, at least in Sax’s view, was to add yet another possible justification to the mix—concerns about protecting the king’s interest (essentially national security) when sudden retreat of the sea (reliction) occurs on the coast, exposing sometimes rather large tracts of land lying between England and France or the Netherlands. *Id.* at 327.


316. *POWELL*, *supra* note 22, § 66.01[3] n.26 (citing cases). In *County of St. Clair v. Lovington*, 90 U.S. 46, 67–68 (1874), the Court still mentioned both of these rationales perhaps because of its reliance on Blackstone.


318. *Id.*

The water adjacency rationale is more complex than it might seem, however, and arguably contains two dimensions—a private and a public one. The private dimension focuses on the importance of preserving the water-front property owner’s personal interest in physical access to the adjacent water body, his or her view over the water, and privileges of use in the adjacent water. In an illuminating study of the natural law and Roman law roots of the accretion and avulsion doctrines, Richard Epstein underscores these private values in preserving water adjacency. As he observes, a migrating legal boundary preserves both a lay person’s understanding of boundaries and the economic value of waterfront land regardless of whether the repositioning of the high water line occurs through gradual accretion or erosion. Alyson Flournoy observes that

320. Sax, supra note 22, at 347–48 (observing that American courts increasingly demonstrated their concern with the practical problem of whether a riparian or littoral property owner would maintain physical access to an adjacent waterway or waterbody); Eagle, supra note 22, at 883 (explaining that “[t]he migratory boundary helps to preserve the upland owner’s connection to the water by ensuring that the legal coastline is almost always identical to the land/water interface”); Flournoy, supra note 22, at 106, 111 (calling water adjacency the “central and arguably dominant” justification in American common law and “the single strongest rationale” for both accretion and avulsion); POWELL, supra note 22, § 66.01[3] (calling water adjacency the “most persuasive and fundamental rationale” for an ambulatory boundary rule).

Concern about water adjacency was repeatedly expressed in leading decisions addressing riparian and littoral boundaries. See, e.g., Lamprey v. Metcalf, 53 N.W. 1139, 1142–43 (Minn. 1893); State v. Sause, 342 P.2d. 803, 825 (Or. 1959); Hughes v. Washington, 389 U.S. 290, 293 (1967). Some of the most recent decisions continue to stress the importance of water adjacency for the ambulatory coastline rule. Accardi v. Regions Bank, 201 So. 3d 743, 747 (Fla. Dist. Ct. App. 2016).

321. Christie, supra note 22, at 29 (quoting Hughes, 389 U.S. at 293; Thiesen v. Gulf, F. & A. Ry. Co., 78 So. 491, 5077 (1919) (Ellis, J., on reh’g)).

322. See Epstein, supra note 22, at 50–52, 56.

323. Id. at 50–52. For Epstein, the wisdom of the accretion rule, in particular, emerges when one considers that a typical property owner in the classical era of Roman law, when metes and bounds descriptions of land were non-existent, would have described his property boundary by saying “my plot runs down to the river” and then remembering that this statement would not and should not be “rendered false if the river bank itself moves by small increments that can barely be observed.” Id. at 51. Not only does the accretion rule preserve the functional utility of a practical lay person’s understanding of the boundaries of littoral and riparian parcels, Epstein writes, but also is justified because a contrary rule, one that would insist upon a “constant geographical position,” would produce the economically inefficient result of the former riparian land being separated from
most littoral property owners today would have similar expectations that boundary descriptions in their deeds referring to the MHWL or to the water body itself were intended to be ambulatory, and these expectations still justify the presumption in favor of the ambulatory boundary between public and private domains.324

The public dimension of the water adjacency rationale becomes most apparent when erosion or subsidence moves the water’s edge landward or upland. If the legal boundary were to remain fixed in these instances, the public would lose its ability to engage in core public trust activities on the portion of navigable waters and tidelands that now would be subject to private control—waterborne travel, commerce, fishing, and even walking and recreating on the wet sand portion of a beach.325 A fixed boundary would also impair the sovereign’s responsibility to act as “trustee of sovereign submerged lands with a duty to protect the public’s interest in these lands and navigation.”326 If the littoral land owner could enforce a historical boundary line in cases involving substantial coastal erosion or subsidence, that owner could use its bilateral monopoly power over what is normally a highly valued public resource to demand ransom payments in exchange for limited access rights.327 In light of these dual interests in access to our coasts, Professor Sax proposes that “title” to land affected by migratory waters should always follow the water’s edge “without regard

the river by “a sliver of land” (presumably owned by the public) that would be “too small to be viable economically.” Id. at 52. In the context of accession rights of littoral property owners, Epstein suggests, “the same considerations . . . carry over with equal force” because, as he puts it, “[a]ccess to the ocean is the critical variable and there is no reason for it to be disturbed by these incremental movements in the shore.” Id.

324. Flournoy, supra note 22, at 139. Flournoy, however, would allow a littoral property owner to rebut the presumption of an ambulatory water boundary with evidence showing that a specific surveyed description of the MHWL was included in a deed or grant from the sovereign. Id. Courts could thus deviate from the ambulatory legal boundary “default rule” and impose a fixed boundary “when fairness to the individual landowner or the public interest dictates as much.” Id. at 145–46. Elsewhere, though, Flournoy admits that in most cases the reliance interests of a littoral property would be quite weak because of the pervasiveness of the ambulatory coastline presumption in the U.S. Id. at 149, 151.

325. Sax, supra note 22, at 352; Wyman & Williams, supra note 22, at 1979–80. See also Eagle, supra note 22, at 887 (observing that the ambulatory coastline rule and public trust doctrine work together to create significant value for littoral property owners by guaranteeing that they can “walk off” of their property at high tide in a mean high tide state on the wet sand portion of a beach).

326. Flournoy, supra note 22, at 128 (emphasis in original).

to the rate, perceptibility, or suddenness of the movement.” This would reflect the crucial fact that “maintaining water adjacency for riparian/littoral landowners and assuring public use of overlying water (and some part of the foreshore)” are both central goals of our law.

English and early American courts’ intuitions about the de minimis impact and lost boundary rationales are not entirely dead either, though, as some scholars have recast those concerns in terms of administrative efficiency. These scholars emphasize that the presumption in favor of an ambulatory legal boundary at the water’s edge is justified because it is less “information intensive” and more cost effective since the precise location of a historical mean high water line is still quite often difficult to ascertain because of the passage of time. With a nod to two prominent property theorists, these scholars observe that the ambulatory coast line rule lowers “information costs” in accordance with other commonly observed boundary ascertainment rules in property law. Other scholars point to the additional policing and dispute resolution burdens that would be imposed on local and state governments if the legal boundary between public and private domains remained fixed even as the physical boundary between land and sea gradually moves upland.

C. Compensation Not Required When the Shoreline Migrates Upland

The question of whether a littoral landowner who loses title to some or all of a littoral tract deserves just compensation merely because the legal coastline moves landward as a result of gradual and imperceptible erosion or submergence has not generated much interest until recently. In fact, it

328. Sax, supra note 22, at 353. Sax would allow for several exceptions to the migratory legal coastline rule: (1) when a river shifts to an entirely new channel and leaves behind an ox-bow lake; (2) when riparian-littoral shoreline changes are caused or exacerbated by government or landowner action; (3) when shoreline movements are temporary; and (4) for state boundary determinations where some other method has been agreed to or specified by Congress or compact. Id. at 353–54.

329. Id. at 353.

330. Wyman & Williams, supra note 22, at 1973–74, 1982; Flournoy, supra note 22, at 141.


333. Flournoy, supra note 22, at 141–42 (describing conflicts that have already arisen in Walton County, Florida over littoral owners’ attempts to fence off portions of the wet sand beach and predicting that these conflicts would worsen if landowners were encouraged “to think of submerged lands as their private property”) (emphasis in original).
appears that no American court has ever ordered a littoral landowner just compensation in such a case. However, given that sea-level rise attributable to global warming will increase both the frequency and geographic scope of this kind of “unidirectional” boundary movement on U.S. coasts, some scholars have begun to address the question. Their general consensus is that judicial recognition of a new legal coastline further inland than the historical MHWL as the result of gradual erosion, subsidence, or sea level rise does not warrant just compensation.

Taking note of the key common law distinction between accretion (gradual and imperceptible change) and avulsion (sudden and easily observable change), and noting that current sea level rise will produce land loss and concomitant loss of ownership under the accretion rule, Peter Byrne observes that “[a]ccretionary loss has never been considered a taking, constitutionally requiring public compensation, because nature, rather than the state, effects the deprivation.” Emphasizing the historical roots of this distinction, Byrne further explains that “[l]oss of littoral land through accretion might be understood to be a risk that ‘inheres in the title’ to such land.” Later in the same article, when he addresses whether new regulatory initiatives that would prevent construction in coastal areas vulnerable to sea level rise would be subject to regulatory takings claims under either a per se takings analysis or a balancing test, Byrne restates the same analysis with equal force, pointing out that the public trust doctrine itself “inheres in title to land” in the United States and thus “will

334. The author of this Article has not been able to locate such a decision and none of the law review articles or other secondary sources cited in this Article reveal such a decision.

335. Flournoy, supra note 22, at 111–18 (observing that unlike past patterns of change at the land-water interface affecting riparian or littoral boundaries, sea level rise today is predictable, unidirectional, on-going, and geographically pervasive).


337. The Cathedral Engulfed, supra note 22, at 80.

338. Id.


340. Id. at 97. Byrne distinguishes “retreat” regulation from two other kinds of regulation that are likely to be considered as adaptations to sea level rise—“defense” regulation, which refers to various kinds of hard and soft armoring, and “accommodation” regulation, which refers to building codes that require structures to be raised or reinforced to withstand floodwaters. Id. at 85, 86–87.
move landward with the tideline.” Wyman and Williams confirm Byrne’s analysis, explaining that if the current Ambulatory Coastline Doctrine remains unchanged and “rising sea levels will push the mean high water line landward,” the public trust “will burden formerly upland private property” and “expand at the expense of private property.” Like Byrne, they also reject the suggestion that private property owners whose lands become burdened by the public trust as a result of sea level rise should receive compensation.

Alyson Flournoy likewise rejects the suggestion that judicial recognition of an ambulatory coastline even in the context of unidirectional sea level rise would amount to a judicial taking because the common law itself has already recognized that “[t]hose who own land at the water’s edge already are and have always been subject to boundaries that change when the ocean moves.” Moreover, echoing Byrne, she points out that the “root cause” of any loss of littoral property rights in such a case would not be a judicial decision recognizing a new legal boundary between public and private domains, “but a documented force of nature that has always been recognized as having the power to trigger legal changes: inundation of property.” Another earlier commentator made the same point, observing that when title of submerged littoral property shifts to a state, the government is not “actively forcing or causing the loss of private property”, as it might in a traditional possessory takings case, but is simply responding “to the complex and uncontrollable effects of global climate change.” Moreover, that commentator observed, “the government is not singling out individuals” when it asserts the public trust doctrine over submerged land, as it will have “little or no control over

341. Id. at 99–100. Byrne adds:
   Thus, as the seas rise and the public trust areas move upland, the use rights of owners will either be extinguished or subjected to public property interests that will permit strict regulation without regard to Lucas. Note that when the public trust applies, the private owner is not just relegated to Penn Central but has no takings claim at all because the public enjoys a superior property interest.

343. Id. at 1985–86. Wyman and Williams are also clear, however, that their conclusion about the current demands of U.S. law would not prevent a legislature from making a normative choice to award compensation on other justice or fairness grounds. Id. at 1985–92 (exploring that possibility and ultimately rejecting it).
344. Flournoy, supra note 22, at 151.
345. Id.
346. Hiatt, supra note 336, at 388.
which lands become submerged, and all coastal property owners will share in the risks and losses posed by large-scale sea level rise." In short, all of these scholars reject the proposition that coastal land loss caused by gradual erosion or sea level rise requires compensation for littoral landowners.

The same considerations would certainly apply in Louisiana. The basic tenets of Louisiana Civil Code article 450, or its almost verbatim civil code predecessors in 1808, 1825, and 1870, have been a foundational part of Louisiana law ever since the establishment of the state. Courts have applied article 450 to divest a littoral property owner of that portion of a littoral estate that becomes submerged beneath the expanding shore of a lake or the sea ever since *Miami Corp. v. State* was decided in 1936. Indeed, as the Louisiana Supreme Court pointed out in *Miami Corp.*, its unitary submerged navigable water bottom principle was consistent with the general practice of Louisiana courts prior to the 1931 decision of the Court in *State v. Erwin*. In short, Louisiana courts have followed essentially the same approach to the problem of migratory shore lines that U.S. courts have applied, except for a five-year interval between 1931 and 1936. If this kind of jurisprudential consistency—*jurisprudence constante* to use the Louisiana term—is not a “background principle of law” that “inheres in land,” it is hard to imagine a principle that would be.

The general consensus today is that current American takings doctrine does not support the takings theories occasionally mentioned in the Louisiana commentary. However, this would not prevent the Louisiana legislature from changing the law and granting littoral property owners a property entitlement in permanently submerged land or mandating that the state pay just compensation to littoral property owners when title of submerged land shifts to the state. Whether it would be wise as a matter of policy and fairness to change the law and award littoral property owners

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347. *Id.*
348. *See supra* Parts III.A–B.
349. *Mia. Corp. v. State*, 173 So. 315, 320 (La. 1936) (noting that *Erwin* was “out of line with Louisiana jurisprudence on the subject of ‘lakes’” and “has never been followed”).
350. *Lucas v. S.C. Coastal Council*, 501 U.S. 1003, 1029 (1992) (recognizing that regulations that merely apply “background principles” of property law that “inhere in land” and land ownership do not give rise to takings claims even when application of those principles might result in a complete diminution of the subject property’s economic value).
351. *Hiatt, supra* note 336, at 385–97; *The Cathedral Engulfed, supra* note 22, at 81–82, 100.
some form of compensation is a policy question that is beyond the scope of this Article.

Suffice it to say for now, however, scholars outside of Louisiana who have examined unidirectional sea-level rise and its intersection with the Ambulatory Coastline Doctrine have all reached the same conclusion. They all agree that requiring states to pay just compensation to littoral property owners who lose land when the legal boundary between land and sea moves upland would be ill-advised.352 Their reasons, which sound in both fairness and social utility, certainly apply just as forcefully to Louisiana as they do to its sister states.353


353. Scholars generally contend that granting littoral property owners an entitlement in land that becomes submerged below the MHWL as a result of gradual erosion or sea level rise or requiring payment of just compensation to such owners in exchange for loss of title would be bad constitutional and public policy for four principal reasons:

(1) Prohibitions under state law in most jurisdictions on alienating public trust property that would make any gratuitous compensation a legal impossibility. The Cathedral Engulfed, supra note 22, at 81–82; Wyman & Williams, supra note 22, at 1986; EAGLE, supra note 75, at 194–95.

(2) The value of the public’s interest in submerged land and tidelands is generally much greater than littoral property owner’s remaining interest in land once it is submerged beneath the sea or tides. The Cathedral Engulfed, supra note 22, at 82; Wyman & Williams, supra note 22, at 1987–88; Flournoy, supra note 22, at 142–43; Hiatt, supra note 336, at 394–95.

(3) The severe risk of exploitative hold-out behavior frustrating public access to public trust resources if littoral property owners are granted an entitlement to submerged land seaward of the MHWL. Wyman & Williams, supra note 22, at 1988; Carol Rose, The Comedy of the Commons: Custom, Commerce, and Inherently Public Property, 53 U. Chi. L. Rev. 711, 753, 757, 760 (1986) (explaining monopolization and hold-out risk if public trust lands were shifted to private ownership); Richard Epstein, The Public Trust Doctrine, 7 CATO J. 411, 415–16 (1987) (explaining hold-out risk if navigable rivers and lakes were privately owned).

(4) The “settlement costs” associated with determining the appropriate amount of compensation would exceed the “demoralization costs” experienced by littoral landowners who lose ownership of land seaward of the MHWL. Wyman & Williams, supra note 22, at 1988–91 (applying framework developed by Frank Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of “Just Compensation” Law, 80 Harv. L. Rev. 1165, 1214–15 (1967)); Hiatt, supra note 336, at 394–97 (making a broader argument about
CONCLUSION

It is time to resolve the long simmering dual-claimed land dilemma in Louisiana. Too much land is at stake. State officials need certainty about ownership of submerged land as they plan the ambitious coastal protection and restoration projects that will be necessary to mitigate future coastal land loss in Louisiana.\footnote{COASTAL PROT. \& RESTORATION AUTH. OF LA., supra note 1, at 54–65, 75–77 (describing CPRA’s proposed risk reduction and coastal restoration projects). See also Jaccard, supra note 16, at 688–703 (explaining the importance of state ownership of submerged land for CPRA projects).} Determining ownership of submerged land will be crucial as state officials and renewable energy corporations make plans for near-shore and off-shore wind-power generation projects.\footnote{Tristan Baurick, Fifth Wind Farm Bid Makes Louisiana a National Leader in Near-Shore Wind Energy Development, NOLA.COM (July 2, 2023), https://www.nola.com/news/environment/danish-firm-proposes-fifth-wind-farm-in-louisiana-waters/article_04d03f3cc-1786-11ee-a330-2f887a0d1ee2.html [https://perma.cc/MRG6-A9AR]; Juliana Ennes, Louisiana Poised to Spearhead Offshore Wind in Gulf of Mexico, REUTERS (July 26, 2023), https://www.reuters.com/business/energy/louisiana-poised-spearhead-offshore-wind-gulf-mexico-2023-07-26/ [https://perma.cc/8DD7-GVHV].} The ownership status of submerged land may also impact controversial plans for carbon capture and storage projects near the Louisiana coast.\footnote{Sam Karlin, Carbon Capture Creates New Allies, Foes in Louisiana, a Ground Zero for Climate Change, NOLA.COM (May 8, 2023), https://www.nola.com/news/politics/carbon-capture-causes-stir-in-industry-heavy-louisiana/article_9eea3b4c-eb9b-11ed-bcb0-0790c76a2f0e.html [https://perma.cc/ZPS2-ZFNH].} Landowners whose land may be at risk of eroding and becoming submerged in the near future also need certainty. They may need to know whether and when to act to protect mineral rights under Louisiana’s Freeze Statute.\footnote{See LA. REV. STAT. § 9:1151 (2024), discussed supra Part III.B.3.} Finally, many players in the often-bitter dispute over recreational access to wet places in Louisiana would understand their respective rights and obligations better if the dual-claimed land dilemma was settled once and for all.\footnote{See generally PUB. RECREATION ACCESS TASK FORCE, supra note 11; Kyzar Dorr, supra note 11.}

This Article has demonstrated that Louisiana law is clear. When dry land, marshland, swampland, or the beds of once non-navigable water bodies become permanently submerged beneath the sea, an arm of the sea, or a navigable lake as a result of natural forces such as erosion, subsidence,
or sea level rise, the State of Louisiana becomes owner of the submerged land and does not owe compensation to the former private owner. This conclusion is supported by the Louisiana Constitution, numerous revised statutes, and an unbroken line of jurisprudence dating back to the Louisiana Supreme Court’s seminal 1936 decision in *Miami Corp. v. State*. This conclusion is also consistent with American law outside of Louisiana, which provides that when the boundary between land and water moves gradually and imperceptibly landward, the legal boundary between privately owned land and public trust land moves along with it. It is time for Louisiana courts and the Louisiana legal community to recognize that under current law the State of Louisiana owns submerging land on its coast and does not owe compensation to coastal landowners who lose land because of erosion, subsidence, or sea level rise.