CHAPTER I

Submerged Lands Act (Public Law 31)

II. GENERAL STATEMENT

On May 22, 1953, H.R. 4198 of the 83d Congress, 1st session, was signed into law, thus marking the culmination of earlier unsuccessful attempts at legislation dealing with state and federal rights in submerged lands. The resolution, which became Public Law 31 (identified as the Submerged Lands Act),\(^1\) confirms and establishes the titles of the states to lands beneath navigable waters within their boundaries. The general scope of the act is described in its title as follows:

To confirm and establish the titles of the States to lands beneath navigable waters within State boundaries and to the natural resources within such lands and waters, to provide for the use and control of said lands and resources, and to confirm the jurisdiction and control of the United States over the natural resources of the seabed of the Continental Shelf seaward of State boundaries. (See Appendix G.)

Although attempts to enact such legislation date back to 1937, passage of the Submerged Lands Act was actually triggered by the Supreme Court’s historic decision in United States v. California, 332 U.S. 19 (1947), and its later decisions in United States v. Louisiana, 339 U.S. 699 (1950), and United States v. Texas, 339 U.S. 707 (1950), in which the Court enunciated the doctrine of federal, rather than state, paramount rights in the submerged lands of the open sea.

The effect of the act is thus to change the law which the Court laid down in the above cases, with respect to the submerged lands beyond the inland waters of the states,\(^2\) and to give statutory confirmation to the jurisdiction and

---

1. 67 Stat. 29 (1953). The resolution is in essence the same as H. J. Res. 225, 79th Cong., 2d sess. (1946) and S. J. Res. 20, 82d Cong., 2d sess. (1952), both of which were vetoed, neither veto being overridden by Congress. In this publication, the term “Public Law 31” is used interchangeably with “Submerged Lands Act.”

2. The committee, in reporting the resolution, stated: “The purpose of this legislation is to write the law for the future as the Supreme Court believed it to be in the past.” S. Rept. 133, 83d Cong., 1st sess. 8 (1953).
control of the United States over the resources of the subsoil and seabed of the continental shelf (seaward of the state boundaries) as asserted under the Presidential Proclamation of September 28, 1945 (see 2221). A necessary result of the act is to transplant the boundary between federal and state jurisdiction from the “ordinary low-water mark and the seaward limits of inland waters” to the “seaward boundaries of the states.” The former, however, is still the baseline (see Part I, 33) for measuring the seaward boundaries and therefore its essentiality of determination is not diminished as a result of passage of the act.

The act confers rights in three categories of cases: (1) lands under inland navigable waters, including the Great Lakes; (2) tidelands; and (3) lands

3. The Submerged Lands Act, however, does not set up the machinery for administering this area. This is provided for in Public Law 212, 83d Cong., 1st sess., known as the “Outer Continental Shelf Lands Act” (see Chap. 2).

4. Because of the existence of an international boundary in four of the Great Lakes (Ontario, Erie, Huron, and Superior), there was some doubt whether, under the doctrine of national external sovereignty, lands underlying these waters would fall within federal paramount rights. If such waters are inland, the rule of Pollard v. Hagan, 3 How. 212 (44 U.S. 1845), would apply and paramount rights would already be in the state (see Part I, 111); if they are open sea, the rule of United States v. California, supra, could apply and the land would then be federal. To eliminate any uncertainty, a provision confirming and establishing titles in the states was included. S. Rept. 133, supra note 2, at 7, 60–61. In the Senate debate on the measure, the case of Illinois Central Railroad Co. v. Illinois, 146 U.S. 387 (1893), involving submerged lands under Lake Michigan, was cited to uphold both theories. The Supreme Court upheld the right of the State of Illinois to repeal a prior grant of submerged lands in Lake Michigan to a railroad on the ground that the state held such lands in trust for the people and could not abdicate such trust by making an irrevocable grant. This, the Court held to be the settled law in this country regarding sovereignty over lands covered by tidewaters. The states may use or dispose of any portion of such lands "when that can be done without substantial impairment of the interest of the public in the waters" (citing Pollard v. Hagan, supra, and Weber v. Harbor Commissioners, 18 Wall. 57 (85 U.S. 1873)). In referring to the Great Lakes, the Court said: "These lakes possess all the general characteristics of open seas, except in the freshness of their waters, and in the absence of the ebb and flow of the tide. In other respects they are inland seas, and there is no reason or principle for the assertion of dominion and sovereignty over and ownership by the State of lands covered by tide waters that is not equally applicable to its ownership of and dominion and sovereignty over lands covered by the fresh waters of these lakes. . . . We hold, therefore, that the same doctrine as to the dominion and sovereignty over and ownership of lands under the navigable waters of the Great Lakes applies, which obtains at the common law as to the dominion and sovereignty over and ownership of lands under tidewaters on the borders of the sea." In United States v. Rodgers, 150 U.S. 349 (1893), the Supreme Court, in interpreting the term "high seas" as used in 4 Stat. 121 (1825), said: "If there were no seas other than the ocean, the term 'high seas' would be limited to the open, unenclosed waters of the ocean. But as there are other seas besides the ocean, there must be high seas other than those of the ocean . . . The term 'high seas' does not . . . indicate any separate and distinct body of water; but only the open waters of the sea or ocean, as distinguished from ports and havens and waters within narrow headlands on the coast." Id. at 354. As applied to the Great Lakes, the Court said: "The Great Lakes possess every essential characteristic of seas. They are of large extent in length and breadth; they are navigable the whole distance in either direction by the largest vessels known to commerce; objects are not distinguishable from the opposite shores; they separate, in many instances, States, and in some instances constitute the boundary between independent nations; and their waters, after passing long distances, debouch into the ocean." Id. at 356.

5. Neither the tidelands (lands between high- and low-water marks) nor the submerged lands under inland navigable waters were affected by the decisions in the submerged lands cases (see Part I, 111), nevertheless, proponents of the Submerged Lands Act were apprehensive regarding the Government's use of the term "qualified" in the California case, supra at 30, when referring to state ownership of lands under inland navigable waters, and included this provision as a safeguard against any future Government claims to these lands. S. Rept. 133, supra note 2, at 7. See also Clark, National Sovereignty and Dominion Over Lands Underlying the Ocean, 27 Texas Law Review 143 n.15 (1948) for a discussion of this aspect of the California decision.
under the open sea. Since the federal-state boundary under the act is seaward of the ordinary low-water mark and outside the inland waters of the state, the boundary problems likely to arise will be in this third category.

As an aftermath of the submerged lands cases, the Submerged Lands Act raises many boundary problems not unlike those considered by the Special Master in the California case, supra (see Part 1, 213). A discussion of the pertinent provisions of the act, and the impact of the Master’s recommendations on the boundary problems raised, are therefore appropriate in focusing attention on the legal-technical problems that still remain to be resolved before the seaward boundaries of the states and in consequence the boundary between federal and state jurisdiction in the area of the continental shelf can be ascertained with a measure of consistency, as well as with engineering and cartographic certainty.

12. PERTINENT PROVISIONS OF THE ACT

The Submerged Lands Act is divided into two titles: Title I deals with definitions of terms used, and Title II with lands beneath navigable waters within state boundaries.

In the following paragraphs, the pertinent provisions of the act are discussed insofar as they might relate to the activities of the Coast Survey in the present or in the future. They deal primarily with definitions of terms relating to boundaries and with boundaries proper and are based on the language of the act, the hearings before the Senate committee on S.J. Res. 13, the published report of the committee, and the debate on the Senate floor. 

121. LANDS BENEATH NAVIGABLE WATERS

Section 2(a) defines the term “lands beneath navigable waters” as including lands within three different categories, as follows:

“(1) all lands within the boundaries of each of the respective States which are covered by nontidal waters that were navigable under the laws of the United States at the time such State became a member of the Union, or acquired sovereignty over such lands and waters thereafter, up to the ordinary high water mark as heretofore or hereafter modified by accretion, erosion, and reliction.”

6. The Senate proceedings only are considered because they were the more extensive. Although the law as approved is H.R. 4138, actually everything but the title was stricken and S. J. Res. 13, 83d Cong., 1st sess. (1953) substituted. The latter was the measure passed by the Senate and the one that finally became law.
In explanation of this provision, it should be remembered that the basic consideration of the act is that the submerged lands must be under the navigable waters within the state boundaries. This applies to both inland waters and waters on the open coast. The section apparently applies to the inland waters of a state. Its purpose is to include not only those inland waters that are now navigable, but also those that were navigable at the time the state became a member of the Union or at any time thereafter that the state acquired sovereignty over them. The term "nontidal" is used in the act to separate inland water areas from areas on the open sea.  

"(2) all lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line of each such State and to the boundary line of each such State where in any case such boundary as it existed at the time such State became a member of the Union, or as heretofore approved by Congress, extends seaward (or into the Gulf of Mexico) beyond three geographical miles."  

This paragraph refers to the submerged lands under navigable waters beyond the inland waters of the states and includes the tidelands. It establishes a distance of 3 geographic miles from the coastline (coastline is subsequently defined) as the general offshore limit of the submerged lands that fall within the purview of the act. But it also provides that where the boundary of a state at the time it entered the Union, or as heretofore approved by Congress (that is, prior to the passage of the act), extended seaward beyond 3 geographic miles then the submerged lands to that distance fall within the operation of the act.  

"(3) all filled in, made, or reclaimed lands which formerly were lands beneath navigable waters, as hereinabove defined."

This paragraph extends the act to all lands, whether bordering on inland waters or on the open sea, that formerly were under navigable waters as defined in (1) and (2), above, and settles by statute what was left unsettled by the

7. S. Rept. 133, supra note 2, at 17, 18, and 99 Cong. Rec. 2632 (1953). The use of this term to distinguish inland waters from waters of the open sea, or navigable from nonnavigable waters, is inappropriate inasmuch as inland waters can be tidal, and navigable waters can be nontidal. Some light on the import of this subsection may be gathered from the change in the law of navigability in the United States as enunciated by the Supreme Court in the landmark case of The Genesee Chief v. FiskHugh, 12 How. 443 (53 U.S., 1851). Prior to this decision, the test of navigability of a body of water, at least so far as the federal admiralty jurisdiction was concerned, was whether the tide ebbed and flowed there. In the Genesee Chief, the Court expressly overruled its former decisions and adopted the more liberal rule that the test of navigability was the actual navigable capacity of the waterway and not the extent of tidal influence.  

8. But unilateral extension (without congressional approval) by a state of its seaward boundaries beyond 3 geographic miles would be ineffective to pass submerged lands to that distance. For example, Louisiana and Texas have extended their boundaries beyond 3 miles, but these have never been approved by Congress (see Part 1, 12 and 13). The paragraph must also be read together with Sec. 2(b) (see 122), which places a distance limitation seaward on the operative extent of the act.
Supreme Court in the submerged lands cases as to the effect on the boundary between federal and state jurisdiction where artificial changes in the low-water line had been made.  Although the low-water line under the act is merely a baseline for measuring the seaward boundaries, the effect of this provision is to shift the baseline seaward where fills had been made which in turn would shift seaward the state-federal boundary.

Certain lands under navigable waters are excluded from operation of the act. These are defined in Section 2(f), as follows:

“(f) The term ‘lands beneath navigable waters’ does not include the beds of streams in lands now or heretofore constituting a part of the public lands of the United States if such streams were not meandered in connection with the public survey of such lands under the laws of the United States and if the title to the beds of such streams was lawfully patented or conveyed by the United States or any State to any person.”

This section applies only to the public lands of the United States. The beds of certain streams are excluded from the act provided two conditions exist—the streams were not meandered in connection with the public survey and the title to the beds was conveyed by the United States or by a state. The existence of either of these conditions alone would not suffice to remove such lands from operation of the act.

Section 3 sets forth the basic Government policy with respect to “lands beneath navigable waters within state boundaries” as defined in Section 2. The pertinent portion is Section 3(a) which is the granting clause upon which the rights of the states under the act are based. It provides as follows:

“(a) It is hereby determined and declared to be in the public interest that (1) title to and ownership of the lands beneath navigable waters within the boundaries of the respective States, and the natural resources within such lands and waters, and (2) the right and power to manage, administer, lease, develop, and use the said lands and natural resources all in accordance with applicable State law be, and they are hereby, subject to the provisions hereof,

9. Normally, where the sea is a boundary only natural changes in the shoreline operate to change the boundary; artificial changes leave the boundary where it was prior to the change. The statutory declaration follows the recommendation of the Special Master in the California case, supra (see Part 1, 6422 B).

10. The act would seem to leave intact the normal rule regarding the effect on a boundary of natural changes resulting in accretion or erosion.

11. The theory back of this is to protect valid conveyances made prior to the passage of the act. But a patent or conveyance of land by the United States is not effective unless a survey has first been made, hence the conjunctive use of these two conditions.

12. The term “natural resources” is defined in Sec. 2(e) as including “oil, gas, and all other minerals, and fish, shrimp, oysters, clams, crabs, lobsters, sponges, kelp, and other marine animal and plant life but does not include water power, or the use of water power for the production of power.”
recognized, confirmed, established, and vested in and assigned to the respective States or the persons who were on June 5, 1950, entitled thereto under the law of the respective States in which the land is located, and the respective grantees, lessees, or successors in interest thereof."

When read together with other sections of the act, this portion of Section 3 provides that the rights of ownership of lands and natural resources beneath navigable waters within the historic boundaries of the states are vested in and assigned to the states or persons holding thereunder on June 5, 1950 (the date of the Supreme Court decisions in the Louisiana and Texas cases (see 12)). It authorizes the states to administer, develop, and use the lands and natural resources beneath navigable waters.\footnote{13}

\section*{122. Seaward Boundaries of the States}

Section 2(b) is the definitional section with respect to boundaries and provides as follows:

"(b) The term 'boundaries' includes the seaward boundaries of a State or its boundaries in the Gulf of Mexico or any of the Great Lakes as they existed at the time such State became a member of the Union, or as heretofore approved by the Congress, or as extended or confirmed pursuant to section 4 hereof but in no event shall the term 'boundaries' or the term 'lands beneath navigable waters' be interpreted as extending from the coast line more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or more than three marine leagues into the Gulf of Mexico."

This spells out the applicability of the act to the Great Lakes (see note 4 \textit{supra}). It also provides for a recognition of seaward boundaries as they existed when states entered the Union, or as Congress has heretofore approved, or as Section 4 of the act extends or confirms (see below). However, it places a definite limitation on distance from the coastline to which the act will apply, namely: 3 geographic miles (1 marine league) for states bordering the Atlantic

\footnote{13. Other portions of this section provide for the release of the right, title, and interest of the United States in the lands, improvements, and natural resources beneath navigable waters (Sec. 3(b)(1)); for the release of all claims of the United States for money or damages arising out of operations of states or persons holding thereunder on the lands beneath navigable waters (Sec. 3(b)(2)); for the United States to pay (with certain exceptions) to the respective states all moneys under its control which have been tendered to it under leases issued by the states (Sec. 3(b)(3)); and for the grants to the states being subject to the terms of state leases in force on June 5, 1950 (Sec. 3(c)). On this date, all coastal states were put on notice that the United States was possessed of paramount rights in submerged lands lying seaward of their respective coasts; the Submerged Lands Act forgives monetary claims arising out of the states' prior use of the lands so relinquished. But it does not affect claims derived since that date from lands not so relinquished.}
and Pacific Oceans, and 3 marine leagues (9 nautical or geographic miles) for states bordering the Gulf of Mexico.\textsuperscript{14}

Section 4 sets forth the basic philosophy of the act with respect to the seaward boundaries of the states and provides as follows:

\textbf{Sec. 4. Seaward Boundaries.—}The seaward boundary of each original coastal State is hereby approved and confirmed as a line three geographical miles distant from its coast line or, in the case of the Great Lakes, to the international boundary. Any State admitted subsequent to the formation of the Union which has not already done so may extend its seaward boundaries to a line three geographical miles distant from its coast line, or to the international boundaries of the United States in the Great Lakes or any other body of water traversed by such boundaries. Any claim heretofore or hereafter asserted either by constitutional provision, statute, or otherwise, indicating the intent of a State so to extend its boundaries is hereby approved and confirmed, without prejudice to its claim, if any it has, that its boundaries extend beyond that line. Nothing in this section is to be construed as questioning or in any manner prejudicing the existence of any State's seaward boundary beyond three geographical miles if it was so provided by its constitution or laws prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress.

This section is somewhat loosely drafted as a result of changes made in committee and during the Senate debate. The word “hereafter” was struck from the section, as well as from Sections 2(a) (2) and 2(b), in order to limit the act to those extended boundaries that had been approved by Congress prior to the passage of the act. It approves and confirms the boundaries of all states at 3 geographic miles from its coastline or to the international boundaries where such are involved—in the case of the Original States it establishes the boundaries at 3 miles or to the international boundary for those bordering the Great Lakes (New York and Pennsylvania) without any further action on their part;\textsuperscript{15} in the case of subsequently admitted states, it gives congressional authority for them to extend their boundaries, if they have not already done so, to such distances, and approves and confirms any claims indicating an intent so to extend their boundaries. These provisions are operational.

\textsuperscript{14} This limitation did not appear in the resolution as originally reported by the committee, but was added during the Senate debate in order to allay any apprehension that the act might be construed as authorizing states to extend their seaward boundaries in the future (with the consent of Congress) to distances far beyond the act's intent. 99 Cong. Rec. 3549–3553, 4114–4116 (1953).

\textsuperscript{15} In the Senate debate, Senator Cordon, chairman of the subcommittee for the measure, stated that the provision was inserted in order to settle legislatively “the seaward boundaries of the Original 13 States.” 99 Cong. Rec. 2697, 2698 (1953). The reason for the specific spelling out of the Original States is stated in the report on the measure to be that “the Supreme Court decision in United States v. California [332 U.S. 19 (1947)], has been thought by some persons to cast doubt on whether the boundary of various eastern seaboard States extends 3 miles seaward from their coastlines.” S. Rept. 133, supra note 2, at 11. This probably stems from the Court’s finding that the Original States never owned the marginal belt (see Part I, 112).
But boundary claims of a state beyond 3 miles are not prejudiced by this section, the last sentence of which, in the nature of a saving clause, sets out the conditions under which a state's right to assert a claim for extended boundaries will be preserved; namely, if the claim is founded upon a provision in a state constitution or statute that existed "prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress." 16

Like Section 2(a)(2), Section 4 must also be read together with Section 2(b), which limits the operational effect of the Submerged Lands Act to 3 marine leagues for states bordering the Gulf of Mexico (see text at note 14 supra). But the act of itself does not operate to extend boundaries beyond 3 geographic miles on any coast, and neither does it prejudice the rights of a Gulf state to establish such extended boundaries.17

As to the method of perfecting claims for extended seaward boundaries, the act does not provide. Presumably it could be by adjudication or agreement.18

Although the act contains many references to seaward boundaries of the states, nowhere is it specified as to the method to be used for establishing such boundaries, cartographically or otherwise (see 162).19

### 123. WHAT IS THE COAST LINE?

Repetitive references to "coast line" are made in Sections 2(a)(2), 2(b), and 4, and that is as far as the act goes toward determining the precise location

---

16. For an interpretation of this phraseology by the Supreme Court and its applicability to Gulf states, see 1541(a). There was some doubt whether the first part of this provision also applied to the Thirteen Original States or whether it was limited to subsequently admitted states only. Under colonial charters, some of the colonies claimed rather extensive sea boundaries. The Original Colonies formed the Union and thereby became members of it, and would seem to be covered. This view is supported by the colloquy during the Senate debate on the measure between Senator Cordon and others. 99 Cong. Rec. 2698 (1953). On the other hand, Senator Holland, the author of the measure, stated that this applies only to the State of Texas. 99 Cong. Rec. 3551 (1953). However, the limiting clause of Sec. 2(b) (see 122), which was added subsequent to these discussions, disposes of this matter and precludes any seaward extension by the Original States beyond 3 geographic miles.

17. It was stated by Senator Holland that all that is done under the measure is "to preserve in status quo the exact rights, whatever they may be, of the State of Florida and, likewise, of the State of Texas or any other State to be heard [in any forum where a State has a right to be heard] upon this question." 99 Cong. Rec. 2622 (1953).

18. It was stated by Senator Cordon: "It [determination of boundaries] is a matter for the courts to determine, or for the United States, through Congress and the legislative organizations of the several States, to reach an agreement upon. The pending bill does not seek to invade either province." 99 Cong. Rec. 2620 (1953).

19. Lateral boundaries between the states are also not provided for in the Submerged Lands Act because this is a matter of state rather than congressional concern. However, under the Outer Continental Shelf Lands Act, existing civil and criminal laws of the adjacent state are made to apply to the outer continental shelf and for this purpose the boundaries within the area are to be determined by extending the boundaries of the states "seaward to the outer margin of the outer Continental Shelf." This determination will thus depend upon the delimitation of the lateral boundaries of the respective states from shore to their seaward boundaries under the Submerged Lands Act (see 162).
of the federal-state boundary. In the context of the Submerged Lands Act, the term is defined in Section 2(c), as follows:

"(c) The term 'coast line' means 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." (See fig. 24.)

This is a rather general definition of the term which in its application to a specific coast would raise many problems of interpretation. In enacting Public Law 31, Congress declined to adopt the proposal that the definition of "coast line" be made more specific, or that an actual line be laid down on a chart marking the seaward boundaries of the states.

20. These will be considered in a later section of this chapter (see 161).

21. S. J. Res. 13, supra note 6, as originally introduced contained, in addition to the definition of "coast line" given in Sec. 2(c), a clause stating that inland waters were to include "all estuaries, ports, harbors, bays, channels, straits, historic bays, and sounds, and all other bodies of water which join the open sea." This language, however, was deleted in committee because of the belief that "the question of what constitutes inland waters should be left where Congress finds it." S. Rept. 133, supra note 2, at 18. Had this broad provision been approved it could have included every conceivable coastal indentation, and every channel and strait whether leading to inland waters or connecting two parts of the high seas, and would have, in effect, nullified the recommendations of the Special Master in the California case (see Part 1, 54).

22. The Attorney General had recommended that an actual line be drawn on a map separating the area of state jurisdiction from that of federal jurisdiction, the map to be filed with the act. Hearings before Committee on Interior and Insular Affairs on S. J. Res. 13 and other Bills, 83d Cong., 1st sess. 926 (1953).
In essence, the language of Section 2(c) is the same as that used by the Supreme Court in its decree defining the federal-state boundary in *United States v. California*, 332 U.S. 804, 805 (1947). And it was because of the generality of the language used that the Court later named a Special Master to make recommendations for defining the boundary more specifically (see Part 1, 2111). The applicability of these recommendations to the boundary problems raised by the Submerged Lands Act will be dealt with in succeeding sections.

13. OTHER PROVISIONS

Other provisions of Public Law 31, while not directly associated with boundary problems, are of indirect interest as shedding light on the purpose and scope of the act. These provide that the act shall not be construed as affecting or releasing any of the constitutional authority of the United States over the lands and waters falling within the purview of the act for purposes of navigation, flood control, or the production of power (Sec. 3(d)); shall not affect the laws of the states lying wholly or in part westward of the 98th meridian, relating to the ownership and control of ground and surface waters (Sec. 3(e)); shall not apply to those tracts of land, together with accretions, resources, and improvements, which the United States has acquired by the various methods of acquisition, or lawfully holds under the law of a state, or has been filled in, built up, or reclaimed by the United States for its own use, or any rights which the United States has in lands presently and actually occupied under claim of right (Sec. 5(a)); 28 and shall not apply to improvements constructed by the United States in the exercise of its navigational servitude (Sec. 5(c)).

The act provides for the retention by the United States of all its navigational servitude over the lands granted and the navigable waters for the purpose of commerce, navigation, national defense, and international affairs (Sec. 6(a)), and contains a saving clause whereby rights previously acquired under any law of the United States on lands subject to the act are not affected thereby (Sec. 8). It also provides for the protection of the rights of the United States to the natural resources of the continental shelf (outside state boundaries), which are declared to appertain to the United States, and confirms its jurisdiction and control over them (Sec. 9) (see 232).

The final section of the act is a separability clause and contains, in addition to the standard form of such clause, an additional clause indicating the specific

---

23. This section was inserted in order to give ample protection for properties of the United States which were not to be affected by the Submerged Lands Act. 99 Cong. Rec. 2699 (1953).
intention of Congress to hold valid the basic granting provisions of the act, as embodied in Sections 3(a), 3(b), or 3(c), in the event some provisions included therein should be held invalid (Sec. 11).

14. SUMMARY OF PROVISIONS

In summary, the basic philosophy of the Submerged Lands Act, insofar as boundaries are concerned, is to recognize the seaward boundaries of the states as they existed at the time they came into the Union—referred to in the debate on the measure as their "historic" boundaries. Of itself, the act does not confirm any boundaries beyond 3 geographic miles from the coastline, nor does it undertake to define where those boundaries are or by what criteria they are to be established. This it leaves for future determination by the courts or by agreement. In pertinent part, the act establishes the following:

1. Relinquishes to the states the entire interest of the United States in all lands beneath navigable waters within state boundaries.

2. Defines the area in terms of state boundaries as they existed at the time a state became a member of the Union, or as heretofore approved by Congress, but not extending seaward from the coastline of any state more than 1 marine league (3 geographic miles) in the Atlantic and Pacific Oceans or more than 3 marine leagues (9 geographic miles) in the Gulf of Mexico.

3. Confirms to each of the original coastal states a seaward boundary of 3 geographic miles from its coastline, or to the international boundary in the case of the Great Lakes. For states admitted subsequent to the formation of the Union, it permits them to extend their seaward boundaries 3 geographic miles distant from their coastlines, or to the international boundaries in the Great Lakes, if they have not already done so, without questioning or in any manner prejudicing the existence of any Gulf state's seaward boundary beyond 3 geographic miles if it was so provided by its constitution or laws prior to or at the time such state became a member of the Union, or if it has been heretofore approved by Congress.

4. Reserves to the United States, for purposes of commerce, navigation, national defense, and international relations, all constitutional powers of regulation and control over the areas within which the proprietary interests of the states are recognized; and retains in the United States all rights in submerged lands lying beyond those areas to the seaward limits of the continental shelf.

5. Defines "coast line," for purposes of measuring the seaward boundaries of the states, wherever they may be, 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."

15. CONSIDERATION BY THE SUPREME COURT

The Submerged Lands Act has been before the Supreme Court on two occasions—the first on a challenge to its constitutionality, and the second on an interpretation of certain boundary provisions. Both were initiated in the
Supreme Court and did not come up by way of the Court’s appellate jurisdiction, and both were decided on motions and briefs without the taking of testimony. 24

151. CONSTITUTIONALITY OF ACT

On September 26, 1953, the State of Alabama filed suit in the Supreme Court, naming as defendants the States of Texas, Louisiana, Florida, and California, in their sovereign capacities, and the Secretaries of the Treasury, Navy, and Interior, and the Treasurer of the United States, in their individual capacities, to test the constitutionality of the act. 25

The right of Congress to convey the offshore submerged lands to the bordering states was generally accepted as a valid exercise of authority vested under Article IV, section 3, clause 2, of the Constitution, which provides that “The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States.” And this power of Congress where applicable has been held to be without limitation (United States v. California, supra note 15, at 27, citing United States v. San Francisco, 310 U.S. 16, 29–30 (1940)).

The picture began to change somewhat by the Court’s emphasis in the Texas case on the inseparability of the dominium from the imperium, on the coalescence of property and political rights in the area of the marginal sea, and on the resulting diminution from the national sovereignty if Texas’ claim of title to the submerged lands seaward of low-water mark were to be recognized (see Part 1, 13). This gave some color to the belief that here may be an area of national interest over which the power of Congress to legislate might not be without limit. 26

24. This is the procedure that was followed in the California case, supra note 15 (see Part 1, 11). After the decision, the matter was referred to a Special Master to hold hearings and make recommendations for determining with greater particularity the federal-state boundary (see Part 1, 111).

25. A similar suit was filed by the State of Rhode Island on Dec. 21, 1953, against the same defendants and raising essentially the same challenge to the constitutionality of the act. There was thus presented to the Court a challenge to Public Law 31 from the point of view of one of the Original Thirteen States, and of one of the subsequently admitted states. Both cases were instituted on motions for permission to file a complaint, so that this phase of the proceedings was in the nature of preliminary hearings to be followed by more extensive hearings if the motions were granted. The Court consolidated the two cases into one opinion (see 152). A suit was also filed in the Federal District Court for the District of Columbia on July 8, 1953, by the State of Arkansas against the Secretary of the Interior, the Secretary of the Navy, and the Treasurer of the United States. The essence of the complaint was that Congress had exceeded its powers under the Constitution and that the act was in violation of the trust under which the submerged lands of the marginal sea were held by the United States for the benefit of all the states. This case never came to trial and became moot when the Supreme Court decided the Alabama and Rhode Island cases (see 152).

26. The point of constitutionality was raised in a somewhat different context by the Attorney General of the United States when he appeared before the Senate Committee holding hearings on the Submerged Lands Act. In a prepared statement, he said: “My recommendation would mean, in legal terms, that
Alabama raised two principal objections to the validity of Public Law 31. First, that it was an invalid exercise of the power of Congress to dispose of the public lands of the United States, because the submerged lands and the natural resources were held in trust for all the states and not merely for the four defendant states; and second, that it violated the equal-footing clause which guarantees equal rights to all states upon their admission to the Union. The latter was based on two grounds: (1) because the known valuable property interests were in the submerged lands off the coasts of the defendant states, Public Law 31, while appearing to give similar rights to the other coastal states, does not actually constitute equal treatment; and (2) because it permits certain coastal states along the Gulf of Mexico to perfect claims to the natural resources in the submerged lands and in the overlying waters for a distance of 3 marine leagues from the coastline, whereas Alabama would be limited to 1 marine league.\textsuperscript{28}

152. The Decision of March 15, 1954

On March 15, 1954, the Supreme Court denied the motions of Alabama and Rhode Island for leave to file their complaints challenging the constitutionality of the Submerged Lands Act. In a brief, \textit{per curiam}, opinion, the Court held, in effect, that the act is a valid exercise of the power granted to Congress under Article IV, section 3, clause 2, of the Constitution. In so doing, the Court said: “The power of Congress to dispose of any kind of property belonging to the United States is vested in Congress without limitation” (citing \textit{United States v. Midwest Oil Company}, 236 U.S. 459, 474 (1915)), and that “Congress not only has a legislative power over the public domain, but it also exercises the powers of the proprietor therein” and “may deal with such lands precisely as a private individual may deal with his farming property.” And it said further that the power over the public land is entrusted to Congress and

\textsuperscript{27} In support of this position, Alabama cited by analogy the case of \textit{Illinois Central Railroad v. Illinois}, supra note 4, as an indication of the criteria which the Supreme Court applied in determining whether a particular disposition of public property was a proper exercise of a public trust. The Court there held that a grant to a railroad company by the Illinois legislature of submerged lands extending for a considerable distance into Lake Michigan was invalid and hence revocable by a later Illinois legislature. Brief in Support of Motion for Leave to File Complaint and Complaint 43–44. \textit{Alabama v. Texas et al.}, Sup. Ct., Original, Oct. Term, 1953.

\textsuperscript{28} Brief, Alabama v. Texas et al., supra note 27, at 63–66. The limitation of 1 marine league as the boundary of Alabama was based on the assumption that it could not meet the conditions imposed by Public Law 31 for a seaward boundary beyond 3 miles. In \textit{United States v. Louisiana et al.}, 363 U.S. 1, 82 (1960), Alabama was denied a seaward boundary more than 3 geographic miles (see 1545).
"it is not for the courts to say how that trust shall be administered. That is for Congress to determine." \(^{29}\)

1521. Commentary

Although the decision upheld the general constitutionality of the Submerged Lands Act as a valid exercise of the power granted to Congress under the Constitution, the Court did not pass on the constitutionality of specific provisions of the act or the judicial construction to be placed upon the boundary provisions. \(^{30}\)

The decision cleared up any doubt that may have previously existed regarding federal "ownership" of the submerged lands under the paramount rights doctrine of the California case; for if ownership did not exist, Congress would have been powerless to convey them to the states. And this lends color to the theory that under the paramount rights doctrine something more than property rights was involved, rather than less, as had been suggested. \(^{31}\)

29. Alabama v. Texas et al., Rhode Island v. Louisiana et al., 347 U.S. 272–273 (1954). In a more extended concurring opinion, Justice Reed stated that the power of Congress to cede property to one state without cession to all states had been consistently recognized, and that the challenged cession to the states did not affect the power and responsibility of the United States as sovereign to protect against enemies in the area or resources ceded. \(\text{Id. at 275–276.}\) Justice Black, who wrote the majority opinion in the California case, and Justice Douglas, who wrote the majority opinion in the Louisiana and Texas cases, upholding federal paramount rights in the submerged lands seaward of low-water mark along the open coast, disavowed the summary denial by the Court of the right of Alabama and Rhode Island to file their complaints. In their view, if the original submerged lands cases presented a question suitable for judicial review, the present controversy also did and the two states should have been given full opportunity to challenge the act. \(\text{Id. at 278, 283.}\)

30. One aspect of the boundary problem was subsequently adjudicated by the Supreme Court in United States v. Louisiana et al., 363 U.S. 1 (1960) \(\text{(see 154).}\)

31. Alabama v. Texas et al., supra note 29, at 273. Whatever the reasoning of the Court in the California case as to how the Government acquired its interest in the submerged lands, the effect of the decision was to invest it with a proprietary interest. Otherwise, the Government could not exercise "full dominion over the resources of the soil under that water area, including oil," as was stated by the Court in that decision. Even Justice Frankfurter, in his dissenting opinion, stated that "it [the majority opinion] implies that the Government has some proprietary interest." United States v. California, supra note 15, at 39, 45. The Alabama case, supra, confirms this view. In United States v. Louisiana et al., supra note 29, at 9, 20, and 64, the Court refers to the Submerged Lands Act as a "grant" by Congress. But even more significant is the Court's statement that "Since the Act concededly did not impair the validity of the California, Louisiana, and Texas cases, which are admittedly applicable to all coastal States, this case draws in question only the geographic extent to which the statute ceded to the States the federal rights established by those decisions" \(\text{(id. at 7).}\) and the further statement that "except as granted by Congress, the States do not own the lands beneath the marginal seas" \(\text{(id. at 77).}\)

Since passage of the Submerged Lands Act, but prior to the decision in United States v. Louisiana et al., supra, cases have arisen in the lower courts construing the act as conferring title in the states as from the beginning. Thus, in People v. Heck, 179 Cal. App. 2d 825 (1960), the court said: "It is obvious from the language used in the act that Congress intended thereby only to declare that title to tidelands already vested in the state be 'recognized' and 'confirmed.' Thus, the court in Superior Oil Co. v. Fontenot, 213 F. 2d 565, in 1954, construed the act either as conferring title to tidelands in the state which it at all times had, or if it were regarded as conferring title, the title so conferred related back so as to confirm and maintain possession and title of the state as good from the beginning. The terms 'grant' or 'convey' are not employed in section 1311 \(\text{(43 U.S.C., Chap. 29).}\) and considering the status
The decision also cleared up the question of the nature of the submerged lands. In the Court's view they fall within the category of "public land" and are part of the "public domain." But the Court's holding cannot be completely reconciled with the doctrine of national external sovereignty—the rationale of the submerged lands cases (see Part 1, 112)—which the Court did not overrule. And in the Texas case, the Court enunciated the additional doctrine of the inseparability of the dominium and the imperium and the coalescence of the two in the national sovereign (see Part 1, 13). The Alabama case must therefore stand for the principle that the power of Congress over the public domain is so complete as to enable it to separate ownership from sovereignty and dispose of the ownership. This raises a question as to the equal-footing doctrine enunciated by the Court in the Texas case (see Part 1, 13). If it was necessary for Texas to surrender all her property and political rights in the marginal sea in order to enter the Union on an equal footing with the other states, as the Court there held, how could she get back some of those rights and still remain on an equal footing with the other states? This was posed by Justice Douglas in his dissenting opinion in the Alabama case.32

153. Seaward Boundaries of Gulf States

A second milestone in the history of the Submerged Lands Act was reached when the Supreme Court on May 31, 1960, pronounced its decision in the case of United States v. Louisiana, Texas, Mississippi, Alabama, and Florida, 363 U.S. 1, 121 (1960) (cited hereinafter as United States v. Louisiana et al.).

32. One possible explanation of this seeming contradiction would be that the Court in the Texas case had to find a rationalization for denying to Texas the control which as an independent republic she no doubt exercised over her marginal belt. If the principle of national external sovereignty was a valid one, then the conclusion was inescapable that it had to apply to every state whose shores were washed by the open sea, irrespective of any special status which a state may have enjoyed prior to its entry into the Union. To have carved out an exception in favor of Texas would have been an unexplainable incongruity and a challenge to the soundness of the California decision. The equal-footing doctrine seemed an adequate rationalization. It was a case of Texas voia a vis the rest of the coastal states. In the Alabama case, the principal issue was the constitutionality of the power of Congress to grant to the states the submerged lands in the 3-mile belt (this was the only specific grant made) and the grant was made to all coastal states; therefore, it was not a matter of equal footing. It was merely an extension of the Pollard inland water rule to the open coast (see 1541(b)). The Court was not considering claims to a wider belt in the Gulf, because the Submerged Lands Act merely allowed the Gulf coast states to establish claims to a wider belt—it did not grant such belt (see 1541(a)). The separation of the dominium from the imperium was apparently justified by the provision in Sec. 6 of the act that "The United States retains all its navigational servitude and rights in and powers of regulation and control of said lands and navigable waters for the constitutional purposes of commerce, navigation, national defense, and international affairs." This provision of the act was cited by Justice Reed in his concurring opinion. Alabama v. Texas et al., supra note 29, at 276.
Although the cases against the Gulf states were consolidated into one proceeding, a separate opinion is recorded for Florida in 363 U.S. 121. The specific issue raised in these cases was whether under the act any of the Gulf coast states were entitled to a grant of submerged lands greater than 3 nautical miles from the coastline.

The proceeding originated on December 19, 1955, with an action by the United States against the State of Louisiana, seeking to establish its right to the submerged lands and minerals underlying the Gulf of Mexico in the area beyond 3 geographic miles from the coastline of that state and extending to the edge of the continental shelf. The United States also sought an accounting for any sums of money derived by the state from that area after June 5, 1950.\(^\text{33}\)

After various preliminary procedures involving a suit by Louisiana in a state court against officials of the United States Department of the Interior, an interim agreement between the United States and Louisiana for continued development of the area, and an amicus curiae brief by Texas, the Supreme Court ordered the suit against Louisiana broadened to include all states bordering on the Gulf of Mexico.\(^\text{34}\)

The interim agreement entered into between the United States and the State of Louisiana on October 12, 1956, and filed with the Supreme Court, divided the submerged lands into four zones, with references to the Chapman line (see Part 1, 73 and 731). Zone 1 was the area lying seaward and within 3 geographic miles of the Chapman line; Zone 2 extended from the seaward limit of Zone 1 to a distance of 3 marine leagues from the Chapman line; Zone 3 was designated as the area extending from the seaward limit of Zone 2 to the seaward boundary line of the State of Louisiana as fixed and redefine by Act 33 of the Louisiana Legislature of 1954; Zone 4 comprised the area seaward of the seaward line of Zone 3 to the edge of the continental shelf.\(^\text{35}\)

\(^{33}\) This was the date of the Supreme Court's decisions in the Louisiana and Texas cases (see Part 1, 12).

\(^{34}\) In its order of June 24, 1957, the Court stated that "the issues in this litigation are so related to the possible interests of Texas, and other States situated on the Gulf of Mexico, in the subject matter of this suit, that the just, orderly, and effective determination of such issues requires that they be adjudicated in a proceeding in which all the interested parties are before the Court." United States v. Louisiana, 354 U.S. 515 (1957). For an account of the various proceedings and orders of the Court, see Brief for the United States in Support of Motion for Judgment on Amended Complaint, 3-5; United States v. Louisiana, Texas, Mississippi, Alabama, and Florida, Sup. Ct., No. 11, Original, Oct. Term, 1957.

\(^{35}\) This Act established Louisiana's coastline as coincident with the line established by the United States Coast Guard in Dec. 1953, for dividing the area along the Gulf coast where the Inland Rules of the Road apply from the area where the International Rules apply. 18 Fed. Reg. 7893 (1953).

\(^{36}\) The agreement recognized Zones 2 and 3 as the disputed area, Louisiana being granted exclusive supervision and administration as to Zone 2 and the United States as to Zone 4. The agreement provided for impounding all funds theretofore or thereafter accruing to the properties within the disputed area. (As of Jan. 31, 1962, some $350 million had accrued in this fund.) For a discussion of the federal-state agreement and the problems which it posed, see Lewis, The State-Federal Interim Agreement Concerning Offshore Leasing and Operations, 33 Tulane Law Review 331 (1959).
Both litigants were in agreement that the Submerged Lands Act granted rights to the states for a minimum distance of 3 geographic miles from the coastline. The point of difference was how far beyond 3 miles a Gulf coast state could claim.

Briefly, the Government contended that the act granted rights to a distance of more than 3 miles only to the extent that a Gulf state could show, in accordance with Section 2(b) of the act (see 122), either that it had a legally established seaward boundary in excess of 3 miles at the time of its admission to the Union, or that such a boundary was thereafter approved by the Congress prior to the passage of the act. It also contended that the act left it to the courts to ascertain whether a particular state had a seaward boundary meeting either of these requirements, and that the measure of the grant was a boundary which existed subsequent to a state’s admission to the Union, and not one which existed only prior to admission 37—in other words a boundary carrying the legal consequences of the event of admission. From this it concluded that since a state’s seaward boundary cannot exceed the national maritime boundary, no state could have had a seaward boundary greater than 3 geographic miles (the extent of the national boundary at all relevant times), regardless of what it may have claimed prior to admission as a state. But, irrespective of the extent of the national boundary, the Government contended that none of these states ever had a valid seaward boundary in excess of 3 miles, even prior to admission, and that no such boundary was thereafter ever approved by Congress for any state.

The states made several alternative arguments. On the one hand, they contended that the Submerged Lands Act ipso facto made a 3-league grant to all Gulf states, or at least that the act by its terms established the seaward boundary of some states, notably Texas and Florida, at 3 leagues. On the other hand, the states contended that if the extent of their boundaries “at the time” of admission was left to judicial determination, then the controlling question was what seaward boundary they had just prior to admission. But if the

37. The basis for this contention was that Secs. 2(a) and 2(b), the definitional sections, and Sec. 3(a), the granting section, being the operative provisions of the act, control the extent of the grant made to the states and neither of these make reference to boundaries prior to statehood but rather the definitional sections specifically refer to boundaries that existed at the time of statehood. In the Government’s view, the broader language of Sec. 4, which refers to boundaries “prior to or at the time” of admission (see 122), was used for a different purpose and did not enlarge the grant, it being merely an explanation that certain boundary claims, not approved by Sec. 4, were not thereby disapproved. Brief for the United States in Support of Motion for Judgment, supra note 34, at 47–49.

38. It was necessary for the Government to advance this alternative theory, in the event the Court did not sustain its national-state boundary identity theory, insofar as its application to the Submerged Lands Act was concerned.
act contemplated a boundary as fixed by the event of admission, then the states contended that Congress fixed for them a 3-league Gulf boundary, and that whatever may have been the extent of the national boundary at the time was an irrelevant factor. However, if the national maritime boundary was in any way relevant, then they contended it was in fact at all material times at 3 leagues in the Gulf.

154. The Decision of May 31, 1960

In an elaborate opinion, delivered on May 31, 1960, the Supreme Court held that Texas and Florida are entitled to rights in the submerged lands extending for a distance in the Gulf of Mexico of 3 leagues from their coastlines, but that Louisiana, Mississippi, and Alabama are entitled to rights extending no more than 3 geographic miles from their coastlines.

1541. Preliminary Findings

(a) Statutory Interpretations.—As a preliminary to its ultimate findings, the Court dealt first with issues common to all the Gulf states, and considered the statute on its face and the legislative history as revealed by the record, dat-

39. The particular claims of Texas, Louisiana, Mississippi, and Alabama depended upon their original admission boundaries and were treated by the Court in one opinion. The particular claims of Florida involved primarily its readmission boundary and were considered in a separate opinion. United States v. Louisiana et al., 363 U.S. 1, 13 (1960). Louisiana maintained that the Act of Congress admitting it to the Union described the state as "including all islands within three leagues of the coast" (2 Stat. 701, 702 (1812)) should be read to mean that Congress fixed as the state's seaward boundary a line 3 leagues from its coast. The terms of this act were practically identical with those of the Louisiana enabling act passed the year before (2 Stat. 641 (1811)). The contentions of Mississippi and Alabama were based upon claims similar to that of Louisiana, namely, that they entered the Union with 6-league boundaries by virtue of the enabling acts and the acts of admission describing their boundaries as "including all the islands within six leagues of the shore" (3 Stat. 348 (1817) for Mississippi, and 3 Stat. 489, 490 (1819) for Alabama). Texas contended that as an independent nation immediately prior to its admission it had a 3-league maritime boundary which existed at the time it became a member of the Union in 1845, and Florida asserted that Congress approved its boundary as extending 3 leagues in the Gulf by approving the state's constitution, which set forth a 3-league boundary (25 Fla. Stat. Ann. 414, 415 (1868)), and readmitting the state to representation in Congress in 1868 (15 Stat. 73).

40. This was predicated in the main on the fact that Article V of the Treaty of Guadalupe Hidalgo between the United States and Mexico, consummated in 1848, states, "The boundary line between the two republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande." 9 Stat. 926 (1848).

41. United States v. Louisiana et al., supra note 39, at 64, 79, 82, and 129. A variety of views was evoked by these cases, as is evidenced by the six opinions written. Justice Harlan wrote the majority opinion for the Louisiana, Texas, Mississippi, and Alabama cases, in which Justices Frankfurter, Brennan, Whitaker, and Stewart concurred. Justice Black wrote a separate opinion, concurring as to Texas' rights but dissenting as to the denial of similar rights to the other states. Justice Douglas was the lone dissenter in this case, being of the belief that the Court applied a standard test in the case of Texas, which if applied to Louisiana, Mississippi, and Alabama would also give them a 3-league boundary. In his view, the claim of Florida is fully established by the standard he would apply. Justice Black wrote the majority opinion in the Florida case which was concurred in by Justices Douglas, Frankfurter, Brennan, Whitaker, and Stewart, the last four writing a separate opinion. Justice Harlan was the lone dissenter in this case and wrote a separate opinion.
ing back to 1937. It held first that the terms of the act do not ipso facto grant the states submerged land rights of 3 leagues in the Gulf, and that the measure of the grant in excess of 3 miles depends entirely upon the location of a state’s original or later congressionally approved maritime boundary, subject only to the 3-league limitation.42

On the question whether the requirement of Section 2 of the act as to a boundary which “existed at the time such State became a member of the Union” was satisfied merely by showing a preadmission boundary, or whether that requirement contemplated a boundary that carried the legal consequences of the event of admission, the Court held the statute on its face to be inconclusive. It therefore went back to the legislative history of the act.43

The Court reviewed the history of the various attempts in Congress to secure legislation vesting in the states the ownership of offshore submerged lands under an application of the Pollard inland water rule (see Part I, 112) to the marginal sea.44 It found that from the very outset proponents of such legislation believed that all states were entitled to at least 3 miles of coastal submerged lands, but the various bills contained no definition of “boundaries” and it was apparently assumed that the boundaries of all states extended at least 3 miles. However, when the decision in the California case cast some doubt on whether any of the Original States ever had a boundary beyond its coast, a new section was added, similar to the second and third sentences of Section 4 of the Submerged Lands Act, permitting each state which had not already done so to extend its boundaries seaward 3 miles. The upshot of this was to confirm each coastal state’s boundary at 3 geographic miles which by the terms of the act carried with it rights in submerged lands to that distance from the coast.

As to rights in submerged lands beyond 3 miles, the Court found a clear understanding by Congress that the question turned on the existence of an

42. Id. at 13.
43. Id. at 13–16. In the Government’s view, the effect of congressional action could not be ignored because to do so would be to measure the boundary of a state by what it was prior to the time it became a member of the Union, and “at the time” cannot mean “prior to the time.” As an aid to construction of “at the time” in Sec. 2, the Government pointed to the disjunctive use of the phrase “prior to or at the time” in Sec. 4 (see 122), which in its view indicated that the use of the term “at the time” was intended to refer to the time after admission, otherwise the phraseology would be redundant. The states, on the other hand, contended that the meaning of “at the time” in Sec. 2 is explained or clarified by the last sentence of Sec. 4, so that a boundary “existed at the time such State became a member of the Union,” as used in Sec. 2, is satisfied if “it was so provided by its constitution or laws prior to or at the time such State became a member of the Union,” as used in Sec. 4. In other words, whatever the meaning of “at the time,” the existence of a state constitutional or statutory 3-league provision prior to admission would conclusively establish the boundary contemplated by the act, irrespective of the character of congressional action upon admission.
44. The Court took into account the legislative history of all bills prior to enactment of the Submerged Lands Act, as directly relevant to the latter because the purposes and phraseology of such bills and the objections raised against them were substantially the same. Id. at 17 n. 16.
expressly defined state boundary beyond 3 miles." Hence, while a 3-mile boundary was expressly confirmed for all coastal states, their right to prove boundaries in excess of 3 miles was preserved by the language in Section 4 of the act. And from repeated expressions of the act's sponsors, it was clear to the Court that no boundary in excess of 3 miles was fixed for any coastal state, but that a state would have to establish the existence of such a boundary in judicial proceedings, and any individual expressions of views as to the location of particular state boundaries could not serve to relieve the Court from making an independent judicial inquiry and adjudication on the subject, as contemplated by Congress.

The Court concluded that the two-fold test incorporated in the act—boundaries which existed at the time of admission and boundaries heretofore approved by Congress—indicated that congressional action surrounding the event of admission was relevant to the determination of present boundaries, and that the basic theory of the grant was to restore the states "to the ownership of submerged lands within their present boundaries, determined, however, by the historic action taken with respect to them jointly by Congress and the State." It noted also that the last sentence of Section 4 (see 122) of the act was added for the specific purpose of assuring that the boundary claims of Texas and Florida would be preserved, the first part of the sentence being intended to refer only to Texas' claim to a 3-league boundary. That claim, however, was asserted to rest not only on its statute but also on the action of Congress in admitting it to the Union. "If any doubt could remain," the Court said, "that the event of admission is a vital circumstance in ascertaining the location of boundaries which existed 'at the time' of admission within the meaning of the Submerged Lands Act, it is conclusively dispelled by repeated statements of its proponents to that effect." From the legislative record, therefore, the Court found that predetermination boundaries alone (as contended for by the states) do not suffice to meet the requirements of the Submerged Lands Act.

(b) The 3-Mile National Boundary.—The Court considered two aspects of this question, both having to do with the effect of the act on our dealings

45. Id. at 24. The Court noted that Congress was aware that several states claimed such an extended boundary, and cited specifically the claims of Texas, Florida, and Louisiana.

46. Id. at 26, where the Court refers to statements by President Eisenhower, Attorney General Brownell, Secretary of the Interior McKay, and Senators Connolly and Holland.

47. Id. at 28. In support of this, the Court cited the statement by Representative Willis of Louisiana regarding the nature of the inquiry it was contemplated the courts would have to make to ascertain the location of "historic boundaries," and his explanation of the term.

48. Id. at 29–30. The Court here cited the 1949 Senate Hearings, the 1953 Senate Hearings, and the Congressional Record.
with other nations—(1) permitting states to exercise rights in submerged lands beyond 3 miles, and (2) recognizing that the boundaries of some states might extend beyond 3 miles.\textsuperscript{49}

The Court held that the purposes of the act were purely domestic and it saw no irreconcilable conflict between the executive policy relied on by the Government and the historical events claimed to have fixed seaward boundaries for some states in excess of 3 miles.\textsuperscript{50} It concluded that, "consonant with the purpose of Congress to grant to the states, subject to the three-league limitation, the lands they would have owned had the Pollard rule been held applicable to the marginal sea, a state territorial boundary beyond three miles is established for purposes of the Submerged Lands Act by Congressional action so fixing it, irrespective of the limit of territorial waters."\textsuperscript{51}

In further support of its conclusion, the Court held that the power to admit new states resides in Congress, from which springs the power to fix state land and water boundaries as a domestic matter. And if the Pollard rule is applied to the marginal sea—the premise on which Congress proceeded in enacting the Submerged Lands Act—such a boundary, the Court said, would be similarly effective to circumscribe the extent of submerged lands owned by the state beyond low-water mark, even to the limits of the continental shelf.\textsuperscript{52}

This disposed of the Court's preliminary findings as to the meaning of certain boundary provisions of the act based on the legislative record. The next

\textsuperscript{49} As to the first, the deputy legal advisor of the State Department had given testimony before a congressional committee to the effect that exploitation of submerged lands involved a jurisdiction of a very special and limited character and was of such a nature as not to conflict with international law or the traditional position of the United States with respect to the extent of territorial waters. Id. at 30-31. As to the second, however, the State Department had repeatedly stressed that this country's consistent foreign policy would be violated if the bill recognized the effectiveness of the relied-on-historical events to fix boundaries beyond 3 miles, despite the State Department's refusal to recognize them. It had maintained that by virtue of federal supremacy in the field of foreign relations, the territorial claims of the states could not exceed those of the Nation. Id. at 31, 32.

\textsuperscript{50} Id. at 33. It was contended by the Government that the act left the ascertainment of state boundaries to be judicially determined, and because of federal supremacy in the field of foreign relations the judiciary must hold that the executive policy worked a decisive limitation upon the extent of all state maritime boundaries for purposes of the act. The Government supported its position respecting the Nation's adherence to the 3-mile limit by letters from the Secretary of State (printed in Brief for the United States in Support of Motion for Judgment, supra note 34, at 342-347). But the Court found it unnecessary for purposes of this case to decide whether the Secretary's letters would be conclusive upon the Court as to the existence of that policy.

\textsuperscript{51} United States v. Louisiana, supra note 39, at 35-36. It noted that a nation may extend its national authority into the adjacent sea to varying distances from its seacoasts and for various purposes—for example, for customs control, for enforcing sanitary measures, and for defense, such practices being recognized by international law. "A nation," the Court said, "which purports to exercise any rights to a given distance in the sea may be said to have a maritime boundary at that distance." Id. at 34.

\textsuperscript{52} Id. at 35. The Court found it unnecessary to decide at this time whether action by Congress fixing a state's territorial boundary more than 3 miles beyond its coast constitutes an overriding determination that the state, and therefore this country, are to claim that much territory against foreign nations. Ibid.
step was to ascertain what boundary was actually fixed for each of the defendant states in conformance with the criteria set by the Court.

1542. The Texas Decision

Texas, the only one of the defendant states which had the status of an independent nation immediately prior to its admission, contended that it had a 3-league maritime boundary which "existed at the time [it] became a member of the Union" in 1845. Whether that was so for the purposes of the Submerged Lands Act depended upon a proper construction of the congressional action admitting the state to the Union.

In considering the claims of Texas, the Court found it necessary to delve at length into its preadmission status and events following admission. The pertinent episodes of this history it found to be Texas' declaration of independence from Mexico on March 2, 1836 (1 Laws, Republic of Texas, 3-7); the act of December 19, 1836, passed by the Texan Congress to define its boundaries (referred to by the Court as the Texas Boundary Act); 53 the Convention of April 25, 1838, between the Republic of Texas and the United States, for establishing a boundary and the running and marking of same; 54 the joint resolution of Congress for the annexation of Texas; 55 and the Treaty of Guadalupe Hidalgo, which ended the war with Mexico and fixed the boundary between the United States and Mexico from the Gulf to the Pacific coast. 56

In considering these several historical events, the Court found that the circumstances surrounding the passage of the joint resolution of annexation made it clear that it was the understanding of Congress that the "properly" and "rightfully" clause of the resolution (see note 55 supra) was intended neither

53. The boundaries were described in part as "beginning at the mouth of the Sabine river, and running west along the Gulf of Mexico three leagues from land, to the mouth of the Rio Grande, thence up the principal stream of said river" (1 Laws, Republic of Texas, 133 (1836)). United States v. Louisiana et al., supra note 29, at 36. The full text of the boundary act is given at id. 36-37. This act remained in force up to the time of admission of Texas on Dec. 29, 1845, and the state constitution expressly continued in force from that time forward all laws of the republic not repugnant to the federal or state constitutions or the joint resolution of annexation. Id. at 37-38.

54. The convention read in part as "that portion of the said boundary which extends from the mouth of the Sabine, where that river enters the Gulph of Mexico, to the Red river." 8 Stat. 511 (1838). (See 1545 A for discussion and significance of this convention by Justice Douglas.)

55. This was signed by President Tyler on Mar. 1, 1845, and provided "That Congress doth consent that the territory properly included within, and rightfully belonging to the Republic of Texas, may be erected into a new State, to be called the State of Texas... Said State to be formed, subject to the adjustment by this government of all questions of boundary that may arise with other governments." 5 Stat. 797 (1845).

56. The treaty was signed Feb. 2, 1848, and provided in part (Art. V) as follows: "The boundary line between the two republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande, otherwise called Rio Bravo del Norte, or opposite the mouth of its deepest branch, if it should have more than one branch emptying directly into the sea." 9 Stat. 926 (1848).
as a legislative determination that the entire area claimed by Texas was legitimately hers, nor to serve, independently of the "adjustment" clause, as a self-operating standard for measuring Texas' boundaries. The precise fixing of the boundaries was left to future negotiations with Mexico.\textsuperscript{57} And the Court found that Texas, at least as to its land area, was admitted with undefined boundaries subject to later settlement. But this did not necessarily apply to Texas' seaward boundary. The Court noted in this respect that it was unable to find a single instance of significant advertence to the problem of seaward boundaries in the congressional debates on the resolution of annexation nor in a series of historical events involving boundaries that took place prior to annexation.\textsuperscript{58} None of these referred to a seaward boundary, but rather to the mouth of a river (the Sabine River or the Rio Grande) or on the Gulf. The most significant of these historic events was the Convention of 1838, in which Texas reaffirmed the 1819 and 1828 Treaties with Spain and Mexico regarding the boundary (see note 54 supra). Yet two years earlier, in 1836, and 1 month after Texas made the proposal for annexation (see note 58 supra), for some inexplicable reason, the Court said, the Texas Congress passed the boundary act (see note 53 supra) which provided for a 3-league boundary in the Gulf of Mexico.\textsuperscript{59}

From these circumstances, it was abundantly clear to the Court that "at the time Texas was admitted to the Union, its seaward boundary, though expressly claimed at three leagues in the 1836 Texas Boundary Act, had not been the subject of any specific concern in the train of events leading to annexation." And the Court said the controlling factor as to the boundary was the terms of the joint resolution of annexation. Although there was strong argument that the "properly," "rightfully," and "adjustment" clauses of the resolution (see note 55 supra) should be read as applying only to the land boundaries that were in dispute with Mexico and that the resolution was meant to validate any boundary asserted by Texas without protest, the Court said that since "the language employed in the Resolution is of general applicability . . . its language must be taken as applying to Texas' maritime boundary as well as to its land boundary."\textsuperscript{60} But this does not mean, the Court pointed out, that because

\textsuperscript{57} United States v. Louisiana et al., supra note 39, at 44. Congressional attention at the time was focused primarily on the great political questions attending annexation, such as slavery and the possibility of involvement with Mexico, and the question of boundaries received little consideration. \textit{Ibid.}

\textsuperscript{58} Id. at 47-49. These included treaties between the United States and Spain and Mexico in 1819 and 1828, the agreement between Texas and Mexico in 1836, the proposal by Texas in 1836 for annexation to the United States, and the Convention of 1838 between the United States and Texas.

\textsuperscript{59} United States v. Louisiana et al., supra note 39, at 48.

\textsuperscript{60} Id. at 50. It was urged that failure on the part of Congress or the Executive to protest Texas' claim to a 3-league maritime boundary constituted a validation of that claim upon admission.
Texas' maritime boundary was not settled at the time it entered the Union, it was fixed at 3 miles from the moment of admission by virtue of the foreign policy of the United States which fixed the extent of territorial waters at that distance. The reason for this is, the Court said, that "boundaries contemplated by the Submerged Lands Act are those fixed by virtue of Congressional power to admit new States and to define the extent of their territory, not by virtue of the Executive power to determine this country's obligations vis-a-vis foreign nations." 61

The inquiry then resolved itself into two questions: (1) Whether the 3-league maritime boundary asserted by the Republic of Texas embraced an area which was "properly included within, and rightfully belonging to" the Republic, and (2) whether such a boundary was ever fixed for the State of Texas pursuant to the power reserved by Congress to adjust "all questions of boundary that may arise with other governments." 62 As to (1) the Court said that the first clause of the resolution of annexation (the "properly" and "rightfully" clause), independent of the second clause (the "adjustment" clause), was not a self-executing standard for determining the land boundaries of Texas, which did receive consideration by the Congress. It would therefore be misleading to attempt to apply that clause alone as fixing the extent of Texas' maritime boundary, when that question was never considered. The Court therefore found it necessary to look to other events to determine where the Texas maritime boundary was fixed pursuant to the resolution of annexation. 63

The Court noted that both supporters and opponents of annexation acknowledged that the United States would probably negotiate on the basis of the Texas boundaries, as declared in her boundary statute. And it was clear to the Court that Congress, although it purposely refused to settle the question, anticipated that the Texas Boundary Act should and would be insisted on to the greatest degree possible in negotiations with Mexico. To support this, the Court cited statements in Congress by Representatives and Senators speaking to the joint resolution. In addition, it cited several official statements by the Executive and others made subsequent to the passage of the annexation resolution which indicated that the United States would maintain the claims of Texas regarding her boundary. But there was nothing in these statements

61. Id. at 51. Although, in the exercise of its power, the Executive may limit the enjoyment of certain incidents of a congressionally conferred boundary, it does not fix that boundary. "If, as in the case of Texas," the Court said, "Congress employs an uncertain standard in fixing a State's boundaries, we must nevertheless endeavor to apply that standard to the historical events surrounding admission." Ibid.

62. The quoted clauses are from the joint resolution of annexation (see note 55 supra).

63. The Court noted that Congress' failure to carry into the annexation resolution the boundaries fixed by the 1836 Texas Boundary Act did not foreclose the possibility that the state's boundary might ultimately be fixed according to that statute. Id. at 52.
Submerged Lands Act (Public Law 31)

to indicate that the Executive, any more than the Congress, was interested in the seaward boundary of Texas as claimed in its 1836 Boundary Act. The settlement of that matter therefore remained for future events.\textsuperscript{64}

The pertinent events began on April 15, 1847, when a commissioner was appointed to negotiate a peace treaty with Mexico, and culminated with the actual signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. In the projec of the proposed treaty and in the final treaty the boundary line between the two republics was stated as commencing "in the Gulf of Mexico three leagues from land opposite the mouth of the Rio Grande." (See note 56 supra.)\textsuperscript{65} The 3-league provision was reaffirmed 5 years later in the Gadsden Treaty of December 30, 1853, and subsequently in a long line of international conventions, and, the Court said, it has never been repudiated.\textsuperscript{66}

"The Treaty [of Guadalupe Hidalgo]," the Court said, "unquestionably established the Rio Grande from New Mexico to the Gulf as the land boundary not only of the United States but also of Texas, since the Executive, acting pursuant to the power given by Congress to 'adjust' Texas' boundaries in dealings with other nations, pressed that boundary against Mexico on the theory that it embraced territory rightfully belonging to the State of Texas.\textsuperscript{67} There is

\textsuperscript{64} Id. at 53-58. It was urged by the Government in explanation that the policy of the United States to claim only 3 miles of territorial waters was by this time firmly established. But the Court said "the Executive's responsibility for fixing the Texan boundary derived from a delegation of Congressional power to admit new States, not from the Executive's own power to fix the extent of territorial waters." These two powers can operate independently and only the first is determinative in the present case. While it might be expected, the Court said, that the Executive would take into account its own policy regarding territorial waters in fixing the congressionally mandated boundary, there is no suggestion from the data presented that such was actually the case. Rather, the evidence shows that the greatest concern of the President was "to maintain to the greatest extent possible the land boundaries claimed by Texas and disputed with Mexico, as anticipated by Congress." Id. at 57-58.

\textsuperscript{65} Id. at 58, 49. The Court noted that while there was considerable disagreement in the negotiations over the various land boundaries, the proposals of both parties never departed from the 3-league provision.

\textsuperscript{66} Id. at 60-61. The Compromise of 1850 by which the United States paid Texas $10,000,000 to relinquish its claim to a portion of New Mexico which the United States had acquired from Mexico under the Treaty of 1848, was the final step in the establishment of Texas' disputed land boundaries (9 Stat. 446 (1850)). In describing the boundary of Texas, the act states: "... thence on the said parallel of thirty-two degrees of north latitude to the Rio Bravo del Norte, and thence with the channel of said river to the Gulf of Mexico." The suggestion, the Court said, that the seaward boundary of Texas was thus fixed at the edge of the Gulf could not be maintained because this concluding phrase of the act describing the portion of Texas' boundary south of New Mexico was unnecessary, since Texas' western boundary south of New Mexico was already fixed by the Treaty of Guadalupe Hidalgo and there was nothing to compromise in 1850. This portion of the act could not therefore, without Texas' consent, affect the seaward boundary previously fixed for it. Id. at 59. The Court considered it noteworthy that the boundary commission appointed to survey the 3-league boundary in 1853 reported: "Lieut. Wilkinson, in command of the brig \textit{Morris}, repaired at the appointed time to the mouth of the river and made soundings . . . to trace the boundary, as the treaty required, 'three leagues out to sea,'" and noted the contrast between this statement and the notes of the surveyors of the boundary between Texas and the United States established by the 1838 Convention (see note 54 supra). The Journal of the Joint Commission which conducted the latter survey stated: "[W]e established the point of beginning of the boundary between the United States and the republic of Texas at a mound on the western bank of the junction of the river Sabine with the sea." Id. at 60. But see 1548(c) for a discussion of the actual survey of 1853.

\textsuperscript{67} Id. at 61. This is on the basis of the Texas Boundary Act (id. at 36).
nothing to indicate that the extension of that boundary three leagues into the
Gulf, pursuant to the very same Boundary Act, was treated on any different
basis. The portion of the boundary extending into the Gulf, like the rest of
the line, was intended to separate the territory of the two countries, and to
recognize that the maritime territory of Texas extended three leagues
seaward. 68

It was contended by the Government that the Treaty of Guadalupe Hidalgo
was of no significance in the present case because the line drawn 3 leagues out to
sea was not meant to separate territory of the two countries, but only to separate
their rights to exercise certain types of extraterritorial jurisdiction with respect
to customs and smuggling. 69 But the Court held the boundary referred to in
the treaty separated territory of the two countries, and that the Government's
explanation is "no more than after-the-fact attempts to limit the effect of a
provision which patently purported to establish a three-league territorial bound-
ary, so as to bring it into accord with this country's international obligations." 70

The Court therefore concluded that "pursuant to the Annexation Resolu-
tion of 1845, Texas' maritime boundary was established at three leagues from
its coast for domestic purposes," and therefore is entitled to a grant of 3 leagues
from her coast under the Submerged Lands Act. 71

1543. The Louisiana Decision

In passing on the claims of Louisiana to a 3-league seaward boundary, the
Court considered both preadmission and postadmission events. Louisiana's
preadmission history was relevant only to the extent that it aided in construing
the act admitting Louisiana to the Union. The postadmission events were for
the purpose of showing by the state that the United States established a 3-league
"national boundary" in the Gulf.

68. Id. at 61. The Court noted that although the Submerged Lands Act requires a state's boundary
in excess of 3 miles to have existed "at the time" of its admission, the phrase was intended to define a
present boundary by reference to the events surrounding its admission. It thus includes a boundary fixed
pursuant to a congressional mandate establishing the terms of a state's admission, even though the final
execution of that mandate occurred a short time subsequent to admission. Id. at 61-62.

69. Id. at 62. To support this, the Government relied on certain diplomatic correspondence which
was intended to show that at most the boundary provision recognized the territory of the two countries as
extending 3 leagues from the coast in only one area adjacent to the international boundary. Ibid.

70. Id. at 63, 64. The right of the Executive to limit the effect of a treaty provision in its dealings
with other countries, is not doubted, the Court said, but not where the treaty touches upon relationships
between the Nation and a state created by a congressional mandate. The original purport of the treaty
must control.

71. Id. at 64. The Court intimated no view on the effectiveness of such a boundary as against other
nations,
Louisiana's claims, like those of Texas, were based on the contention that it had a 3-league maritime boundary which existed "at the time" it was admitted to the Union in 1812. The act of admission described the boundaries of the state as "beginning at the mouth of the river Sabine." It then described the western, northern, and eastern boundaries "to the gulf of Mexico; thence, bounded by the said gulf, to the place of beginning, including all islands within three leagues of the coast." 72

The crucial question before the Court was the interpretation of the phrase "including all islands within three leagues of the coast." Did it mean that Congress fixed the state's seaward boundary as a line 3 leagues from its coast, as contended by the state, or did it include only the islands themselves within that distance and not all waters within that distance as well, as contended by the Government? 73

On the basis of the act of admission itself, the Court held, the language appears to support the view that Louisiana is not entitled to a boundary that includes the waters within 3 leagues of the coast, but rather no territorial sea whatever. The Court said: "The boundary line is drawn down the middle of the river Iberville 'to the Gulf of Mexico,' not into it for any distance. The State is then to be bounded 'by the said gulf,' not by a line located three leagues out in the Gulf, 'to the place of beginning,' which is described as 'at the mouth of the river Sabine,' not somewhere beyond the mouth in the gulf." (Emphasis by Court.) 74

Louisiana's preadmission history was relevant only to the extent that it aided in construing the act of admission. The burden of the state's argument was that the boundaries fixed under the act of admission comprised the area of the Louisiana Purchase which in turn went back through cessions by France to

72. 2 Stat. 701, 702 (1812). The terms of this act were practically identical with those of the Louisiana enabling act, passed the year before, 2 Stat. 641 (1811).

73. It was conceded by the Government that all the islands which are within 3 leagues of Louisiana's shore are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters (this is based on the rule expounded in Mahler v. Norwich and New York Transportation Co., 35 N.Y. 352 (1866)), and Louisiana would be entitled to the lands beneath those waters under the rule of Pollard's Lessee v. Hagan, 3 How. 212 (44 U.S., 1845). United States v. Louisiana et al., supra note 39, at 67.

74. Id. at 67. The Court noted that similar language ("comprehending all islands within twenty leagues of any part of the shores of the United States") was used in the Treaty of Paris of Sept. 3, 1783 (8 Stat. 82), by which Great Britain recognized the independence of the United States, yet 10 years later President Jefferson, observing that claims to control of the sea beyond 20 miles had not been recognized among maritime nations, proposed that a 3-mile limit should be placed upon the extent of territorial waters. In the light of this, the Court held it to be inconceivable that the treaty intended to establish United States territorial jurisdiction over all waters within 20 leagues of the shore. The Court also noted the act defining the boundaries of Georgia, which claims 3 miles of marginal sea but "all the islands within 20 marine leagues of the seacoast." These examples were sufficient evidence to show that language claiming all islands within a certain distance of the coast is not meant to claim all the marginal sea to that distance. There appeared to the Court no reason for reading the Louisiana statute differently. Id. at 68, 69.
Spain and Spain to France to what was first claimed for France by La Salle in 1682, and that such area originally extended some 120 miles into the Gulf. But the Court found nothing in the documents submitted or the events on which Louisiana relied to indicate that its preadmission territory extended any distance in the Gulf. Rather it found that, consistently with the act of admission, it stopped at the coast and did not embrace any marginal sea. 78

Louisiana also advanced the theory that about the time of its admission, the United States was claiming 3 leagues of territorial waters in the Gulf, and that the act of admission was framed with reference to that claim. But the Court said that even though it be assumed that under international law the United States could have claimed 3 leagues in the Gulf, it could not conclude that Congress meant to define Louisiana's boundaries by reference to such a rule. The terms of the act of admission seem to point strongly to the contrary. 78

As to the postadmission events having any relevance to Louisiana's claims, the Court said that under the Submerged Lands Act, Louisiana's boundary must be measured at the time of her admission, unless a subsequent change was approved by Congress. And since the act of admission fixed the boundary at the shore, it was immaterial what boundaries were fixed for other states or what the executive policy was on the extent of territorial waters. 77

75. Id. at 71. The area which includes the present State of Louisiana was first claimed for France by La Salle in 1682, as extending southward "as far as [the Mississippi's]...mouth in the sea, or Gulf of Mexico, about the twenty-seventh degree of the elevation of the North Pole." It was apparent to the Court that what La Salle was claiming was the mouth of the Mississippi, which he mistakenly thought was at the 27th parallel, or a distance of some 120 miles south of the mouth. Other documents also indicated that the river mouth defined the extent of the claim and that the territory included no marginal sea whatever. Id. at 71, 72.

76. Id. at 75. The Court also found it significant that only a few years later the act admitting Mississippi and Alabama to the Union described their boundaries as including all islands within 6 leagues of the shore (see 1544 and 1545). "If the three-league provision in Louisiana's Act of Admission was intended to reflect a policy of claiming three leagues of territorial waters, it is difficult to understand why Congress, so shortly thereafter, should have incorporated a six-league limit in an otherwise identical provision." Ibid.

77. Id. at 76. Louisiana had urged that certain of these events subsequent to admission must be considered in construing the act of admission—for example, (1) the 3-league boundaries fixed for Texas and Florida indicated an intent by Congress to treat Louisiana equally; (2) certain treaties entered into from 1819 to 1838 by the United States with Spain, Mexico, and the Republic of Texas; and (3) acts of sovereignty exercised by Louisiana over the marginal sea and seabed which were acquiesced in by the Government, indicating a practical construction of Louisiana's act of admission. As to (1) the Court said it indicated no consistent congressional policy and cited the acts of admission for Mississippi and Alabama shortly after Louisiana was admitted which according to Louisiana's own construction would be different than 3 leagues (see note 76 supra). Not does the concept of equal footing require such a conclusion, for the Court said, while ownership of certain lands within state boundaries is an inseparable attribute of sovereignty, the geographic extent has nothing to do with political equality, and this applies especially to "maritime boundaries beyond low-water mark, since, except as granted by Congress, the States do not own the lands beneath the marginal sea." (Citing United States v. California, supra note 15, and Alabama v. Texas et al., supra note 29.) As to (2), the Court said, the language of the treaties refute this contention since they speak of beginning "on the Gulf of Mexico." As to (3), the Court said, they do not have the effect urged by Louisiana. They indicate only that until the 1930's the Federal Government may have believed that lands beneath the marginal sea may have belonged to the states. Id. at 76-78.
Submerged Lands Act (Public Law 31)

On the whole, therefore, the Court concluded that Louisiana was “entitled to submerged-land rights to a distance no greater than three geographic miles from its coastlines, wherever those lines may ultimately be shown to be.”

1544. The Mississippi Decision

In the light of the Court’s limitation of Louisiana’s rights under the Submerged Lands Act to a distance of 3 nautical miles from its coastline, it was natural for the Court to reach the same conclusion as to Mississippi. By the Act of March 1, 1817, Congress authorized the creation of the State of Mississippi, specifically setting out its boundaries, in part, as follows: “thence due south to the Gulf of Mexico, thence westwardly, including all the islands within six leagues of the shore, to the most eastern junction of Pearl river with Lake Borgne.” (Emphasis by Court.) This provision is similar, except for the distance, to the one in the Louisiana act of admission which the Court held did not mean to establish a boundary line that distance from shore including all waters and submerged lands as well as all islands. The Court found nothing in Mississippi’s history to cause it to depart from this holding and concluded that “Mississippi is not entitled to rights in submerged lands beyond 3 geographic miles from its coast.”

1545. The Alabama Decision

The act admitting Alabama to the Union incorporated the enabling act, which described its boundary, in part, as follows: “thence, due south, to the Gulf of Mexico; thence, eastwardly, including all islands within six leagues of the shore to the Perdido river.” This is essentially the same as was included in the acts admitting Louisiana and Mississippi. The Court therefore held that “Mississippi is not entitled to rights in submerged lands beyond 3 geographic

78. Id. at 79. It was urged by Louisiana, as part of the postadmission history explaining the act of admission, that its 1954 statute (Act 33 of 1954, La. Rev. Stat. 49:1) establishing the state’s boundary at 3 leagues seaward of the line between inland and open waters was in conformity with regulations promulgated by the United States Coast Guard (see note 35 supra) and should be accepted as establishing Louisiana’s coastline for the purposes of the Submerged Lands Act. But the Court said the consideration of this contention should be postponed to a later stage of the case (see 161). Ibid.

79. 3 Stat. 348 (1817). The Mississippi Constitution, approved by the act admitting the state to the Union on Dec. 10, 1817 (3 Stat. 472), contained an identical provision.

80. United States v. Louisiana et al., supra note 39, at 81; 82. Mississippi had urged that the draftsmen of the provision in the enabling act must have intended to include all waters and submerged lands within 6 leagues from shore because the waters are very shallow and the islands are constantly shifting. But the Court said this merely strengthens the conclusion that it was islands upon which the provision focused, and not waters where there were no islands. Id. at 82.
to Alabama and hence "is not entitled to rights in submerged lands lying beyond three geographic miles from its coast." 81

A. JUSTICE DOUGLAS' DISSENT

Justice Douglas agreed with the majority of the Court that nothing was done at or subsequent to the act of admission to approve Texas' claim to a seaward boundary of 3 leagues from land unless it was the Treaty of Guadalupe Hidalgo. But he took an opposite view on the effect of that treaty on the boundary of Texas. That treaty established a boundary line between Mexico and the United States and he could not accept the view that the United States sat at that conference table negotiating for Texas and her boundary claim. 82

The Treaty of Guadalupe Hidalgo, in Justice Douglas' opinion, had never been considered to have played any part in determining the Texas boundary question. He cited the case of United States v. Texas, 162 U.S. 7 (1896), where it was held that the boundary between the United States and Texas was not defined when she was admitted to the Union, but was settled by the Compromise of 1850. That compromise fixed the boundary of Texas as running with the channel of the Rio Grande "to the gulf of Mexico." 83 Thus, on the two occasions when the United States and Texas negotiated and agreed upon boundaries (the 1838 Convention and the 1850 Compromise) no extension of the Texas territory into the Gulf was recognized. From this, Justice Douglas concluded that the seaward boundary of Texas must have been so inconsequential as to require or receive no settlement, and therefore in terms of Section 4 of the Submerged Lands Act (see 122) the boundary of Texas reserved for later adjudication when Texas was admitted to the Union (see note 55 supra) was on its seaward side never approved by Congress to be 3 leagues from shore.

81. Ibid. The preadmission history of Alabama the Court found to be essentially the same as that of Mississippi.
82. Id. at 102. Justice Douglas found nothing in the history of the negotiations to indicate that the United States had moral or legal claim to the 3-league belt because of the earlier claim of Texas, nor did he find any suggestion that the United States claimed derivatively from the right of Texas, thus approving the claim made by Texas in her Boundary Act of 1836 (see note 53 supra). He cited treaties with Spain and Mexico made prior to Texas' admission and the Convention of 1838 between the United States and Texas (see note 54 supra), all of which referred to the "mouth of the river Sabine," and made no mention of a boundary 3 leagues in the Gulf (see text following note 58 supra). The agreement to fix the boundaries of Texas, he said, was not derived from Texas' unilateral act of 1836 but by the Convention of 1838 which required the seaward boundary to extend from "the mouth of the Sabine, where that river enters the Gulph of Mexico," pursuant to which a joint commission in 1840 surveyed and actually marked the boundary between the United States and the Republic of Texas at the mouth of the Sabine River. Id. at 102, 103.
83. Id. at 106-107. It was pointed out by Justice Douglas that drawing the line "to the Gulf of Mexico" was a far cry from drawing it to a point "three leagues from the shore." In the majority opinion, it was stated that this concluding phrase was unnecessary because Texas' western boundary south of New Mexico was already fixed by the Treaty of Guadalupe Hidalgo. Id. at 61.
He regarded as speculative the majority view that although the State Department in 1848 was wholly insensitive to the problem of a seaward boundary it was nonetheless trying to stand in the shoes of Texas and get Mexico to validate the old boundary claims of Texas. Much less speculative, in his view, was the explanation given to Great Britain in 1875, by the then Secretary of State, that the 3-league provision in the treaty with Mexico was prompted by the Act of March 2, 1799 (1 Stat. 668)—an act to regulate the collection of duties on imports and tonnage, and designed for the same purpose, that of preventing smuggling. In support of this, Justice Douglas cited a series of treaties between Mexico and other countries concluded in the latter half of the 19th century indicating a practice of exercising extraterritorial regulation beyond the 3-mile limit with respect to customs and smuggling.

“It seems apparent from this history,” Justice Douglas said, “that the United States in negotiating the Treaty of Guadalupe Hidalgo was far from determining that the metes and bounds of our property on the seaward side of the Gulf ran to three leagues. The three-league provision in purpose and presumed effect had quite a different aim. It had no aim to assert derivatively a title that Texas had claimed. Its aim was merely to mark a zone where, so far as the two contracting parties were concerned, our law enforcement agencies could maintain effective patrols.”

B. JUSTICE BLACK’S DISSENT

Justice Black concurred in the majority opinion as to Texas but dissented as to the States of Louisiana, Mississippi, and Alabama. He based this dissent on his reading of the Submerged Lands Act and its legislative history. In his

84. Id. at 110–112. Section 24 of the act provided that “it shall be lawful for all collectors, naval officers, surveyors, inspectors, and the officers of the revenue cutters . . . to go on board of ships or vessels in any port of the United States, or within four leagues of the coast thereof, if bound to the United States . . . for the purpose of demanding the manifests . . . and of examining and searching the said ships or vessels.”

85. Id. at 112–115. Justice Douglas observed that if the term “boundary” in the Treaty of Guadalupe Hidalgo meant “boundary” in the technical property sense, it would mark a line that separated the territory of the United States and Mexico and establish a territorial claim good against every country. But this theory, he said, is negatived by the explanation given to Great Britain shortly after the treaty was concluded that “the treaty can only affect the rights of Mexico and the United States,” and by the protest made in 1935 by the United States against an extension by Mexico of its territorial waters from 3 to 9 nautical miles. Id. at 115, 116.

86. Id. at 116. He noted, in this regard, that the Gulf presents peculiar problems due to the shallowness of its waters, which were well documented in 1848. “These,” he said, “are the persuasive facts behind the creation of the three-league belt by the Treaty of Guadalupe Hidalgo and by Mexico in the other treaties concerning the Gulf which she negotiated with other nations.” Regarding the claims of Louisiana, Mississippi, and Alabama, he agreed that they have not met the burden of proof, if the degree of proof of ownership which is ordinarily required in title disputes is applied. “But if standards and requirements as lax as those used to grant Texas three leagues from shore are sufficient for her,” he said, “they should be sufficient for these other three states.” The standard which the Court applied to Florida is what he would have applied to Texas (see 1546). Id. at 118–119, 120.
view, Congress accepted the Supreme Court’s holdings in the California, Louisiana, and Texas cases as declaring the then existing law—that these states had never owned the offshore lands—but believed that all coastal states were equitably entitled to keep all the submerged lands they had long treated as their own, without regard to technical legal ownership or boundaries.\(^{87}\)

In referring to the constitutions of these three states defining their coastal boundaries as extending from one Gulf point to another “including all islands” 3 or 6 leagues from the shore or coastline, he said the legislative history of the Submerged Lands Act showed that these definitions were repeatedly called to the attention of Congress as a reason why the Gulf states should be granted 3 leagues or more.\(^{88}\) Each constitutional definition, according to Justice Black, provided some color of title for each state’s claim to a boundary extending at least 3 leagues from its coastline, especially since for more than 100 years the Gulf states exercised the only possession, dominion, and sovereignty over the submerged lands that was ever exercised at all. To grant to Texas and Florida ownership over 3-league marginal belts while denying it to their sister states bordering the Gulf, appeared to him fundamentally unfair and bound to frustrate the intent of Congress to settle the whole Gulf states controversy at this time.\(^{89}\)

87. Id. at 85, 86. Justice Black makes the point that the statute neither defines the kind of “boundary” which is to measure Congress’ grants to the Gulf states, nor particularizes the criteria for deciding it. He does not accept the Government’s view that each state must show a “legal” or “legally accepted” boundary (the limit of territory) as of the date it came into the Union. To do so, in his opinion, would in effect be overruling the California, Texas, and Louisiana cases. In his view of the statute, it was the intent of Congress to allow the rights of the states to be determined under established equitable, rather than strictly legal, principles. In support of this he cited extracts from the Senate report on the measure as well as statements by various Senators during committee hearings and on the Senate floor. Id. at 89–92.

88. Id. at 96. In this connection, Justice Black stated: “From the beginning of the congressional hearings on the matter of the submerged lands, it has been clear to Congress that all the Gulf States’ constitutional definitions of their boundaries have been a basis of their claims, without regard to the slight differences in language.”

89. Id. at 97, 98. Justice Black stressed particularly the plight of Louisiana under the Court’s holding. He stated that Louisiana had leased land out more than 3 leagues from its coastline as early as 1920 and that the income from the royalties had become a part of the very life of the state and constituted a large part of the support of its school system. He concluded that the action of the Court was incompatible with the kind of justice and fairness that Congress wanted to bring about by the Submerged Lands Act. Id. at 98–100. But see the concurring majority opinion of Justice Frankfurter (joined by Justices Brennan, Whitaker, and Stewart) in which he states that Congress did not determine the existence of a boundary for any state beyond 3 miles either explicitly or by implied approval of a claim presented to it in the course of the legislative process. “Nor,” he said, “did Congress vest this Court with determination of a claim based on ‘equity’ in the layman’s loose sense of the term, for it could not. Congress may indulge in largess based on considerations of policy; Congress cannot ask this Court to exercise benevolence on its behalf.” Id. at 130. Following the Court’s decision of May 31, 1960, several bills were introduced in the House and Senate to amend the Submerged Lands Act so as to establish the seaward boundaries of Alabama, Mississippi, and Louisiana as extending 3 marine leagues into the Gulf of Mexico and providing for the ownership and use of the submerged lands within such boundaries, effective as of May 22, 1953. In the 86th Cong., 2d sess., H.R. 12964 and S. 3857 were introduced; in the 87th Cong., 1st sess., H.R. 406 was introduced on Jan. 5, 1961, and H.R. 6605 on Apr. 25, 1961; in the 87th Cong., 2d sess., H.R. 10942 was introduced on Feb. 1, 1962. Thus far (Mar. 1962), the bills have not been acted on.
1546. The Florida Decision

The burden of Florida’s claim to ownership of 3 leagues of submerged lands was based on two considerations: (1) its boundary extended 3 leagues or more seaward into the Gulf when it became a state, and (2) Congress approved such a boundary after its admission into the Union and prior to the passage of the Submerged Lands Act. The Court based its decision on Florida’s second contention and it was unnecessary for it to decide the boundaries of Florida at the time it became a state.\textsuperscript{90}

The decisive question before the Court was whether Congress approved the Gulf boundary of Florida at “3 leagues from land” when it approved the 1868 Florida Constitution which was written and adopted pursuant to the Reconstruction Acts passed the year before.\textsuperscript{91}

The Court found that when Florida’s Constitution was submitted to Congress it was much debated and, thereafter, on June 25, 1868, another act was passed authorizing the admission of Florida “to Representation in Congress” (15 Stat. 73). It also found that Congress not only approved Florida’s Constitution which included 3-league boundaries, but Congress in 1868 approved it within the meaning of the 1867 Reconstruction Acts. This approval seemed to the Court to be precisely the kind of approval contemplated by the Submerged Lands Act.\textsuperscript{92}

The Court held that the legislative record showed that Florida’s Constitution was referred to the Committee on Reconstruction and copies were printed for the use of the House, and while it could not know, for sure, whether all or any of the Congressmen or Senators gave special attention to Florida’s boundary description, it was sure “that this [Florida’s] constitution was examined and approved as a whole, regardless of how thorough that examination may have been, and we think that the 1953 Submerged Lands Act requires no more than

\textsuperscript{90} United States v. Florida, 363 U.S. 121, 123 (1960). In the Submerged Lands Act, the two provisions are in the disjunctive (see 122), hence proof of only one was all that was required.

\textsuperscript{91} Id. at 123, 124. These acts required “examination and approval” of the constitutions as a prerequisite to readmission to congressional representation. The Florida boundary is described in Art. I of its 1868 Constitution (25 Fla. Stats. Ann. 411, 413). It provided in relevant part as follows: “... thence southeastwardly along the [Atlantic Ocean] coast to the edge of the Gulf Stream; thence southwardly along the edge of the Gulf Stream and Florida Reefs to and including the Tortugas Islands; thence northeasterly to a point three leagues from the mainland; thence northwesterly three leagues from the land, to a point west of the mouth of the Perdido river; thence to the place of beginning.” (Emphasis by Court.) The Florida Constitution of 1868 (25 Fla. Stats. Ann. 449) is its current constitution, and contains language identical to the above to describe its 3-league boundary.

\textsuperscript{92} United States v. Florida, supra note 90, at 125. The Government contended that the readmission enactments did not contemplate and Congress did not make a general scrutiny of all the provisions of the state constitutions, but only that they were duly adopted and were republican in form. It cited in support of this many references to debates. On the other hand, the Court noted that Florida pointed out many other remarks which indicated a much closer examination of the state constitutions.
It, therefore, concluded that “the Submerged Lands Act grants Florida a three-marine-league belt of land under the Gulf, seaward from its coastline, as described in Florida’s 1868 Constitution.”

A. JUSTICE HARLAN’S DISSENT

In Justice Harlan’s view, neither the Court’s opinion nor the concurring opinion set forth adequately the nature of the question left by the Submerged Lands Act to be decided. The further, and controlling inquiry, he believed, that must be made was whether the legal effect of such action was to establish a valid 3-league boundary for Florida. If not, Florida would not have owned the submerged lands to that distance under Congress’ concept of the Pollard rule, and it would therefore be entitled to no better rights under the Submerged Lands Act.

Justice Harlan made a distinction between a state relying on a readmission boundary and one relying on an original admission boundary. In the latter case, according to his theory, since the fixing of a boundary is a necessary incident of Congress’ power to admit new states, a state may, in the absence of an express fixation of its boundary by the act of admission, rely on “a presumed Congressional purpose to adopt whatever boundary the political entity had immediately prior to its admission as a State.” But not so in the case of a state readmitted to “representation in Congress” after the Civil War. Such a state renounced the Union with boundaries already fixed by Congress at the time of original admission. When it was restored to full participation in the Union, there was no reason to suppose its territorial limits would not remain the same.

After a painstaking examination of the legislative record, Justice Harlan could find no evidence that Congress intended to change, expressly or impliedly,

93. Id. at 127. The Court stated that those who wrote into the act the provision “heretofore approved by Congress” (see Sec. 4 in 122) had in mind Florida’s claim based on its 1868 Constitution, and was “at least in part designed to give Florida an opportunity to prove its right to adjacent submerged lands so as to remedy what the Congress evidently felt had been an injustice to Florida.” Id. at 127, 128.

94. Id. at 129. In his concurring opinion, Justice Frankfurter (joined by Justices Brennan, Whitaker, and Stewart) stated that there was no foundation in the Submerged Lands Act or its legislative history for the view that particularized, express approval of a state’s boundary claim by a prior Congress was required to make a defined boundary the measure of the grant. In his view, Florida was directed to submit a new constitution for congressional approval as a prerequisite for the exercise of her full rights and resumption of responsibilities. To hold that it was necessary to find a formal, explicit statement, whether in statutory text or history, that the boundary claim was duly considered and sanctioned, in order to find “approval” of that claim, would in his opinion be attributing “deceptive subtext to the Congresses of 1867-1868.” Id. at 132.

95. Id. at 134. In support of this, New Mexico v. Colorado, 267 U.S. 30 (1925), and New Mexico v. Texas, 275 U.S. 279 (1927), 275 U.S. 557 (1928), are cited.
Florida's seaward boundary from one not in excess of 3 miles to one of 3 leagues. 96 In his view, Florida's claim could only be sustained on the basis that Congress was under a duty to speak with reference to the state's boundary provision, failing which Congress' silence should as a matter of law be considered as acceptance. "To uphold Florida's claim on any such theory," he said, "would be novel doctrine indeed, particularly where property rights of the United States are involved." 97 The whole tenor of the reconstruction debates, according to Justice Harlan, clearly showed that the nature of the approval of the seceded states' constitutions was that they were properly adopted and were republican in their general structure.

He summed up his position by saying: "I believe the conclusion inescapable that all that Congress can properly be taken to have done in readmitting Florida was to declare that nothing in the State's new constitution disqualified its Senators and Representatives from taking their seats in Congress. While such action may in some abstract sense have constituted 'approval' of Florida's boundary provision, since it was included in its constitution, in my opinion it did not represent the sort of advertent, affirmative Congressional action which legally would have been necessary to effectuate an actual change in Florida's original admission boundary. It therefore did not 'approve' Florida's three-league boundary within the only sense contemplated by the Submerged Lands Act."

1547. Summary of Court's Conclusions

In pertinent summary, the following conclusions were reached by the Court:

1. As to Louisiana, Mississippi, and Alabama, a decree will be entered declaring the United States entitled, as against these states, to all the lands, minerals, and other natural resources underlying the Gulf of Mexico more than 3 geographic miles from the coastline of each such state, that is, from the line of ordinary low-water mark and outer limit of inland waters, and extending seaward to the edge of the continental shelf; and directing each such state

96. *Id.* at 135. Justice Harlan pointed out that the Act of June 25, 1868 (15 Stat. 73), readmitting Florida to the Union, afforded no basis for a claim that Congress approved the state's 3-league boundary provision because it in no way referred to boundaries, did not undertake to approve Florida's Constitution, and is entitled merely as "An Act to admit . . . Florida, to Representation in Congress," not as an act to admit it to the Union. *Id.* at 135-136.

97. *Id.* at 139. He cited *United States v. California*, 332 U.S. 19, 39-40 (1947) for his statement as to "property rights" (see note 57 supra).
to account to the United States for all sums of money derived from such lands subsequent to June 5, 1950.\textsuperscript{98}

2. As to Texas and Florida, decrees will be entered declaring that the states are entitled, as against the United States, to the lands, minerals, and other natural resources underlying the Gulf of Mexico to a distance of 3 leagues from their coastlines, that is, from the line of ordinary low-water mark and outer limit of inland waters; declaring the United States entitled, as against Texas and Florida, to all such lands, minerals, and resources lying beyond that area, and extending to the edge of the continental shelf; and directing Texas and Florida to account to the United States for all money derived since June 5, 1950, from the area to which the United States is entitled.

3. Jurisdiction is retained by the Court for such further proceedings as may be necessary to effectuate the rights adjudicated, for example, more specifically to determine the coastline, fix the boundary, and dispose of all other relevant matters.

4. The motions of Louisiana and Mississippi to take depositions and present evidence are denied but without prejudice to their renewal in any further proceedings as may be required in connection with matters left open by the present decision. (This also applies to Alabama.)\textsuperscript{99}

1548. Comment on Decisions

The following comments are for the most part in the nature of clarifications of some of the technical observations made by the Court that have not been covered in the principal discussion of the decisions:

\textit{(a)} The Supreme Court in the \textit{California} case (see Part 1, 112) refused to transplant the \textit{Pollard} rule of state ownership of the tidelands and lands under inland navigable waters to the submerged lands of the open sea. The rationale of that decision was the national external sovereignty which the United States exercises over this area. And in the \textit{Texas} case (see Part 1, 13), the Court held that once low-water mark is passed, the international domain is reached and

\textsuperscript{98} \textit{United States v. Louisiana et al.}, \textit{supra} note 39, at 83. On June 5, 1950, the date of the Court’s decision in the \textit{Louisiana} and \textit{Texas} cases (see text at note 2 \textit{supra}), all coastal states were put on notice that the United States was possessed of paramount rights in submerged lands lying seaward of their respective coasts. The Submerged Lands Act of 1953 relinquished part of those lands to the states and also forgave any monetary claims arising out of the state’s prior use of the lands relinquished. But the United States is entitled to an accounting for all sums derived since June 5, 1950, from lands not so relinquished. \textit{Id.} at 83.

\textsuperscript{99} \textit{Id.} at 84, and \textit{United States v. Florida}, \textit{supra} note 90, at 129. In so deciding, the Court was not unmindful of its liberty in original cases of allowing full development of the facts, but it believed that the conclusions to be drawn from the historical documents relied on by the states were so clear as to leave no issue presently involved open to dispute.
property rights become so subordinated to political rights as to "coalesce and unite in the national sovereign." It there declined to go along with the contention that the *imperium* (governmental powers of regulation and control) could still be exercised by the United States even if the *dominium* (proprietary rights) was in Texas. In interpreting the Submerged Lands Act, which it had previously held as a valid exercise by Congress of its unlimited power to dispose of any kind of property belonging to the United States (see 152), the Court holds that Congress in enacting the statute intended it as an extension into the open sea of the doctrine laid down in *Pollard*.100

(b) From the point of view of boundary delimitation, one of the significant aspects of the Court's decisions is its holding that the purposes of the Submerged Lands Act are purely domestic and that the historic boundaries of the states have nothing to do with the 3-mile national boundary as espoused by the United States in its international relations. This raises the important question whether under these conditions the practices followed by the United States in the delimitation of the marginal sea (an international concept) are applicable in defining the coastline and the seaward boundaries of the states under the act. This matter will be considered in connection with the supplementary boundary problems raised by the act (see 1611).

(c) In the *Texas* decision, the Court notes the 3-league boundary provision of the Treaty of Guadalupe Hidalgo, and cites the 1857 report of the boundary commissioners which states that "Lieut. Wilkinson [of the Coast Survey] . . . repaired at the appointed time to the mouth of the river [the Rio Grande] and made soundings . . . to trace the boundary, as the treaty required, 'three leagues out to sea'" (see note 66 supra). This carries the implication that the hydrographic survey extended for a distance of 3 leagues from the coast. Yet, in tracing the antecedents of the survey for the State Department in 1857, no documentary evidence could be uncovered in the Bureau archives to indicate any authorization for a survey farther into the Gulf than 1 marine league from shore. The records show that authority for the Coast Survey to undertake a survey of the Rio Grande and the offshore hydrography was based on letters of April 1, 1853, and April 9, 1853, exchanged between the Superintendent of the Coast Survey and the Chief Astronomer of the Boundary Commission, in which it was agreed that the work should extend "one marine league" from shore. The records also show that on April 1, 1853, instructions were issued by the superintendent for the hydrographic survey of the entrance and the approaches for a distance of "one marine league" from shore. The actual survey

100. In neither the *Alabama* case nor the instant case did the Court overrule any of its earlier submerged lands decisions (see 1521 for discussion of this aspect of the Submerged Lands Act).
(Register No. H-377) was made during August of 1853 and extends for a distance of 2 nautical miles or two-thirds of a marine league from shore.\(^{102}\)

\((d)\) In passing on Louisiana’s claims based on the language in the act of admission, the Court notes that “In precise modern usage, the term ‘shore’ denotes the line of low-water mark along the mainland, while the term ‘coast’ denotes the line of the shore plus the line where inland waters meet the open sea.”\(^{102}\) This needs clarification. In technical usage, particularly in surveying and mapping, the term “shore” is understood to mean the strip of land bordering tidal waters that is covered and uncovered by the rise and fall of the tide—the land between the mean high-water and mean low-water lines, sometimes referred to as tidelands or beach.\(^{103}\) The term “coast,” on the other hand, is defined as a zone of land of indefinite width that borders the sea; it is the land that extends inland from the shore.\(^{104}\) The important point is that both terms refer to “zones” not “lines.” What the Court seems to be defining is “shoreline” and “coastline.”\(^{105}\)

\(^{101}\) This statement is based on the Memorandum of Aug. 29, 1957, furnished the State Department in response to a request for information on the precise location of the U.S.-Mexican boundary in the Gulf. The Memorandum also contains an extract from the Plan for the Conjoint Survey of the Rio Grande agreed to on Nov. 21, 1851, which gives some insight into the reasons for a 3-league line in the Gulf. It is stated that if more than one channel is found to exist, “all shall be sounded, so that the boundary line may be laid down along the middle of the deepest one. Soundings shall then be carried out from the mouth of this deepest channel to a distance of three leagues into the Gulf of Mexico, in order to show the best entrance for vessels into the river. Either party desiring it may extend these soundings to the said distance of three leagues out from the entrance of all the said channels, the result to be considered as for the benefit of the navigation of both countries.” But see statement of the Court that “the conclusion is clear that what the line, denominated a ‘boundary’ in the Treaty itself, separates is territory of the [respective] countries. No reference to ‘extraterritorial’ jurisdiction is made in the Treaty, and no such concept can be gleaned from the context of the negotiations.” \(^{363}\) U.S. 1, 62 (1960).

\(^{102}\) Id. at 66 n.108. The pertinent language in the act of admission is “including all islands within three leagues of the coast.” Similar language is used in the acts admitting Mississippi and Alabama but the term “shore” is used instead of “coast.” The Court considers the term “coast” to be used in a nontechnical sense to denote what is actually the shore. Id. at 67.

\(^{103}\) MITCHELL, DEFINITIONS OF TERMS USED IN GEODETIC AND OTHER SURVEYS 71, SPECIAL PUBLICATION No. 242, U.S. COAST AND GEODETIC SURVEY (1948). Legally, courts have many times used similar language to define the term shore. BLACK, LAW DICTIONARY (4th ed.) 1548 (1951), where citations are given to federal and state decisions. In BURAX CONSOLIDATED V. LOS ANGELES, 966 U.S. 10, 22-23 (1996), the Supreme Court approved an instruction of the Circuit Court of Appeals which stated that by the common law, the shore is confined to “the land between ordinary high and low-water mark, the land over which the daily tides ebb and flow.”

\(^{104}\) ADAMS, HYDROGRAPHIC MANUAL 55, SPECIAL PUBLICATION No. 143, U.S. COAST AND GEODETIC SURVEY (1942), and JOHNSON, SHORE PROCESSES AND SHORELINE DEVELOPMENT 160 (1919). Other definitions vary the point at which the actual coast begins but generally they are in harmony with the concept of being a zone of indefinite width (perhaps 1 to 3 miles) extending landward from the shore.

\(^{105}\) In its general technical sense, the term shoreline is synonymous with coastline and is defined as the line of contact between the land and a body of water. But in a particular context the term coastline may have a specialized meaning, as, for example, in the Submerged Lands Act, where it also includes the line marking the seaward limit of inland waters (see 161). (It is in this sense that the Court mistakenly uses the term “coast.”) In tidal waters it is necessary to associate the term shoreline with a tidal datum, such as low water or high water. In the Coast and Geodetic Survey, the line delineating the shoreline on its surveys and charts approximates the mean high-water line. ADAMS, op. cit. supra note 104, at 55.
Submerged Lands Act (Public Law 31)

(e) The Court held that language claiming all islands within a certain distance of the coast is not meant to claim all the marginal sea to that distance, and on that basis denied to Louisiana, Mississippi, and Alabama sea boundaries greater than 3 geographic miles. It also said that under the Government's admission that all islands within 3 leagues of Louisiana's shore are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters, Louisiana is entitled to the lands beneath those waters under the terms of its act of admission, quite apart from the affirmative grant under the Submerged Lands Act. "Since the islands enclose inland waters," the Court said, "a line drawn around those islands and the intervening waters would constitute the 'coast' of Louisiana within the definition of the Submerged Lands Act." 106 Since the specific question of what constitutes the coastline of Louisiana, or of any other Gulf state, was not in issue in this litigation, the latter statement by the Court must be considered as dictum and subject to later adjudication based upon specific factual data developed. It is for this reason that the Court noted: "We do not intend, however, in passing on these motions, to settle the location of the coastline of Louisiana or that of any other State." 107

155. FINAL DECREE

Following the decision of May 31, 1960, the States of Louisiana, Mississippi, and Alabama sought leave to file petitions for rehearing on the ground that new information had been discovered to substantiate their claims to a 3-league boundary. But the Court while granting leave to file petitions denied a rehearing on October 10, 1960 (364 U.S. 855). 108

106. 363 U.S. 1, 67 n.168. Although the Government in its brief used the words "all islands," following the phraseology in the act of admission, the key words must be considered "the waters between them [the islands] and the mainland are sufficiently enclosed to constitute inland waters." Islands not so situated would not enclose inland waters.

107. Ibid. The Court retained jurisdiction over the case for any further proceedings that may be necessary to effectuate the rights adjudicated. Id. at 84.

108. An 1844 map was sought to be introduced which purported to show extended boundaries for the three states. This map accompanied the 1844 Annual Report of the Commissioner of the General Land Office (S. Doc. 7, 28th Cong., 2d sess., 10) and shows the treaty limits made between 1783 and 1842 with Great Britain, Spain, and France. A line approximately 20 leagues (60 miles) from shore borders the whole Atlantic coast and the Gulf coast to Sabine Pass. Lateral lines from the shore to the 20-league line are also shown at the Georgia-Florida boundary, and at the Perdido and Sabine Rivers. The purpose of the map was apparently to show the sources of the different acquisitions in connection with data on the amount of public land sold and to be sold. The Court had previously declared that the provision in the Treaty of 1783, between Great Britain and the United States, which stated that it comprehended "all islands within twenty leagues of any part of the shores of the United States" could not have meant to establish United States territorial jurisdiction over all waters lying within 20 leagues of the shore. United States v. Louisiana et al., supra note 39, at 68.

618325 0—62—12
On December 22, 1960, the Court entered its final decree as to all five of the Gulf states (364 U.S. 502). This follows essentially the conclusions reached by the Court in its opinions (see 1547). It sets out the rights of the United States, as against the defendant states, to submerged lands underlying the Gulf of Mexico more than 3 geographic miles seaward from the coastlines of Louisiana, Mississippi, and Alabama, and more than 3 leagues seaward from the coastlines of Texas and Florida, and extending to the edge of the continental shelf; enjoins any of the states from interfering with such rights; reasserts the definition of "coast line" as used in the Submerged Lands Act (see 123); sets out the reciprocal rights of the defendant states to the submerged lands from their coastlines to where the rights of the United States begin; provides for an accounting to the United States for all money derived by any state, since June 5, 1950, from submerged lands allocated to the United States under the terms of the decree, whenever the coastline of any of the states shall be agreed upon or determined; and reserves jurisdiction to entertain such further proceedings as may be necessary to give force and effect to the decree.

16. SUPPLEMENTARY BOUNDARY PROBLEMS RAISED BY ACT

When the Supreme Court pronounced its decisions on May 31, 1960, it settled a significant but limited phase of the boundary problems raised by the Submerged Lands Act—the extent of the seaward ownership of submerged lands by the five Gulf states. This was the single issue before the Court. But it did not undertake to settle, in this proceeding, the actual location of the seaward boundary of any state. It merely retained jurisdiction over the case for such further proceedings as may be necessary to effectuate the rights adjudicated.109

Boundary problems arise primarily in two categories of cases: (1) those that involve a determination of the baseline from which the seaward boundaries of the states are to be measured (see Part 1, 33), that is, the "coast line" under the act; and (2) those that involve a determination of the seaward boundaries themselves.110 The first category presents not only problems of delimitation

109. The Government very succinctly set forth these ancillary problems, when it said with respect to the Louisiana coast: "On a shelving and tortuous coast such as that of Louisiana, specific identification of the low-water mark and the outer limit of inland waters involves both difficult factual questions of physical observation at every disputed location and legal questions as to definition of terms and application of such definitions to particular physical situations. Resolution of these problems with respect to the entire Louisiana coast will be, at best, a protracted process." Brief for the United States in Support of Motion for Judgment, 159–160 (Feb. 1957), United States v. Louisiana, Sup. Ct., No. 11, Original, Oct. Term, 1956.

110. In the latter category are also included the lateral boundaries of the states.
but problems of interpretation as well; the second category presents problems of delimitation only.

161. The Coast Line Problem

It will be recalled that Section 2(a)(2) of the Submerged Lands Act establishes a distance of 3 geographic miles from the coast line of each state as the general offshore limit of state rights to submerged lands (see 121). And Section 2(b) places limits of 3 geographic miles and 3 marine leagues (9 geographic miles) from the coast line as the boundaries of states bordering the Atlantic and Pacific Oceans, and the Gulf states, respectively (see 122). Finally, Section 4 approves the boundary of each of the original coastal states at 3 geographic miles from its coast line (see 122).

These repetitive references to “coast line” and to “boundaries” are as far as the act goes toward determining the precise location of the federal-state boundary. Obviously, basic to this determination is an understanding of the technical meaning of the term “coast line,” as it relates to various coastal configurations, from which the seaward boundaries are to be measured. Congress apparently recognized this, for it included, as Section 2(c) of the act, a general definition of that term.

Section 2(c) defines “coast line” 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.” In this context, the term “coast line” is broader in scope than the term “shoreline,” and includes not only an actual low-water shoreline, but also a “fictitious shoreline” which is the dividing line between inland waters and the open sea. (See fig. 24.)

This definition of “coast line” is the pivotal provision of the act, insofar as the location of state boundaries is concerned. While simple enough on its face, it specifies only generally the line from which the state boundaries are to be measured. But the definition does not provide adequate criteria for delimiting, with legal and technical certainty, the boundaries of the states. For example, would the seaward limits of inland waters, in the case of indentations, be a headland-to-headland line, or would the limits follow the sinuosities of the indentation? If the former, would there be a limitation on distance between the headlands? And how is the definition to be applied where islands fringe a coast at varying distances from the mainland? Would the boundaries of the states, whatever they are, be measured from the line of low water along the mainland coast or from the outer island coast? And the matter of “ordinary low water” will require interpretation inasmuch as the tide exhibits varying
characteristics along the different coasts of the United States. Finally, there is the question of defining the method by which the seaward boundaries of the states are to be delimited. Is a replica line, a conventional line, or an envelope line to be used, once an appropriate baseline has been agreed upon? These and other matters are left unsettled by the act.\footnote{111}

It is a cardinal rule of statutory construction that the intent of the legislative body, expressed or implied, governs the interpretation of language. This intent may be inferred from the legislative history of an act and from the circumstances surrounding its enactment. Implicit in the legislative history of the Submerged Lands Act is the desire on the part of the sponsors to change the law of federal paramount rights in the submerged lands of the open sea which the Supreme Court laid down in the submerged lands cases (see Part 1, \footnote{112}). But equally implicit is the desire to leave the question of boundary determinations for future adjudication or agreement.\footnote{113} Within this framework, it is appropriate to develop interpretive guides based on historical precedents in the judicial, legislative, and executive fields.

\textit{1611. Applicable Rules}

In this situation, it becomes necessary to determine in the first instance what rules are to be applied in interpreting these provisions—the rules developed in international law for delimiting the marginal sea, or other interpretive rules, if such should exist—in order that the federal-state boundary may be delineated with engineering certainty.\footnote{114} Had the Court limited the seaward extent of the grant to the national boundaries, there would be no question but what the rules developed in international law apply. But the Court said the grant to the states was a purely domestic matter and had nothing to do with the nation's territorial limits (see \footnote{1541}). Does this rationale for approving state boundaries beyond the traditional 3-mile limit foreclose the use of international rules? The answer must be sought in the legislative history of the act and its interpretation by the Court.

\footnote{111. In the resolution of these problems the Federal Government will be an interested party because federal jurisdiction under the Outer Continental Shelf Lands Act begins at the seaward limits of state jurisdiction as determined by the Submerged Lands Act (see \footnote{235}).}

\footnote{112. See notes 18, 21, and 22 supra. The deletion of certain words from the original bill (see note 21 supra) is stated in the committee report on the measure not to constitute "an indication that the so-called 'Boggs Formula,' the rule limiting bays to areas whose headlands are not more than 10 miles apart, or the artificial 'arc of circles' method is or should be the policy of the United States in delimiting inland waters or defining coastlines." S. Rept. 133, supra note 2, at 18. But see Part 1, \footnote{4211} in explanation of the Boggs formula.}

\footnote{113. For example, the semicircular and the 10-mile rules for bays, and the rule that low-tide elevations within the territorial sea generate their own territorial sea, are creations of international law (see Part 3, \footnote{2218(d)} and (d)).}
Submerged Lands Act (Public Law 31)

The legislative history makes clear that Congress was dealing with the pre-existing situation, that is, the situation brought about by the Supreme Court's decision that the Federal Government, and not the states, had paramount rights in the submerged lands seaward of the ordinary low-water mark and outside of inland waters, by virtue of its national external sovereignty. It was to correct this holding that the Submerged Lands Act was passed. This was repeatedly emphasized by proponents of the legislation. For example, in the committee report on the measure, it is stated: "The purpose of this legislation is to write the law for the future as the Supreme Court believed it to be in the past—that the States shall own and have proprietary use of all lands under navigable waters within their territorial jurisdiction, whether inland or seaward." 114

It also appears that the Senate committee's action in striking from the bill certain language specifically defining inland waters (see note 21 supra) was taken at the request of the Department of State. The Department thought the definition too broad and preferred the limited definition of inland waters which the United States had traditionally followed, and the relation of that definition to its policy of freedom of the seas. 115

There is also a striking similarity in the definition of "coast line" as used in the act and the phraseology used by the Supreme Court in the submerged lands cases to describe the line from which federal paramount rights are to be measured. 116

From these statements and language alone it would seem reasonable to conclude that Congress in enacting the Submerged Lands Act understood the term "coast line" to be the same as the baseline from which the marginal sea of the United States is measured. This conclusion is supported by the Court's interpretation of the act. Throughout its discussion of the legislative history, the Court makes repeated references to "an application of the Pollard rule to the marginal sea," and in its concluding statement says: "We conclude that, consonant with the purpose of Congress to grant to the States, subject to the three-league limitation, the lands they would have owned had the Pollard rule been held applicable to the marginal sea." 117 If the Pollard rule had been

114. S. Rept. 333, supra note 2, at 8. This report accompanied S. J. Res. 13, which ultimately became the Submerged Lands Act.

115. Hearings, supra note 22, at 28. The Department's letter stated that "since the seaward limit of inland waters is the baseline whence the belt of territorial waters is measured, this by cumulative effect brings forward the outer limits of territorial waters."

116. In the Submerged Lands Act, "coast line" is defined 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" (see 164). In the California case, the Court in its decree stated that the Federal Government had paramount rights in the lands underlying the Pacific Ocean "seaward of the ordinary low-water mark on the coast of California, and outside of the inland waters." 332 U.S. 804, 805 (1947).

held applicable in the *California* case, and California held to be the owner of the submerged lands underlying the marginal sea, the federal-state boundary would have been at the seaward limits of the marginal sea. And inasmuch as the marginal sea is a creation of international law (see Part 1, 312) its delimitation must be governed by rules developed in that branch of the law. It follows, therefore, that since the Court holds that the Submerged Lands Act is an extension of the *Pollard* rule to the marginal sea, the same rules should be applied for delimiting boundaries under the act.

Viewed in this light, there is no necessary conflict between the Court's holding the grant of submerged lands (defined in terms of state boundaries) to be one of federal concern and applying principles developed in international law for delimiting the boundaries of such grant—one is substantive, the other is procedural. The least that can be said is that in holding the grant to be a federal matter, the Court did not foreclose the use of international practices for delimiting the boundary provisions of the act. The application of principles developed in international law to the settlement of domestic boundary problems is not new in American jurisprudence. In the New Jersey-Delaware boundary dispute the Supreme Court applied the doctrine of the *thalweg* (an international law concept) to the settlement of the boundary between the two states in the lower Delaware River and in Delaware Bay.\footnote{118. *New Jersey v. Delaware*, 301 U.S. 361, 378 (1934). The Court, through Mr. Justice Cardozo, said: "Up to the time when New Jersey and Delaware became independent states, the title to the soil under the waters below the circle was still in the Crown of England. When independence was achieved, the precepts to be obeyed in the division of the waters were those of international law." It should also be noted that in an earlier phase of *United States v. Louisiana et al.*, *supra* note 39, Louisiana considered a determination of both the inner and outer boundaries of the marginal belt as essential to the adjudication of her rights under the Submerged Lands Act. Motion of Defendant, Interposing Plea to the Jurisdiction and Opposition to Plaintiff's Motion to Modify Decree, and Brief in Support Thereof, 23, *United States v. Louisiana*, Sup. Ct., No. 7, Original, Oct. Term, 1955.}

But beyond these reasons is the overriding one that if the rules developed in international law are not applicable then there are no guidelines for determining seaward boundaries, unless arbitrary rules are adopted. For example, the phrase "seaward limit of inland waters" is an integral part of the definition of "coast line," which in turn becomes the baseline from which seaward boundaries are measured, yet inland waters are not defined in the act.\footnote{119. It is sometimes thought that the lines established by the United States Coast Guard for separating areas of the sea where the Inland Rules of the Road apply from those where the International Rules apply define the limits of inland waters. This, however, is erroneous, and in *United States v. Newark Meadows Improvement Co.*, 173 Fed. 426, 428 (1909), it was held that such lines have no application other than "to inform navigators where the inland rules of navigation, as distinguished from the international rules, become applicable."}

Accepting then the rules developed in international law as appropriate criteria for interpreting the boundary provisions of the act, we can now consider the specific problems raised by these provisions (see text at note 111 *supra*).
Except for the seaward boundary problem, these problems, while framed in a
different context, are not unlike those considered by a Special Master in the
California case (see Part 1, 2111), where he was called upon to interpret the
language "lying seaward of the ordinary low-water mark on the coast of Cali-
ifornia, and outside of the inland waters." Although his recommendations
have not been finalized by the Court, the low-water line as a federal-state
boundary having become moot by the passage of the Submerged Lands Act,
his findings nevertheless afford certain guidelines for resolving the boundary
problems raised by the act. Therefore, absent any legislative guidance, the
Master's findings, where applicable, will be drawn on in this discussion.120

1612. Seaward Limits of Inland Waters

Along a mainland coast, as distinguished from a coast fringed with islands,
The coastline problem involves two facets—(1) the seaward limits of inland
waters, and (2) the line of ordinary low water (see 1613). The first arises along
an indented coast and resolves itself into a question of what indentations are to
be considered mere curvatures in the coast, where the baseline for measuring the
seaward boundaries would be the line of ordinary low water; and what indenta-
tions are to be considered as constituting "true bays" and thus become part of
the inland waters of the state, the seaward limits of which would be a headland-
to-headland line across the entrance.

It has been noted heretofore that the term "bay," as actually applied in
common usage, is so indefinite as not to be susceptible of precise definition
which is at once inclusive and exclusive of inland waters (see Part 1, 42). The
nearest approach to a rational geometric definition is the semicircular rule. The
geometric basis for the rule has been previously described and need not be

120. Since passage of the Submerged Lands Act in 1953, a United Nations Conference on the Law of
the Sea was held at Geneva in 1958 and a Convention on the Territorial Sea and the Contiguous Zone
adopted (see Part 3, 2211). Delimitation rules were formulated which in some instances are amplifications
of existing rules while in others are clear departures from what had been generally considered the rule of
international law. In the latter category is the 24-mile closing line for true bays to replace the 10-mile
rule (see Part 3, 2211 C(c)). As to the effect of the convention on the boundary phases of the Submerged
Lands Act, it should be pointed out that although the United States Senate consented on May 26, 1960, to
its ratification (see Part 3, 2271), the convention does not become operative until 30 days after the twenty-
second nation has ratified it (see Part 3, 2271 and 2272). And even when the convention does become
operative, it does not seem that it could have retroactive effect on a grant made as of May 22, 1953. At
best, it could have only prospective operation from the date the convention becomes effective. It follows
therefore that the principles to be presently adopted would have to be those that the United States has hereto-
before espoused in its international relations. These are set out in the letter of Nov. 13, 1951, from the
Acting Secretary of State to the Attorney General and the letter of Feb. 12, 1952, from the Secretary of
State to the Attorney General (see Appendix D). These were relied on by the Government in the pro-
cedings before the Special Master in the California case. Brief for the United States before the Special
Master, 33-36 (May 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951. For a
comparison between these boundary criteria and the criteria adopted at Geneva, see Part 3, 2218.
repeated. Suffice it to say that the method postulates that a semicircular bay having its diameter along the line joining the headlands is the theoretical bay which lies on the border line between a closed and an open bay, that is, between inland waters and the open sea (see Part 1, 421). 121

The Special Master in the California case adopted this geometric principle to determine which of the indentations along the California coast fell within the category of inland waters. He found the semicircular rule to be “an appropriate technical method of ascertaining whether a coastal indentation has sufficient depth [penetration into the land area] to constitute inland waters” (see Part 1, 441).

In addition to the semicircular rule, he also applied a 10-mile limitation on indentations, which he found the United States had traditionally supported in its international relations (see Part 1, 43 and 441).

A. WHERE ISLANDS FRINGE A COAST

Associated with the seaward limits of inland waters, and in turn an aspect of the “coast line” problem that will require interpretation, is the situation where islands fringe a coast at various distances from the mainland. Is a state's seaward boundary to be measured from the mainland coast or from the outer island coast? 122 The Submerged Lands Act of itself lacks the necessary criteria and no congressional intent can be inferred from the legislative history of the measure other than a desire to leave the question where Congress found it. 123

The problem is analogous to that in international law of determining a baseline from which the marginal sea is to be measured, the baseline marking the seaward limit of the inland waters of a riparian nation. The Geneva Convention on the Territorial Sea and the Contiguous Zone (see Appendix I) permits the use of straight baselines in certain geographical situations—for example, where the coast is deeply indented, or there is a fringe of islands along the coast in its immediate vicinity (see Part 3, 2211 a(b)). But the United States has not heretofore recognized such baselines (see Part 3, 2218(a)), and the convention

121. Although the method was developed for application to delimitation problems associated with the international law of the sea, the principle being a geometric one makes it appropriate for use even where principles of international law are not involved—for example, in determining the status of a tributary waterway in relation to a principal waterway.

122. The islands off the southern California mainland is an example of such a geographic situation (see fig. 13).

123. In answer to a specific question from Senator Douglas of Illinois as to whether the continental mass or the outer points of the islands would be considered the coastline, Senator Cordon of Oregon, chairman of the subcommittee in charge of the floor debate, stated that he was “not prepared to discuss the application of any rule defining shorelines in a situation where islands exist off the main mass of land” and that the question “exists irrespective of the resolution.” 99 Cong. Rec. 2623, 2634 (1953).
Submerged Lands Act (Public Law 31) 161

does not become operative until ratified by 22 nations (see Part 3, 227 and 2272). In any case, the adoption of straight baselines by a country is permissive and not mandatory (see Art. 4, par. 1 of convention). 124

In the California case, the Special Master considered the problem from the point of view of the traditional position of the United States in its international relations and found it to be that the baseline follows the sinuosities of the coast, except where interrupted by deep indentations. He noted that this rule in itself excluded the idea of drawing the coastline from headland-to-headland around offshore islands, and stated that placing a 3-mile belt around each offshore island goes naturally with the fact that the islands are part of the territory of the nation to which the mainland belongs (see Part 1, 54).

When the Chapman line was drawn along the Louisiana coast (see Part 1, 731), pursuant to the decision in United States v. Louisiana, 339 U.S. 699 (1950), the principle followed in drawing the baseline was that waters enclosed between the mainland and offlying islands which were so closely grouped that no entrance exceeded 10 nautical miles in width were considered inland waters.

In formulating principles for delimiting the “coast line,” as defined in the Submerged Lands Act, an amplification of the above procedure was recommended so that it would be of general application, to wit: “The coast line should not depart from the mainland to embrace offshore islands, except where such islands either form a portico to the mainland and are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters, or they form an integral part of a land form.” 125 The first part of the recommendation is based on the position of the United States as enunciated in

124. Within the author’s knowledge there has neither been proposed nor developed thus far a geometric rule for determining the status (inland waters or open sea) of water areas between islands and the mainland coast similar to the semicircular rule for bays. It would be difficult to develop such a rule for general application because of the complex of geographical configurations that might be encountered and would not be limited as in the case of bays to a single form of configuration. It has been proposed that the semicircular rule for bays be applied for a determination of the limit of inland waters behind straight baselines (see Part 3, 2211 A(6) note 17).

125. Memorandum of Apr. 18, 1961, from the Director, Coast and Geodetic Survey, in reply to letter of Mar. 6, 1961, from the Solicitor General of the United States. The request set forth the problem of giving precise application to the rather general terms of the Supreme Court decision of May 31, 1960, and the decree of Dec. 12, 1960, which established the dividing line between federal and state property rights in the Gulf of Mexico at a distance of 3 geographic miles from the coastlines of Louisiana, Alabama, and Mississippi, and 3 leagues from the coastlines of Texas and Florida, and defined 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.” The Bureau’s advice was sought in formulating principles on which to base the Government’s position because “the questions involved [bays, inland waters, islands, ordinary low water, etc.] largely relate to matters within the particular competence of the Coast and Geodetic Survey.” The Bureau’s memorandum contained recommendations (including comments) on the principles to be established in defining “coast line” as it applied to various geographic configurations along the Gulf coast, particularly the Louisiana coast. Some of these recommendations are embodied in the discussion of the Geneva Convention on the Territorial Sea and the Contiguous Zone and the interpretation to be placed on some of the provisions (see Part 3, 221).
the letter of Nov. 13, 1951, from the State Department to the Justice Department (see Part 3, 2218(d)). This was the position taken by the United States in the California case and which the Special Master upheld. Under this part of the recommendation, each island, whether isolated or part of a group, would carry its own territorial belt. The second part of the recommendation (the exceptional part) deals with situations characteristic of the Louisiana coast and did not arise in the California case. It was the basis for drawing the Chapman line. With regard to determining which islands are part of a land form and which are not, no precise standard is possible. Each case must be individually considered within the framework of the principal rule. (See fig. 25.)

1613. The Line of Ordinary Low Water

The second facet of the "coast line" problem is the determination of "the line of ordinary low water" as specified in the Submerged Lands Act. And here it must be noted that the act defines the coastline as "the line of ordinary low water along that portion of the coast that is in direct contact with the open sea and the line marking the seaward limit of inland waters." (See 123.) The commonplace understanding of this language would be that along that part of the United States where the open sea washes the coast, the "coast line" would have to be the line of ordinary low water, and the only departure from this would be where indentations exist that fall within the category of inland
waters in which case the seaward limits of such waters would constitute the
"coast line" (see 1612). 126

The first point that must be taken into account is the meaning of the
term "ordinary" as applied to tides. As was shown previously (see Part 1, 6411),
the word is traceable to the English common law and has been used rather
extensively in American jurisprudence, both with respect to high water and to
low water. In the Coast Survey, this term is not used in a technical sense but
when applied to tides it is regarded as the equivalent of the word "mean." 127
In *Borax Consolidated, Ltd. v. Los Angeles*, 296 U.S. 10 (1935), the Supreme
Court of the United States interpreted the word "ordinary" to be the same as
"mean" when applied to the expression "ordinary high-water mark" along the
California coast (see Part 1, 6413 A). The Special Master, in the *California*
case, also interpreted the word "ordinary" to be the same as "mean" when
applied to the term "ordinary low-water mark" along the California coast as
used by the Supreme Court in the submerged lands cases (see Part 1, 6421). 128
As used in the context of the Submerged Lands Act, the word "ordinary"
must therefore be considered to be the same as the word "mean" (see Part 1,
6421 (text at note 44)).

This raises the question of how the term "line of mean low water" or
"mean low water" is to be interpreted along the different coasts of the United
States. (Inasmuch as "line of mean low water" or "mean low-water mark"
is simply the intersection of the plane of "mean low water" with the shore, the
latter term will be used in the present discussion.)

In order to define "mean low water" for engineering use, the character
of the tide in a given area or along a coast must be taken into account. There
are three principal types of tide along the coasts of the United States—the semi-
daily, the mixed, and the daily. The semidaily, or semidiurnal (this is the
more technical terminology), tide is the predominant type found along the
Atlantic coast, the characteristics being two high waters and two low waters
each day with relatively small inequality in successive high-water heights, or in
successive low-water heights, or in both. No problem arises in determining
mean low water from a series of tide observations at any such place. It is

126. The language of the act precludes the use of any other line in such situations—for example,
straight lines from one salient point to another along a slightly curving coast—because such line could
not be along the portion of the coast that is "in direct contact with the open sea." It should also be noted
that the phraseology "the line of ordinary low water" and "the seaward limit of inland waters" is in the
conjunctive and not in the disjunctive as an alternative.

127. SCHUREMAN, TIDE AND CURRENT GLOSSARY 26, SPECIAL PUBLICATION NO. 228, U.S. COAST AND
GEODETIC SURVEY (1949).

128. This was based on written and oral testimony furnished by the Coast and Geodetic Survey (see
Part 1, 2113).
simply the average height of the low waters at that place over a period of 19 years.129 (See fig. 17.)

Along the Pacific coast, the mixed type of tide prevails, with two high waters and two low waters each day. It is distinguished, however, from tides along the Atlantic coast in that the diurnal wave is more pronounced, with resulting larger inequality in successive high-water heights, in successive low-water heights, or in both. This inequality is known as diurnal inequality (see Part 1, 621). Whether the low-water inequality is small or large, mean low water is determined in the same manner as for a semidiurnal tide, that is, by averaging all the low waters (higher lows and lower lows) over a period of 19 years.130 As in the case of the semidiurnal tide, the same procedure would be followed in determining mean low water even where under certain situations but one tide occurs in a day (see note 129 supra).131

The daily, or diurnal, type of tide is the predominant tide in the Gulf of Mexico, its name being derived from the fact that there is but one high and one low water in a tidal day. But within this area of predominately diurnal tides, there are two stretches along the outside coast where the tide is mixed.132 But even where the tide is diurnal (the places where the tide is always diurnal are uncommon), there are times during the month when the tide becomes semidiurnal and the tide curve exhibits two high and two low waters during the day. For purposes of classification, however, if the dominant feature of the tide at any place is diurnal, the tide at that place is designated as belonging to the diurnal type.133

129. Murrell, Tidal Datum Planes 204, Special Publication No. 135, U.S. Coast and Geodetic Survey (1951). Even where under certain rare astronomic situations but one tide occurs in a day (in consequence in relation to the number of low waters that would be averaged for determining mean values) the same procedure applies.

130. In the California case, the Special Master was faced with the problem of deciding whether the higher low waters, the lower low waters, or all the low waters should be used in obtaining mean low water. (Along the California coast the low-water inequality is quite pronounced.) The Special Master recommended the use of all the low waters, even though he found nothing in the Supreme Court's decision to indicate that when the Court used the expression "ordinary low water" it intended to choose the mean of the low waters and not the mean of the lower low waters. He arrived at this conclusion on the basis of property rights. Where one claimant in a disputed boundary line might urge the use of the higher lows and another claimant the use of the lower lows, the middle way, or the use of all the lows, he believed, would be the just one. For a discussion of this aspect of the Special Master's findings, see Part 1, 6421.

131. This was the situation in Borch Consolidated, Ltd. v. Los Angeles, 226 U.S. 10 (1912), with respect to ordinary high water. The question there was primarily whether the neap tides only should be used in determining the tidal boundary of "ordinary high-water mark," and the Court held that neither the spring tide nor the neap tide is to be used, "but a mean of all the high tides." (See Part 1, 6413 A.)

132. These occur along the Florida coast: the first extends from Key West to Punta Rassa in San Carlos Bay, and the second includes the area from Indian Rocks near St. Petersburg to St. George Sound.

133. Pensacola, Fla., is such a case. When the moon is over the equator twice during the month, the tide curve exhibits semidiurnal characteristics. Murrell (1951), op. cit. supra note 129, at 16 and 17. At Galveston, Texas, the tidal situation is somewhat different. There are months during the year when the tide curve shows two tides a day for the greater part of the month. But because of the
If the procedure developed for determining mean low water where the tide is of the semidiurnal or mixed type were applied to the type of diurnal tide found in the Gulf of Mexico, it would be statistically unsound because of the imbalance created by the use of both low waters on days when the tide becomes semidiurnal. The tidal engineer has therefore developed a procedure whereby he considers the tide at such places as if it were always of the diurnal type. That is, he disregards the secondary tides completely, and on those days when there are two tides he uses but one low water a day, the lower of the two lows. Since all low waters are used in obtaining mean values, except on those days when the tide becomes semidiurnal, the general definition of mean low water is still applicable (see text at note 129 supra).

1614. The Time Element

An important aspect of the "coast line" problem, not specifically settled by the Submerged Lands Act, is the time element. Is the seaward boundary of a state to be measured from the coastline as it existed when a state's boundary was approved by Congress (see text at note 47 supra), regardless of subsequent changes, or is it to be measured from the present coastline? Coastlines are continually changing; in some localities accretions have been going on for many years, while in others eroding processes are exhibited.

If Section 2(c) alone were considered (see 123), it could be assumed that the coastline as of the date of the act, rather than of a past date, was intended, for interaction of the diurnal and semidiurnal forces, the secondary tides at such times become very small and almost vanish. While there may be a difference of 0.3 foot between a higher low water and a following lower high water—the criterion used in tabulating high and low waters—such a low water would not be determined with the same degree of accuracy as the lower low, especially when the effect of wind and weather is considered which could be large percentage in relation to the effect of such nonperiodic forces on the primary tides. Such tides would not have equal significance in the tidal cycle and therefore the mean of the two low waters would not better represent the plane of mean low water than the single lower low would, as previously stated (see Part 1, 623).

134. The lower low water is used because from the point of view of tidal theory, it, rather than the higher low water, reflects the diurnal wave, as does the single low water on the other days. This places all the low waters selected for obtaining mean values on a comparable basis. It is sometimes stated that mean low water for the diurnal tide as thus obtained is the same as mean lower low water. This is theoretically true, since even in the Gulf there is a semidiurnal wave but it is masked by the stronger diurnal wave which is reflected on the tide curve as a single low water. From a practical engineering point of view, however, it would probably be better to avoid this analogy and consider the tidal plane derived in such cases as the plane of mean low water because the concept of a lower low water presupposes a higher low water and there cannot be a lower low where there is but one low. In any case, this theoretical lower low water should not be confused with the actual lower low water that is reflected on the tide curve in the case of the mixed type of tide.

135. This applies to both the low-water line along a straight coast and to the low-water line of indentations. In the latter case, if an early coastline applied, the status (inland waters or open sea) of the indentation would be determined by the geometric formula as applied to the then position of the low-water line (see text at note 105 supra.)

136. Along sections of the Louisiana coast, in the vicinity of the Mississippi Delta, the land has built out as much as 8 miles in the past 100 years (see fig. 26).
Figure 26.—Shoreline changes along Louisiana coast, 1859–1960.
a past coastline could not be "in direct contact" with the open sea where the coastline has shifted seaward or landward. Also, Section 2(b), with its reference to boundaries as "extending from the coast line," and Section 4, speaking of approving the extension of the boundary of any state admitted subsequent to the formation of the Union "to a line three geographical miles distant from its coast line" if it has not already done so (see 122), both carry the overtone of a present coastline. On the other hand, Section 2(a)(2) defines "lands beneath navigable waters" as all lands seaward "from the coast line of each such State and to the boundary line . . . as it existed at the time such State became a member of the Union" (see 121), and throughout the discussions on the measure, there are repeated references to "historic boundaries" and to "areas" of the states as they were when they came into the Union. The legislative intent is thus left unclear.

Reading the act as a whole together with the discussions, however, it seems reasonable to assume that what the Congress wished to preserve for the states was the concept of a distance fixed as of the date of admission—3 miles, 6 miles, etc.—rather than the concept of a fixed line in the water. Under this interpretation, the historic distance would be applied to the present coastline to fix the outer boundary of the state.

Adoption of the theory of a present coastline is also supported by the reference in Section 2(a)(2) of the act to the "coast line of each such State" (see 121), rather than to the coastline as it existed when the state entered the Union. The throw back in time is only in reference to boundaries.

This theory of the Submerged Lands Act is in accord with the common law rule, which is the federal rule, that where the sea is a boundary the doctrine of

137. It was stated by Senator Cordon that "the philosophy of the joint resolution is limited to the areas of the States as they were when the States came into the Union," and that "the boundary lines of the States recommended by the committee majority are the lines as they were at the time the States entered the Union." 90 Cong. Rec. 2619, 2696 (1953). And Senator Daniel, a co-sponsor of the resolution, stated: "The joint resolution does not undertake to fix the historic boundaries of any State, but it limits them all to the boundaries as they existed at the time each State entered the Union." Id. at 2696.

138. Most of the seaward boundary descriptions contained in the enabling acts or in the state constitutions are merely distance references from the coast. Specific locations of the seaward lines by metes and bounds or otherwise are almost uniformly absent. For a compilation of such provisions for states other than the Original Thirteen, see Hearings before Committee on Interior and Insular Affairs on S.J. Res. 13 and other Bills, 83d Cong., 1st sess. 1232 (1953). Some of the Original States seem never to have declared their seaward boundaries. For a discussion of the claims to seaward boundaries by the Thirteen Original States with a reference to their charters, constitutions, and statutes, see Brief for the United States in Support of Motion for Judgment, 93-109, United States v. California, Sup. Ct., No. 12, Original, Oct. Term, 1946.

139. This would seem to be supported by the Supreme Court's interpretation of the basic theory of the Submerged Lands Act, namely, to restore the states to the ownership of submerged lands within their present boundaries but determined by the historic action taken with respect to them jointly by Congress and the state. United States v. Louisiana et al., 363 U.S. 1, 28 (1960), citing Representative Wills as to the meaning of "historic boundaries" and how they would be ascertained.
erosion and accretion is normally applicable and the boundary shifts with the change.\textsuperscript{140}

If the theory of a past coastline were accepted, it could in extreme cases operate to deprive a state entirely of a contiguous water zone: for example, where the coastline has built out 3 miles or more (see note 136 supra). And, conversely, in the case of a heavily eroded coast the distance could be much greater than the limitation specified in Section 2(b) of the act (see 122). Such results could hardly have been intended by the proponents of the legislation.

From a practical point of view, the theory of a present coastline is the logical solution, for it would be an exceedingly difficult, if not impossible, task to determine the line of ordinary low water as of a distant past. Accurate surveys of our coast did not begin to become available until the middle of the 19th century and in many sections the low-water line has never actually been surveyed.

Ultimately, the Supreme Court may have to face squarely the question of what "coast line," in point of time, is applicable in the determination of the seaward boundaries of the states. Where a coastline has eroded it would be to a state's advantage to use a past coastline. On the other hand, where it has accreted it would be more acceptable to the state to use a present coastline. From the point of view of the Government, the reverse effect would be true in each situation. But whatever theory is adopted it would have to be consistently applied to an entire coast, irrespective of whether part has accreted and part eroded.\textsuperscript{141}

162. THE SEAWARD BOUNDARY PROBLEM

Thus far, there has been considered the resolution of problems with respect to the landward base—the coastline as defined in the Submerged Lands Act.

\textsuperscript{140} Oklahoma v. Texas, 268 U.S. 252, 256 (1925). This was recognized by both litigants in the proceedings before the Special Master in the California case. The Master went a step further and recommended that because the problem was one of defining the marginal sea, even where artificial fills had been made, the boundary be accepted as the low-water mark "as it exists at the time of survey" (see Part I, 6422 B).

\textsuperscript{141} In an ancillary proceeding to the original suit filed by the United States against the State of Louisiana to adjudicate the extent of the latter's seaward boundary (United States v. Louisiana, Sup. Ct., No. 7, Original, Oct. Term, 1955, which was later supplanted by No. 11, Original), the Supreme Court on Dec. 12, 1955, granted Louisiana's application for leave to perpetuate testimony relating to the location of the state's shoreline (the high-water line) and its seaward boundary as they existed prior to or at the time it became a member of the Union in 1812. In re State of Louisiana, 350 U.S. 921 (1955). (Testimony was taken at Baton Rouge, La., on Dec. 27 and 28. At the request of the Attorney General of the United States, the author was present in an advisory capacity during the entire hearing.) The method used for fixing the 1812 shoreline was by an extrapolation from accurate surveys made subsequent to 1853. The validity of this method depends upon the assumption that the advance or retreat of the shoreline from 1812 to 1854 has proceeded at a uniform rate and has continued in the same direction. For an account of the hearing, the technique of extrapolation, and a discussion of the effect of the hearing on the need for a present survey of the shoreline, see Shallowitz, Special Assignment for Department of Justice, Special Rept. 88 of 1955 (Coast Survey archives).
Unlike the California case, the act also poses delimitation problems associated with seaward boundaries. These fall into two categories: (1) a determination of the outer boundaries of the states, and (2) a determination of the lateral boundaries between the states. As in the case of the landward base, there is nothing in the act, nor in its legislative history, that provides a guiding principle for the solution of these problems. International law furnishes the necessary criteria, since the problems are the same as those of determining the outer limits of the marginal sea, and the boundary through the marginal sea of two adjacent countries.

1621. Exterior Boundaries

Basically, the concept of a marginal sea is that of a belt of water of a fixed breadth throughout its extent. In the United States, this belt is considered to be 3 nautical miles wide. But this does not mean that the belt runs like a ribbon along the coast, of even width throughout every sinuosity. It does mean that all the water which is within the fixed distance from the baseline (the low-water line, subject to exceptions) is part of the marginal sea. Three processes of drawing these exterior boundaries have been mentioned in the literature: (a) a replica line, (b) a conventional line, and (c) an envelope line. In front of straight coastlines, all three procedures would produce the same result.

(a) A Replica Line.—This line (often called the tracé parallèle) results from lifting the low-water line bodily from its existing position, moving it seaward a distance equal to the width of the marginal sea, and laying it down parallel to its former position. Such a line will usually be extremely irregular, following all the sinuosities presented by the low-water line. This procedure has never been seriously advocated by geographers or cartographers. The reasons are obvious: it requires an actual charting of the line to be of value to the user; it must be drawn parallel to the general trend of the coast, which opens

142. The common boundary between federal and state jurisdiction in United States v. California, 332 U.S. 19 (1947), was the inshore limits of the marginal sea; therefore, the Special Master was not called upon to establish criteria for determining the offshore limits.

143. This is so because under the Outer Continental Shelf Lands Act (see 23), the beginning of federal jurisdiction will be determined by the seaward limits of state jurisdiction.

144. Senator Cordon, chairman of the subcommittee on S.J. Res. 13, 89th Cong., 1st sess. (1953), stated during the debate on the measure: “It [location of boundaries] is a matter for the courts to determine, or for the United States, through Congress and the legislative organizations of the several States, to reach an agreement upon. The pending bill does not seek to invade either province.” 99 Cong. Rec. 2620 (1953).

145. But the method of fixing the exterior limits of the marginal sea should not be confused with the problem of fixing the baseline from which the marginal sea is measured. While the location of the exterior limits is dependent upon where the baseline is fixed, the method by which the limits are fixed is not. How you fix the baseline and how, having fixed it, you delimit the exterior boundaries of the marginal sea are two separate problems.
the door to divers interpretations; it introduces refinements not justified by a seaward boundary 3 or more miles from shore; and, surprisingly, it only partially preserves the concept of a fixed distance from the low-water line. 146

(b) A Conventional Line.—This may be any one of a number of lines. It is usually associated with straight lines, but may be a combination of lines: straight lines along a concave coast and curved lines (the tracé parallèle or the “envelope line”) along a convex coast, for example. A conventional line may also encompass a series of connected straight-line segments related to major or minor headlands along a coast without regard to the adopted baseline for the seaward limits of inland waters. In the case of any conventional line, the actual delineation of the line based on any principles adopted becomes a matter of individual judgment, and considerable differences in the results may be obtained by even two experts. Probably the greatest value inherent in the conventional line is in the opportunity it affords for reaching a compromise between conflicting national interests. On the other hand, because of the wide choice of such lines along a given coast, one of its great drawbacks is that an actual charting of the seaward boundary is necessary to make the line of value to the user.

(c) An Envelope Line.—The preferred method of delimiting the exterior boundary of the marginal sea is by means of an envelope line. It is defined as a line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the marginal sea. 147 It is not a true envelope in a geometric sense, 148 but is so named because it forms a continuous series of intersecting arcs which are farthest seaward of all the possible arcs that can be drawn from the baseline with the same radius, and thus envelops, so to speak, all arcs that fall short of the most seaward arcs—for example, the arcs drawn from the heads of small indentations, as in figure 27. The result is that minor sinuosities in the baseline are not reproduced in the envelope line because by definition every point on such line must be a fixed distance from the nearest point on the baseline and at least that distance away from every point on the baseline. If the baseline is straight or a smooth curve, the envelope line will be of the same character; if the baseline consists of indentations with projecting

---

146. This can be visualized by reference to fig. 27. By shifting the low-water line seaward a fixed distance parallel to the general trend of the coast it will be found that there are points on the exterior boundary that will be less than the fixed distance from the nearest point on the low-water line, as, for example, near the ends of the figure.

147. The envelope line was embodied in the proposal of the United States delegation at the Hague Conference of 1930 (3 Acts of the Conference for the Codification of International Law, League of Nations Publications V: Legal 1931), and was adopted by the Geneva Conference in 1930, on recommendation of the International Law Commission, which in turn acted on the recommendation of a committee of experts (see Part 3, 3211 B).

148. The word “envelope” is a mathematical term and denotes a curve forming a common tangent to a number of other curves arranged according to some fixed principle—hence, the term courbe tangente which is sometimes used to denote the envelope line.
points, the envelope line will not form a smooth curve but will consist of a
number of intersecting arcs.\textsuperscript{149}

Geometrically, the envelope line is the locus of the center of a circle the
circumference of which is always in contact with the coastline, that is, with the
low-water line or the seaward limits of inland waters. Although often referred
to as the "arcs-of-circles method," because of the manner in which the line can
be drawn (by swinging arcs from points along the coastline), it will occasion
less confusion if thought of in its geometric sense, that is, as a derivative of
the coastline. (See fig. 27.)

The principle of the envelope line is so definite and conclusive that under
it only one line can possibly be drawn from a given coastline.\textsuperscript{150} And even
though no actual line is charted, a navigator would find no difficulty in deter-
mining whether he is within or without the marginal sea. Having plotted his
position on his chart, he describes an arc to landward with a radius equal to
the width of the marginal sea—if the arc cuts land (the low-water line) or
inland waters, he is in the marginal sea; if it just touches such features, he is
exactly on the boundary between the marginal sea and the high seas; and if it
fails to touch at all, he is outside the marginal sea. (See fig. 28.)

\textsuperscript{149} It also follows that the greater the distance from the same baseline, the smoother will the envelope
line be.

\textsuperscript{150} The reverse of course is not true. It can be shown that the same envelope line may result from
different coastlines, but this does not detract from the efficacy of such line as a boundary.
These practical advantages of the envelope line are so overriding as to more than offset the departures of the line from strict parallelism to the sinuosities of the coast. The envelope line adheres in essence to the rule of the tidemark (see Part 1, 331) because every point on it is a fixed distance from some point on the low-water line, even though every point on the low-water line is not a fixed distance from the envelope line.

Since the envelope line is geometric in origin, it, like the semicircular rule for bays, would seem to be appropriate for delimiting the seaward boundaries of the states under the Submerged Lands Act, quite apart from its use in international law.\footnote{151}

1622. Lateral Boundaries

Delimitation of the seaward lateral boundaries between adjacent states under the Submerged Lands Act poses the same problems as delimitation of the lateral boundaries between adjacent coastal nations through the marginal sea and the continental shelf. The objective in all such cases is to apportion the area in such manner as will be equitable to both nations or to both states. This principle of equity was embodied in the Presidential Proclamation of 1945 relative to the continental shelf contiguous to the coasts of the United States (see

\footnote{151. Having established an envelope line at T-distance from the coastline, agreement might be reached between the parties concerned on a jurisdictional line consisting of a series of straight lines within the framework of the envelope line. Such treatment would be in the interest of simplified leasing procedures and better identification of leased areas.}
But to proclaim an abstract principle is one thing, and to formulate a working rule is quite another.

The simplest case of drawing a lateral seaward boundary would be where the coastline is relatively straight and the land boundary between two states reached the shore at right angles. An extension seaward of the last land frontier would be a logical solution. But this idealized condition is seldom found in nature and to apply the procedure just described could clearly result in an inequitable apportionment of the water area adjacent to the two states (see fig. 48). Other solutions must therefore be found.\textsuperscript{182}

The Geneva Conference adopted the principle of equidistance as the guiding rule in the delimitation of boundaries through the territorial sea and the continental shelf. The basis for the rule and the method of constructing a boundary line between adjacent coastal nations and nations with coasts opposite each other are discussed in detail in Part 3, 2212 and 2224, and will not be repeated here. The principle being geometric in nature is applicable to the delimitation of the lateral boundaries between the states under the Submerged Lands Act (Public Law 31).

17. LOW-WATER LINE SURVEY OF LOUISIANA COAST

171. PURPOSE OF SURVEY

To implement the application of Public Law 31 to the Louisiana coast, the State of Louisiana in 1957 entered into a cooperative arrangement with the Bureau of Land Management and the Coast and Geodetic Survey for the mapping of the low-water line along the entire Louisiana coast.\textsuperscript{188} The mapping was to be accomplished by photogrammetric procedures in which the aerial photography was to be closely coordinated with actual tidal conditions as determined from a number of tide stations to be established in the area. The inland limits of the mapping were to be defined generally by the Chapman line location (see Part 1, 731).

Specifically, the purpose of the survey was to establish an accurate map location of the low-water line which could be used for delineating the “coast

\textsuperscript{152} For a discussion of some of those solutions, see Part 3, 2212.

\textsuperscript{153} The field work and the preparation of the maps were to be done exclusively by the Coast Survey. Prior to this (in 1954), 15 of the oil companies operating along the Gulf coast had entered into a cooperative project with the Coast Survey to establish the necessary control along the coast (much of the prior control no longer existed) for future mapping, and to tie in to the triangulation scheme the offshore platforms so that they could be used by the companies to carry control farther offshore if that should become necessary (see fig. 29). For a description of this project and the special problems encountered, see Gilmore, Louisiana Coast and Offshore Triangulation, 7 Journal, COAST AND GEODETIC SURVEY 22 (1957).
Figure 29—Coastal and offshore triangulation along Louisiana coast.
line" under Public Law 31 (see 161) and from which the seaward boundary of Louisiana could be established. The survey is equally important to the Federal Government because under Public Law 212, federal jurisdiction begins where state jurisdiction ends (see 231). This project, including the compiled maps, was completed in October 1961.

172. THE MAPPING PROJECT

The mapping project was undertaken in three stages, determined by the available photography and the nature of the coastline. Stage 1 included the areas east and west of the Mississippi delta and comprised the coastline of the islands facing Breton and Chandeleur Sounds, the coastline west of the Mississippi delta to Atchafalaya Bay, and from west of Marsh Island to the western boundary of Louisiana at Sabine Pass. Stage 2 included the Mississippi delta area, and stage 3 the Atchafalaya Bay area. The maps for the entire project were to be planimetric in nature and drawn at a scale of 1:20,000.

1721. Area East and West of the Mississippi Delta

The maps for this area were based on commercial photography flown in January and March of 1954 at tide stages ranging from 0.3 foot above to 0.7 foot below mean low water. Because of the nature of the coastline in this area, the slope of the foreshore, and the absence of possible dispute over the Chapman line (see Part 1, 731), it was possible to utilize the contact line on the photographs to interpolate a mean low-water line from the known height of the tide at which the various photographs were taken.

In compiling the low-water line for this portion of the coast, existing planimetric maps were utilized as base maps. Where necessary, modifications were made in the high-water line and in adjacent details from the 1954 photography. Forty-one maps were required for this portion of the project.

154. For the Coast Survey, the project will provide basic tidal data along this section of the Gulf coast, and planimetric maps for the revision of nautical charts.

155. Although the Submerged Lands Act is unclear as to whether a "present" coastline is to be used as the baseline from which the seaward boundaries of the states are to be measured (see 161), an accurate present survey would still be necessary, even if it should be held that Congress intended a "past" coastline. This is because very few of the early, or even later, surveys delineate a low-water line suitable for boundary determination. A present, accurate survey, of both the high- and low-water lines could be used for extrapolating a past low-water line by the method described in Coast Survey Special Rept. 88 of 1955 (see note 141 supra).

156. The maps are numbered consecutively from 1 to 41 beginning at the eastern boundary of the state. They are also identified by register numbers. All the maps carry a note similar to the following: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the State of Louisiana to show the approximate mean low water line along the Gulf Coast as interpolated and compiled from aerial photographs taken by Jack Ammann Corp., January 1954."
Although commercial photography flown in 1954 was also available for this area, the same procedure could not be followed as was used for the area east and west of the delta. The flatness of the area necessitated a more critical tolerance in the determination of the mean low-water line. The predominance of marsh and wild cane made this a most difficult area to survey and economically prohibitive insofar as ground surveying was concerned. The only practical solution was by means of aerial photogrammetry linked to an exact tidal datum. 157

(a) Establishment of Tidal Datum.—Accurate coordination between the photography and the tide was essential to the mapping of the low-water line. A paucity of tide stations in the area made a tidal survey in advance of the photography a prerequisite. Eight tide stations were established in the area, so distributed to reflect changes in time and range of the tide along the different portions of the delta in order to insure an accurate mean low-water datum for every part of the coast (see fig. 23). Twelve months of tide observations were obtained at the local stations for comparison with a 19-year series at Pensacola, Fla., where the tidal characteristics are the same. 158 Indications are that the datum of mean low water was established with an accuracy of 0.1 foot vertically.

(b) Photogrammetric Operations.—To provide detail for the basic planimetric mapping, 9-lens photographs were taken during October 1958. These were especially suitable because of the relative scarcity of ground control and the difficulty of identifying such control on the aerial photographs. For mapping the low-water line, infrared photography, controlled from the tide stations after establishment of the mean low-water datum, was taken in December 1959. 159 (See fig. 30.)

157. Small inaccuracies in the low-water line resulting from this method could readily fall within the doctrine laid down by the Supreme Court in the boundary dispute between Arkansas and Tennessee along the Mississippi River. The Court said: “The thing to be done must be regarded. It is to locate the boundary along that portion of the bed of the river that was left dry as a result of the avulsion, according to the middle of the main navigable channel at the time the current ceased to flow therein as a result of the avulsion. Absolute accuracy is not attainable. A degree of certainty that is reasonable as a practical matter, having regard to the circumstances, is all that is required.” Arkansas v. Tennessee, 269 U.S. 152, 157 (1925).

158. The tide in the delta area follows the diurnal pattern with one high and one low water occurring during the greater part of the month. Therefore, in computing the datum of mean low water at the various stations, the tides were reduced on a diurnal basis, using only the lower of the two low waters on the days when the tide became semidiurnal (see 1613). This follows the procedure used for establishing the plane of mean low water at Pensacola. Mariners’ The Tide at Pensacola, 68 United States Naval Institute Proceedings 1429 (Oct. 1942).

159. Infrared photography provided a sharp contrast between land and water and made possible an accurate delineation of the tidal contour.
Figure 30.—Infrared photography provided a good contrast between land and water.

The outer coastline, with the exception of a small section of the west shore of the delta, was photographed when the tide ranged between mean low water and 0.3 foot below mean low water. All lines on the project were photographed from two to four times at tide stages varying between 0.2 foot above to 0.4 foot below mean low water, from which an interpolation of the actual mean low-water line was made.\textsuperscript{160}

The photographs were compared with the shoreline at, or very nearly at, mean low water to check the interpolation made when the photographs were not taken at exactly mean low water. This inspection also served to detect small, off-lying, mean low-water reefs that might have been missed in the office.

\textsuperscript{160} It was not possible to fly all the photography at exactly mean low water because this would have required more flying days than could be expected. The tides do not always go exactly to mean low water and stand there. They usually do not go as low as mean low water or they go below mean low water.
examination of the photographs, and to search out the mean low-water line in
the few instances where it occurs just inside the edge of the wild cane.161

Fourteen maps cover the entire delta area and include full planimetric
coverage to neat-line limits. 169

1723. Atchafalaya Bay Area

This was the third stage of the Louisiana mapping project and was the
last to be accomplished. It covered the area from Point au Fer westward to the
western end of Marsh Island where it joined the area described in 1721. The
Point au Fer Shell Reef, extending northwesterly from Point au Fer, and the
south shore of Marsh Island were the two critical areas. It was necessary to
know the condition of the reef with respect to both high water and low water
because of its possible effect on the status of the bay as inland waters or open
sea. 163 The exposed nature of the reef, its distance from land, its low elevation
at low water, and its almost complete submergence at high water made it
particularly difficult to survey even by photogrammetric methods. It is doubtful
whether any practical ground method of surveying could have been utilized.

Along the south shore of Marsh Island there were a number of known
reefs (mostly exposed at low water) some attached to the shore and some
detached. These had only been surveyed approximately in the past and it
was necessary that they be accurately delineated before the seaward boundary
of the state could be drawn (see Part 3, 2211 D(c)).

Besides the overall control established along the Louisiana coast in 1954
(see note 153 supra), supplemental control was established in 1960 by a com-
bination of triangulation and tellurometer traverse in order to position the

161. For a description and analysis of the field aspects of this project, the problems encountered,
and the accuracies attained, see Jones and Shofnos, Mapping the Low Water Line of the Mississippi Delta.

162. The maps are identified as Registers Nos. T–10944 to T–10957, inclusive. All maps carry the
following note: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the
State of Louisiana to show the mean low water line along the outer coast of the Mississippi River Delta
area of the Gulf Coast as interpolated and compiled from infrared aerial photography and field examination
by the Coast and Geodetic Survey in November and December, 1950."

163. The importance of knowing the condition of the reef with respect to high water is pointed out
by an observation made by the Supreme Court in its decision of May 31, 1960 (see 154). The Court there
said: "The Government concedes that all the islands which are within three leagues of Louisiana's shore
and therefore belong to it under the terms of its Act of Admission, happen to be so situated that the
waters between them and the mainland are sufficiently enclosed to constitute inland waters. Thus,
Louisiana is entitled to the lands beneath those waters quite apart from the affirmative grant under the
Submerged Lands Act... Furthermore, since the islands enclose inland waters, a line drawn around
those islands and the intervening waters would constitute the 'coast' of Louisiana within the definition
of the Submerged Lands Act." United States v. Louisiana et al., supra note 139, at 67 n.108. The present
charted reef is within 3 leagues of the Chapman line (see Part 1, 731), hence the necessity of knowing its
condition with respect to high water (see 1545 B, Note 89).
reef across the bay where the land detail was insufficient for photogrammetric
bridging.

(a) Establishment of Tidal Datums.—Tide conditions in the bay are some-
what unique and therefore more stations were required to coordinate the aerial
photography with the tidal datums than would normally be required in such
an area. Seven new tide stations were established at strategic locations (two
within a half mile to a mile from the axis of the reef), so that each station con-
trolled a rather restricted area (see fig. 22). 164

The unique tidal conditions also made it infeasible to use the method of
comparisons of simultaneous observations for deriving mean values, as was
done in the delta area (see 1722). The procedure adopted was to obtain mean
sea level in the bay by comparison with a 19-year series at Galveston. Harmonic
constants for each tide station were then computed from a 29-day series by
comparison with a 369-day series at Eugene Island. These showed the diurnal
tide to be the dominant one in the area and therefore the datum reductions
were made on a diurnal basis (see notes 133 and 158 supra). 165 The high- and
low-water datums were determined with an accuracy of 0.1 foot vertically.

(b) Photogrammetric Operations.—Wide-angle single-lens, and 9-lens
photography were used for bridging and for fixing the position of the reefs
across the flight lines. All low-water mapping was done by infrared photog-
raphy controlled from a base station where tide observations from the other
tide stations were received at 15-minute intervals. It was thus possible to inform
the aircraft what lines to fly and at what times. 166

A field inspection was made of the mean low-water line using prints of
the infrared photography. The purpose of this was to verify the low-water
line visible on the photographs; to make certain that no small reefs were missed
on the 1:20,000 scale photography; to mark for omission low-lying reefs just
visible on the photography but just covered at mean low water; and to obtain
elevations above water of low-lying reefs in order to complete mean low-water
mapping regardless of a change in the preliminary datum of 0.1 or 0.2 foot,
which might be either plus or minus. A careful program of inspection was

164. The only existing tide station in the area was at Eugene Island near the eastern end of the bay,
but this was not representative of tidal conditions in the area because of the influence of the Atchafalaya
River.

165. Preliminary datums were established from a 5-month series of observations and were later
corrected for a 12-month series. This was done in order to fly the area during the winter of 1960–61,
which was the only time mean low water occurred during photographic daylight. The alternative was
to delay operations for 1 year. The final low-water datum did not vary by more than 0.1 foot from the
preliminary value, and the high-water datum by no more than 0.2 foot.

166. All low-water photography was completed between Nov. 19 and 21, 1960. On the first day
the tide barely reached mean low water; on the second day it reached exactly mean low water; and on
the third day it went to 0.3 foot below mean low water.
worked out so as not to miss any of the many small reefs bare at low water. Panchromatic and color photography penetrated the water slightly and all indications of reefs shown on photographs were investigated, as well as all shoal indications on the nautical charts as possible reefs bare at low water. The area across the bay was inspected and reinspected several times in order to be certain of the mean low-water line. Not all inspection could be done at exactly mean low water because the tide changed rapidly—0.1 foot every 15 minutes. Inspection usually started 0.2 or 0.3 foot below mean low water.\textsuperscript{167}

As noted above, a determination of the condition of the reef and shoals with respect to the datum of mean high water was essential for determining the status of the bay (whether inland water or open sea). It was not practicable to take high-water photographs during the period of operations in the winter of 1960–61 because high water rarely occurred during photographic daylight. Instead, an inspection was made of the area to detect points on the reefs that might bare at mean high water. Levels were then run on each one from the water surface to the top of the reef and referenced to a tide staff to determine its elevation with respect to mean high water. Another search of the area was made by helicopter in February 1961, to make sure that no small islets were missed. Mean high-water, infrared photography was also flown in May 1961.\textsuperscript{168}

Five shoreline maps (with some planimetry back of the high-water line), compiled at scale 1: 20,000, cover the area.\textsuperscript{169}

\textsuperscript{167} Field inspection was accomplished between Nov. 30, 1960, and Jan. 15, 1961, using a helicopter. The inspection unit knew at all times the exact stage of tide in relation to mean low water. Where the elevation of a reef was critical the helicopter was landed and the elevation above the water surface measured by hand level. Reference to the controlling tide station gave the elevation of the reef with respect to mean low water. Field inspection photographs show the date, time of inspection, and stage of tide for each unit area.

\textsuperscript{168} The elevations changed slightly as a result of a slight change in the datum value but no major change was made in the general status of the high-water reefs. For a complete discussion of the entire field project for this area, see \textit{Shoreline and Mean Low-Water Line Mapping—St. Charles Bay, La.}, Special Rept. 2 of 1961 (Coast Survey archives).

\textsuperscript{169} The maps are identified as Registers Nos. T–11993 to T–11997, inclusive. All maps carry the following note: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the State of Louisiana to show the mean low water line as interpolated and compiled from infrared aerial photography and field examination by the Coast and Geodetic Survey in November and December 1960. Base map compiled from photography taken November 1960 and field inspection of December 1960 to February 1961."