

INTRODUCTION AND OVERVIEW

THE HEADWATERS OF THE PUBLIC TRUST: SOME THOUGHTS ON THE SOURCE AND SCOPE OF THE TRADITIONAL DOCTRINE

BY
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I. INTRODUCTION

The public trust doctrine is complicated—there are fifty-one public trust doctrines in this country alone;¹ timely—the judicial, legislative and scholarly work on the doctrine is proceeding apace; and arcane—the roots of the public trust doctrine go back liter-

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1. The federal public trust doctrine announced in *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387 (1892), and the varying, state-law based trust doctrines total 51 separate public trust doctrines. See *infra* notes 164-75 and accompanying text.

ally for millennia.² But those factors do not explain why the public trust doctrine is one of the most controversial developments in modern American law, and perhaps the single most controversial development in natural resources law.³

There are two basic reasons for the intense debate over the trust. First, the traditional public trust doctrine deals with our coastlines, harbors, and major rivers and lakes, which as a group are among our most valuable natural resources, whether valued in terms of economics, recreation, beauty, or spirituality.⁴ Second, the debate evidences, at its quick, a collision between two treasured sets of expectancy interests: those of private landowners who expect their titles to land and water to remain secure, and those of the general public, which expects that most of its rivers will remain rivers, its lakes lakes, and its bays bays.⁵

The public trust doctrine comes in many different forms.⁶ To understand the trust, however, it is important to begin with its core, what I refer to as the traditional doctrine. By the traditional

2. See *infra* notes 18-26 and accompanying text.

3. The volume of controversy attending the modern development of the public trust doctrine is suggested by the prominence of the seminal piece on the doctrine, Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970) [hereinafter Sax, *Judicial Intervention*]. Professor Sax's article was ranked among the 49 most frequently cited law review articles of the previous 40 years in 1985. Shapiro, *The Most-Cited Law Review Articles*, 73 CALIF. L. REV. 1540, 1551-53 (1985). See also the "spate of law review commentators" cited in Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 643 n.75, 644 n.76 (1986) (citing 27 law review articles on the public trust doctrine).

4. See *infra* notes 27-58 and accompanying text.

5. On the role of the public trust doctrine in fulfilling public expectancy interests, see Sax, *Liberating the Public Trust Doctrine from Its Historical Shackles*, 14 U.C. DAVIS L. REV. 185 (1980), quoted *infra* note 192 [hereinafter Sax, *Liberating*].

6. The public trust doctrine derives from constitutional, statutory, and common-law sources, and has been applied in various contexts to resources other than watercourses navigable for the purposes of title, including wildlife, federal public lands, and drinking water. See, e.g., Note, *Constitutional Law and the Environment: Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, 59 TUL. L. REV. 1557, 1558-60 (1985). A wide range of trust purposes also have been recognized, from the traditional navigation, commerce, and fishing uses established in Illinois Cent. R.R. v. Illinois, 146 U.S. 387, 452 (1892), to the more expansive purposes recognized in the modern cases. See *infra* notes 165-75 and accompanying text.

doctrine, I mean the trust principles that the United States Supreme Court⁷ has applied to those watercourses that are navigable for the purposes of title⁸—those watercourses whose shorelines, beds, and banks pass by implication to states at the time of statehood.⁹ Those natural resources were the subject of such leading nineteenth century cases as *Shively v. Bowlby*¹⁰ and *Illinois Central Railroad v. Illinois*.¹¹ Different courts have since extended the public trust doctrine to many other kinds of resources,¹² but first I want to focus on these particular resources and the traditional doctrine that governs them.¹³

7. The traditional public trust doctrine appears in United States Supreme Court cases as early as the 1840s and 1850s, *see infra* note 9, and in several recent cases during the 1970s and 1980s, *see infra* note 145. The Court's clearest statement of the trust, however, remains *Illinois Central*, 146 U.S. at 435, 452-53.

8. Navigability-for-title is both a rule of real property and a question of federal law. The concept applies to those watercourses that are "navigable in fact"—those watercourses used, or capable of being used, for navigation in their ordinary condition at the time of statehood. *See The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870), *quoted infra* note 95; *see also, e.g.*, Phillips Petroleum Co. v. Mississippi, 108 S. Ct. 791 (1988); Utah Div. of State Lands v. United States, 482 U.S. 193 (1987); Utah v. United States, 403 U.S. 9, 11-12 (1971); United States v. Oregon, 295 U.S. 1 (1935); United States v. Utah, 283 U.S. 64 (1931); United States v. Holt State Bank, 270 U.S. 49 (1926); *The Montello*, 87 U.S. (20 Wall.) 430, 441-42 (1874), *quoted infra* note 95. The Court's test for navigability-for-title is summarized in Johnson & Austin, *Recreational Rights and Titles to Beds on Western Lakes and Streams*, 7 NAT. RESOURCES J. 1, 24-25 (1967). Other uses of the term "navigability" are discussed in *id.* at 4-5.

9. The rule controlling ownership of shorelines, beds and banks of navigable-for-title watercourses was stated in *Martin v. Waddell*, with reference to the original 13 states:

when the Revolution took place, the people of each state became themselves sovereign; and in that character hold the absolute right to all their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government.

41 U.S. (16 Pet.) 367, 410 (1842). This rule was applied to subsequent states via the constitutional equal footing doctrine in *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 229 (1845). "The new states have the same rights, sovereignty, and jurisdiction over this subject ['the shores of navigable waters, and the soils under them'] as the original states." *Id.* at 230. *See also infra* text accompanying notes 81-89.

10. 152 U.S. 1 (1894).

11. 146 U.S. 387 (1892).

12. *See infra* text accompanying notes 164-73.

13. It is critical to distinguish those watercourses navigable for title and those waters—nearly all waters of the nation, really—that are subject to Congress' so-

Thus, my purpose in this Article is to search out the origins—the headwaters—of the public trust doctrine. In doing so, my real attempt is to explore the fundamental legitimacy of the doctrine. Does the trust have a solid base in history and public policy?¹⁴ Does the trust emanate from the federal constitution, federal common law, state constitutions, or state common law?¹⁵ Is the trust properly invoked in western water law, effectively serving as a counterweight to the prior appropriation doctrine?¹⁶ Ultimately, is it appropriate and legitimate for the judiciary to take a lead role in developing this doctrine in a time when natural resources law has become heavily statutory?¹⁷

II. THE PUBLIC INTEREST IN MAJOR WATERCOURSES

A great many countries have legal rules that, in one fashion or another, give special treatment to major bodies of water. Typically, these rules articulate public concern for the resources and,

called “navigability” power under the commerce clause. In the early years of the republic, federal regulatory authority was described in terms of navigability but the reach of Congress’ commerce clause power expanded dramatically after 1937. *See, e.g.*, *Katzenbach v. McClung*, 379 U.S. 294 (1964); *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1 (1937). In time, the courts recognized that Congress’ ability to legislate over the nation’s waters was essentially unlimited. *See, e.g.*, *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). There has been no corresponding expansion of the navigability-for-title concept, which generally applies only to major watercourses. *See supra* note 8. Chief Justice Rehnquist has accurately distinguished between the two doctrines:

Reference to the navigability of a waterway adds little if anything to the breadth of Congress’ regulatory power over interstate commerce. It has long been settled that Congress has extensive authority over this Nation’s waters under the Commerce Clause. Early in our history this Court held that the power to regulate commerce necessarily includes power over navigation . . . [but] a wide spectrum of economic activities “affect” interstate commerce and thus are susceptible of congressional regulation under the Commerce Clause irrespective of whether navigation, or, indeed, water, is involved. The cases that discuss Congress’ paramount authority to regulate waters used in interstate commerce are consequently best understood when viewed in terms of more traditional Commerce Clause analysis than by reference to whether the stream in fact is capable of supporting navigation or may be characterized as “navigable water of the United States.”

Kaiser Aetna v. United States, 444 U.S. 164, 173-74 (1979).

14. *See infra* text accompanying notes 18-58.

15. *See infra* text accompanying notes 118-63.

16. *See infra* text accompanying notes 186-92.

17. *See infra* text accompanying notes 176-92.

typically, these disparate concepts have ancient roots. Public values in water can be traced back, for example, to the Roman *Institutes of Justinian*¹⁸ and the Magna Carta¹⁹—often cited as historical antecedents for the public trust²⁰—and to medieval Spain²¹ and France.²² But these ideas extended far beyond Europe. In the Orient, recognition of public uses of water existed well before the birth of Christ.²³ African nations held similar traditions: “from time immemorial the people of Nigeria have enjoyed the right to fish the sea, with its creeks and arms and navigable rivers within the tides.”²⁴ In Moslem countries, “the fundamentals of Islamic water law purport to ensure to all members of the Moslem community the availability of water.”²⁵ Spanish and Mexican laws and institutions in the New World evinced a powerful tradition that large portions of the water supply must

18. J. INST., 2.1.1-2.1.6 at 55 (P. Birks & G. McLeod trans. 1987) (“The things which are naturally everybody’s are: air, flowing water, the sea, and the seashore.”).

19. Magna Carta reissue, 1225, chapter 23.

20. See, e.g., 4 R. CLARK, WATERS AND WATER RIGHTS 99 n.53 (1970); Lazarus, *supra* note 3, at 633-35; Sax, *Liberating*, *supra* note 5; Comment, *The Public Trust in Tidal Areas: A Sometime Submerged Traditional Doctrine*, 79 YALE L.J. 762, 763-68 (1970).

21. LAS SIETE PARTIDAS, the thirteenth century codification of King Alfonso X of Iberia, is cited as a Spanish antecedent for the public trust doctrine. See, e.g., M. MEYER, WATER IN THE HISPANIC SOUTHWEST 106-09 (1984) (LAS SIETE PARTIDAS “became a major source of Spanish law and indeed formed the basis for much of the legal system later to be introduced in the New World.”). See also Lazarus, *supra* note 3, at 634.

22. An 11th century statement of regional French law is cited by Professor Sax as a proper source for the modern public trust doctrine. “[T]he public highways and byways, running water and springs, meadows, pastures, forest, heaths and rocks . . . are not to be held by lords, . . . nor are they to be maintained . . . in any other way than that their people may always be able to use them.” Sax, *Liberating*, *supra* note 5, at 189 (citing M. BLOCH, FRENCH RURAL HISTORY 183 (1966)).

23. U.N. ECONOMIC COMM’N FOR ASIA & THE FAR EAST, WATER LEGISLATION IN ASIA & THE FAR EAST, at 210, U.N. Sales No. E.69.II.F.6 (1968) [hereinafter U.N. ECONOMIC COMM’N]. Under the earliest Chinese water laws, first codified under the Ch’in dynasty (249-207 B.C.), “private water ownership never appeared and the individual duties in water undertakings would eventually lead to and enhance public welfare.” *Id.*

24. T. ELIAS, NIGERIAN LAND LAW 48 (1971) (citation omitted). Elias also relates that “[a]ll the inhabitants of Nigeria also enjoy a right of free navigation in tidal and other large inland waterways.” *Id.* at 49.

25. U.N. ECONOMIC COMM’N, *supra* note 23, at 211.

be dedicated to the community good.²⁶

This general and nearly universal notion—the reluctance to allow our great watercourses to be subject to wholesale private acquisition—goes back even further on this continent, for most American Indian cultures wholly denied the possibility of ownership of land, air, and water. Tecumseh, the Shawnee Chief, asked rhetorically, “Sell the earth? Why not sell the air, the clouds, the great sea?”²⁷ Frank Tenorio, Governor of the San Felipe Pueblo, spoke of the community values and spirituality that Indian people traditionally have associated with water:

There has been a lot said about the sacredness of our land which is our body; and the values of our culture which is our soul; but water is the blood of our tribes, and if its life-giving flow is stopped, or it is polluted, all else will die and the many thousands of years of our communal existence will come to an end.²⁸

The English, whose common law is the most direct source of our public trust doctrine, saw ownership differently than did American Indian people and generally favored private ownership of natural resources. But the British made an exception for navigable waterways.²⁹ The common law distinguished between the

26. See, e.g., M. MEYER, WATER IN THE HISPANIC SOUTHWEST 117-19 (1984).

27. Quoted in J. HUGHES, AMERICAN INDIAN ECOLOGY 63 (1983). On Indian perceptions of ownership of water and other natural resources, see generally *id.* at 61-64 (Indians “had no concept of land as a salable commodity subject to exclusive private ownership.”); S. UDALL, THE QUIET CRISIS AND THE NEXT GENERATIONS 4-8 (1988) (“The land and the Indians were bound together by the ties of kinship and nature, rather than by an understanding of property ownership. . . . The idea that land could be bought and sold was an alien concept to the Indians of America.”); MEYER, *supra* note 26, at 18 (“From what is known of American Indian ownership patterns, it seems unlikely that water was considered private property to be bought or sold or traded. Its centripetal position in Indian religion reinforces this hypothesis.”); Vecsey, *American Indian Environmental Religions*, in AMERICAN INDIAN ENVIRONMENTS 1-30 (C. Vecsey & R. Venables eds. 1980). Compare United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53, 69 (1913), in which the Court stated that “[o]wnership of a private stream wholly upon the lands of an individual is conceivable; but that the running water in a great navigable stream is capable of private ownership is inconceivable.” This language was cited with approval in United States v. Twin City Power Co., 350 U.S. 222, 226 (1956).

28. AMERICAN INDIAN LAWYER TRAINING PROGRAM, INC., INDIAN WATER POLICY IN A CHANGING ENVIRONMENT 2 (1982).

29. One authority summarized the public uses of river beds and banks in

jus privatum, which the Crown could transfer to individuals in fee ownership, and the *jus publicum*,³⁰ which the Crown held in trust for the public.³¹ The most important areas of these public rights were the coasts and those stretches of rivers affected by the ebb and flow of the tide.

The real headwaters of the public trust doctrine, then, arise in rivulets from all reaches of the basin that holds the societies of the world. These things were articulated in different ways in different times by different peoples. In some cases the waters ran deep, in other places the waters ran shallow. But the idea of a high public value in water seems to have existed in most places in some fashion.

Public values in water certainly existed in America at the time of its founding. Indeed, it is hard to overstate the importance of the major watercourses during the formative years of the United States. To the early settlers, the rivers furnished paths of exploration and avenues for the fur trade³² and log floats.³³ Due

England in the following terms,

by the time of Sir Matthew Hale in the seventeenth century, the legal presumption was that the riparian owners along fresh-water rivers had the exclusive right to the use of the beds and banks. But that presumption was subject to a public right to use the bed and banks for purposes incidental to navigation where the public had acquired that right by prescription or custom. The beds and banks of navigable rivers were indeed used by the public, as a matter of right, for anchoring, mooring, and towing vessels along the banks; where the public had had need for such uses, the right was thus established. . . . Where there was conflict with the public right of navigation, the right of navigation prevailed. In short, medieval common law recognized the only substantial public demand for water use that was exerted.

1 R. CLARK, WATERS AND WATER RIGHTS 182-83 (1967) (footnotes omitted).

30. On the distinction between the *jus privatum*, or private right of title, and the *jus publicum*, or public rights of use, see 4 R. CLARK, *supra* note 20, at 99-103. See also Shively v. Bowlby, 152 U.S. 1, 11-14 (1894). Both rely heavily on Lord Chief Justice Hale's treatise DE JURE MARIS, 1 HARGRAVE TRACTS 5-44 (1787) and S. MOORE, A HISTORY OF THE FORESHORE (3d ed. 1888).

31. There is conflicting authority over whether the Crown could grant away *jus publicum* lands. Compare Martin v. Waddell, 41 U.S. (16 Pet.) 367, 410 (1842) ("the question must be regarded as settled in England against the right of the king since Magna Charta to make such a grant.") with 4 R. CLARK, *supra* note 20, at 101 ("Statements found in the American cases which assume that the King could not grant the beds of navigable waters, the *jus privatum*, in to private ownership are wrong.").

32. See, e.g., CARNEGIE INST. OF WASHINGTON, HISTORY OF TRANSPORTATION IN THE UNITED STATES BEFORE 1860 5 (1917) [hereinafter CARNEGIE]. The first explor-

to the density of the forests and the difficulty of road construction, the watercourses provided transportation routes, and their shores afforded logical areas for settlement.³⁴ Fishing was signifi-

ers followed the rivers to find outlets to the West through the Appalachian Mountains. *Id.* See also W. LASS, A HISTORY OF STEAMBOATING ON THE UPPER MISSOURI RIVER 5 (1962). The history of pioneer steamboating navigation began in 1819 with the government-sponsored Yellowstone Expedition. *Id.* See also R. RUSSELL, IMPROVEMENTS OF COMMUNICATION WITH THE PACIFIC COAST AS AN ISSUE IN AMERICAN POLITICS 1783-1864 3 (1948). In 1803, the Lewis and Clark expedition was sent to explore the Missouri so that "trade be consequently conducted through the Missouri and United States more beneficially than by circumnavigation now practiced." *Id.*

The fur trade dominated by the American Fur Company was the major business on the upper Missouri from the late 1820s to 1862. The need to carry supplies into the region, and the need for reliable downstream transportation for increasing quantities of fur, encouraged companies to look into steam navigation of the Upper Missouri. W. LASS, STEAMBOATING ON THE UPPER MISSOURI RIVER 8 (1962). The Mississippi also received heavy use for the shipping of furs. For example, "the average annual value of the fur trade of upper Louisiana for 15 successive years ending in 1804 amounted to \$203,750." CARNEGIE, *supra*, at 100.

33. River navigation was also extremely important to the logging industry, since the construction of roads into remote forested areas was often impractical. Log floating was a difficult process but was the only way to use rivers that were not passable by boats.

Still, if the rivers could be made passable, the timber industry could expand. One example of the efforts to make the rivers navigable occurred in Washington State on the Puyallup River. In 1889, the Tacoma Land Co. chartered one of the longest dredging operations in the world to date. The dredger, a 50-horsepower steam engine, labored to deepen the channel connecting the ocean with an up-river portion of the Puyallup River where a mill had been built. The dredger shot the silt out of the channel of the stream to the marshy side banks. The project cost \$300,000 and took two years. It took nature one series of storms in late 1891 to destroy most of the work that had been done. The importance of the early watercourses to the American people is underscored by the fact that the Tacoma Land Co. immediately set about remaking the channel, this time using a different route. The path that the Puyallup River takes today is due to the determination of these early settlers. M. MORGAN, THE MILL ON THE BOOT, THE STORY OF THE ST. PAUL AND TACOMA LUMBER CO. 91-98 (1982).

34. 1 S. DUNBAR, A HISTORY OF TRAVEL IN AMERICA 16-17 (1915). Trees in the eastern American forests during the early colonial days were typically two to five feet in diameter. Some of the largest were 12 or 15 feet in thickness. The area under the standing trees was often covered with fallen trees. Horses were useless except near settlements or on a beaten path. *Id.*; CARNEGIE, *supra* note 32, at 55. A traveler from Baltimore to Washington around 1791 described the roads as

"so exceedingly bad that a carriage will sometimes sink so deep as to defy the utmost exertions of the strongest horse to draw it forwards; and in some parts that would be otherwise totally impassable, causeways constructed of trees are thrown across the road; but these frequently break asunder and

cant, both for commercial and subsistence purposes.³⁵ The Revolutionary War and the War of 1812 demonstrated the military necessity of controlling the natural highways.³⁶ The new nation realized that water had more abstract value as well.³⁷ As William

constantly expose a traveler to the most imminent danger. . . . Such is the high road to the federal city of Washington.'

Id. See, e.g., CARNEGIE, *supra* note 32, at 94-116 (discussing the Ohio and Mississippi rivers); 1 S. DUNBAR, *supra*, at 25 (listing four areas adjoining water as the early Colonial settlements: Chesapeake Bay, New York Bay and the Great River of the Mountains, the Connecticut River Valley and Long Island Sound, and Delaware Bays and Susquehanna Rivers).

35. During the mid-1600s, 730 vessels were built by the Massachusetts colony alone. Many of these boats were devoted chiefly to fishing or to trade with England, the West Indies and the other colonies, "but boats of some sort were kept by families living near water just as a modern farmer or business man keeps an automobile." 1 S. DUNBAR, *supra* note 34, at 28-29. The Ohio River was filled with a variety of fish such as the "agile pike, the fat groveling cat-fish, and the silver scaled perch." C. AMBLER, *A HISTORY OF TRANSPORTATION IN THE OHIO VALLEY* 25 (1932).

36. CARNEGIE, *supra* note 32, at 91-93. The costs of transportation during the War of 1812 were exceedingly burdensome. It is probable that \$60 million was spent on transportation during the War of 1812, due primarily to the lack of roads and watercourses. Cannons cost \$1 per pound and flour cost \$40 to \$50 per barrel because of the transportation costs. It was an almost universal opinion that the money spent on transportation would have been enough to construct all the facilities that were lacking. For example, the Allegheny River could have been improved and available for government use during the war for one quarter the expense incurred in transportation between Pittsburgh and Erie. *Id.* at 91.

37. The beauty of the oceans, rivers and streams gave rise to much of the literature and art of the time. Mark Twain described the mighty Mississippi in many of his works, including *ADVENTURES OF HUCKLEBERRY FINN* and *LIFE ON THE MISSISSIPPI*. Henry David Thoreau philosophized at Walden Pond, and Herman Melville described the power of the ocean in *Moby Dick*.

The opening of the Erie Canal led to the founding of one of the earliest schools of painters in America. The Hudson River School, consisting of artists such as Thomas Cole, John Trumbull, William Dunlap and Asher Durand, painted much of the Hudson Valley. J. HOWAT, *THE HUDSON RIVER AND ITS PAINTERS* 27-29 (1972). For Thomas Cole, "every landscape is defective" without water. Wilmering, *American Waters: The Flow of Imagination*, in *THE WATERS OF AMERICA, 19TH CENTURY AMERICAN PAINTINGS OF RIVERS, STREAMS, LAKES AND WATERFALLS* 3 (1984). Lake George, Niagara Falls, the Great Lakes, the Missouri, and the Mississippi all became the subject of early American painters such as Thomas Doughty, Alvan Fisher and George Caleb Bingham. *Id.* George Catlin ventured 2500 miles up the Missouri River in 1832, creating over 140 paintings. Karl Bodmer traveled over the United States painting scenes from the Ohio, Delaware, Mississippi, Yellowstone, and Big Sioux Rivers, and the Bay of New York. Bodmer painted numerous landscape, steamboat, and river traffic scenes. In addition, Bodmer drew pictures of many of the early American Indians whom he en-

Cullen Bryant wrote,

When breezes are soft and skies are fair,
I steal an hour from study and care,
And hie me away to the woodland scene,
Where wanders the stream with waters of green,
As if the bright fringe of herbs on its brink
Had given their stain to the waves they drink;
And they, whose meadows it murmurs through,
Have named the stream from its own fair hue.³⁸

Mark Twain described the beauty of the steamboat and the river in *Huckleberry Finn*,

One or twice of a night we would see a steamboat slipping along in the dark, and now and then she would belch a whole world of sparks up out of her chimbleys, and they would rain down in the river and look awful pretty; then she would turn a corner and her lights would wink out and her pow-wow shut off and leave the river still again, and by-and-by her waves would get us, a long time after she was gone, and joggle the raft a bit, and after that you wouldn't hear nothing for you couldn't tell how long, except maybe frogs or something.³⁹

The great economic savings made possible by transportation on the watercourses attracted the attention of entrepreneurs.⁴⁰ Even before the waterways were improved, the cost savings from water transportation were significant.⁴¹ Both the watercourses

countered on his journeys. The paintings of Bodmer and Catlin not only portrayed the beauty of the early American waterways, and encouraged many settlers to go West, but also left a historical record of the people and the rustic sights. Hunt & Gallagher, *The Plates in KARL BODMER'S AMERICA* (1984).

Even in the naming of the rivers, Americans attempted to describe the beauty of the watercourses. The Ohio River, for example, was called "La Belle Riviere" or "the Beautiful River" by the French explorers. The origins of the word "Ohio" may come from the Indian word "Ohi," a prefix meaning "very," frequently used by the Indians with other words meaning "the white foaming river." C. AMBLER, *supra* note 35, at 21-22.

38. Bryant, *Green River*, in THE NEW OXFORD BOOK OF AMERICAN VERSE 33 (R. Ellmann ed. 1976).

39. 2 G. McMICHAEL, ANTHOLOGY OF AMERICAN LITERATURE, REALISM TO THE PRESENT 423 (1980) (quoting M. TWAIN, HUCKLEBERRY FINN).

40. See, e.g., R. SHAW, ERIE WATER WEST, A HISTORY OF THE ERIE CANAL 1792-1854 7 (1966) ("In 1814, Robert Fulton wrote that it cost \$2.00 to send a barrel of flour 130 miles overland; the same barrel could go by water from Albany to New York City for \$0.25, a distance of 160 miles.").

41. A striking example of the difference between land and water carriage in-

themselves and the boats floating on them evolved with the desire to increase trade.⁴² Many states began to make nonnavigable waterways navigable and started construction of canals to link natural watercourses.⁴³ One of the earliest canals, the Erie Canal, completed in 1825, propelled New York City into status as a major port. Towns in the area that were unconnected with the canal never regained their former leadership in transportation.⁴⁴ The earliest boats used by the colonists were canoes, followed by flat bottomed boats.⁴⁵ Innovations progressed⁴⁶ and culminated in the

volved two factories established for trade with the Indians, the Georgia and Tellico factories. Money was appropriated for the factories in March of 1795, and the merchandise for both factories was purchased in Philadelphia. By January 1, 1801, the Georgia factory showed a gain of \$15,740.83, while the Tellico factory showed a profit of only \$309.53. The difference lay in the fact that the Georgia factory shipped by river to Savannah, and then forwarded the goods by wagon, but the Tellico factory had to travel entirely by land at high carriage rates. CARNEGIE, *supra* note 32, at 80.

42. See generally 1 S. DUNBAR, *supra* note 34, at 38-56, 392-414; CARNEGIE, *supra* note 32, at 94-116.

43. See generally CARNEGIE, *supra* note 32, at 161-279 (describing canals such as the Erie Canal in New York, the Chesapeake and Delaware Canal in Pennsylvania, and the James River and Kanawha Canal in Virginia).

44. A. BOLLES, *INDUSTRIAL HISTORY OF THE UNITED STATES* 605-08 (3d ed. 1881). The entire Erie Canal region also benefited greatly from the opening of the canal. Between 1810 and 1835, the population of the area tripled. Many cities in western New York became some of the most rapidly growing cities in the nation. Towns such as Rochester, Albany, Syracuse, and Buffalo showed significant growth. The economy of the region also boomed. Agricultural staples increased by 22%, as did the average size of the farms. Manufacturing increased 262% in the 20 years between 1820 and 1840. Jobs in commerce and navigation grew tenfold. R. SHAW, *supra* note 40, at 262-64.

45. 1 S. DUNBAR, *supra* note 34, at 21-22. The Indians and later early settlers used two types of canoes, either a canoe built from one log that was shaped and hollowed out, which was strong but slow moving, or a more graceful and mobile canoe built of birch bark sewn together with roots. *Id.*; CARNEGIE, *supra* note 32, at 94-97. Flat bottomed boats appeared on the Ohio and Mississippi Rivers as early as 1782, and depended entirely on the current for propulsion. The flat bottomed boat was used only for transportation downstream and was built with strong perpendicular sides and a flat bottom. It was then used downstream to construct buildings for the new settlers who travelled on it. *Id.* at 95-97.

46. Travel down the Ohio and the Mississippi was improved by the introduction of the barge. These barges had a capacity of 50 to 100 tons, and made two round trips a year from New Orleans to Cincinnati. The upstream trips were accomplished by the use of a sail or by tying a rope to the barge and carrying the rope to shore and having the boatman walk and pull the boat. The boats could also employ a "warping" technique by wrapping a rope around a tree. The men could then pull the boat up to that point. Some crews also used setting poles.

steamboat, which revolutionized the transportation of the day by allowing upstream travel at the rate of five miles per hour.⁴⁷

Given the importance of the public waterways, the central role that they would play in public law and policy during the nation's early years was inevitable. In 1783, while traveling into the interior, George Washington commented,

I could not help taking a more extensive view of the vast inland navigation of these United States and could not but be struck by the immense extent and importance of it, and of the goodness of that Providence which has dealt its favors to us with so profuse a hand. Would to God we may have the wisdom to improve them.⁴⁸

Article IV of the Northwest Ordinance of 1787, reenacted in 1789 as the eighth law adopted by the First Congress, provided:

The navigable waters leading into the Mississippi and St. Lawrence, and the carrying places between the same, shall be common highways, and forever free, as well to the inhabitants of the said territory, as to the citizens of the United States, and those of any other States that may be admitted into the confederacy, without any tax, impost, or duty therefor.⁴⁹

Congressional regulation of commerce on navigable watercourses was a primary area of emphasis during the early years of the Republic.⁵⁰ Thomas Jefferson, who envisioned uniting the continent

CARNEGIE, *supra* note 32, at 98.

47. D. BUCKMAN, OLD STEAMBOAT DAYS ON THE HUDSON RIVER 11-12 (1907). On August 17, 1807, Robert Fulton sailed from New York to Albany in 32 hours traveling at an average speed of five miles per hour. The wind was ahead of the boat on both of the legs of the journey, so that, in Fulton's own words "the whole has, therefore, been performed by the power of the steam engine." The speed of five miles an hour meant that Fulton and his partner, Chancellor Livingston, met the conditions of the New York Legislature giving them the exclusive right and privilege of navigating steamboats for a 20 year period. *Id.* This exclusive right of navigation eventually gave rise to the litigation in *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824), discussed *infra* text accompanying notes 54-57.

48. B. WATTENBERG, BUSY WATERWAYS, THE STORY OF AMERICA'S INLAND WATER TRANSPORTATION 21 (1964) (quoting George Washington).

49. Ch. 8, 1 Stat. 50, 52 (1789). See *infra* note 129 and accompanying text.

50. See generally W. HULL & R. HULL, THE ORIGINS AND DEVELOPMENT OF THE WATERWAYS POLICY OF THE UNITED STATES 6 (1967) [hereinafter HULL]. As early as 1771, the colony of Pennsylvania declared the Lehigh and Delaware Rivers to be common highways for the purposes of navigation and fined any person obstructing the free flow of traffic. 1 L. HUNTER, WATER POWER, A HISTORY OF INDUSTRIAL POWER IN THE UNITED STATES 142 (1979).

through the watercourses, initiated the Lewis and Clark expeditions in 1803 to "explore the river Missouri, from its mouth to its source, and, crossing the highlands by the shortest portage, to seek the best water communication thence to the Pacific ocean . . ."⁵¹ Politically, water improvements were popular and commonly appeared in the party platforms of the day.⁵²

In an even larger sense, water was a unifying factor for the Nation. Rivers and lakes facilitated trade, allowed immigration to new areas, and established communication lines among the states. The need for one central governing body to oversee water traffic was a key impetus for Congress' primacy under the commerce clause of the Constitution.⁵³ Chief Justice Marshall explained the significance of the clause and of navigation to the nation as a whole in *Gibbons v. Ogden*,⁵⁴ by saying that "[t]he power over commerce, including navigation, was one of the primary objects for which the people of America adopted their government, and must have been contemplated in forming it."⁵⁵ *Gibbons v. Ogden*,

Much of Congress' work related to the nation's waters. For instance, in 1803, statutes concerning the watercourses accounted for one-quarter of all the congressional laws passed in that year: of 42 statutes, 11 concerned water or the Navy. Examples of the laws passed were appropriations for the Naval Service, clearance to certain vessels in the Mississippi, an additional armament for the protection of the commerce of the United States, passports to ships and vessels of the United States, and a statute concerning the salt springs on the waters of the Wabash River. Ch. 1-40, 2 Stat. 199-244 (1803).

51. P. CUTRIGHT, A HISTORY OF THE LEWIS AND CLARK JOURNALS 12 (1976) (quoting Thomas Jefferson). "The necessity of guaranteeing the continued free navigation of the Mississippi in order to reassure the restive inhabitants of the South and West that their rights would be protected, played a major role in Thomas Jefferson's decision to purchase the Louisiana Territory from France in 1803." HULL, *supra* note 50, at 7.

52. In 1819, the Erie Canal was "[s]o popular . . . that no party could openly oppose it and still gain office." R. SHAW, *supra* note 40, at 107. See generally *id.* at 101-22.

53. "The Congress shall have Power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." U.S. CONST. art. I, § 8, cl. 3. Other constitutional provisions indicating the framers' overriding concern with free navigation include the tonnage duty clause of U.S. CONST. art. I, § 10, cl. 3; the import-export clause, U.S. CONST. art. I, § 10, cl. 2; the ports and vessels clause, U.S. CONST. art. I, § 9, cl. 6; and the admiralty clause, U.S. CONST. art. III, § 2, cl. 1.

54. 22 U.S. (9 Wheat.) 1 (1824).

55. *Id.* at 190. Marshall also explained, in *Brown v. Maryland*, that "those who were capable of estimating the influence of commerce on the prosperity of

one of the first Supreme Court commerce clause decisions, involved a monopoly of the steamboats in New York State; the conflict between steamboat monopolies and free watercourses was of great concern nationally.⁵⁶ Marshall, upholding a federal license granted outside of the New York scheme and justifying the need for federal regulation of the waterways, wrote that "deep streams . . . pass through the interior of almost every State in the Union, and furnish the means of exercising this right [to regulate commerce]. If Congress has the power to regulate it, that power must be exercised whenever the subject exists."⁵⁷

Thus, the ribbons of waterways tied the early nation together—economically, politically, and symbolically. As commentators on the waterways of the United States have explained,

A Nation of continental expanse required cheap transportation; preservation of the Union and the economic welfare and growth of the Nation demanded an end to sectional rivalries with their attendant burdens on commerce and trade; facility of communication and ease and economy of transport were prerequisites for holding and defending the Trans-Appalachian West against the depredations of foreign powers and the splintering tendencies of the remote frontier. Much the same combination of influences operated to forge the principle of Federal responsibility for waterway

nations, perceived the necessity of giving the control over this important subject to a single government." 25 U.S. (12 Wheat.) 419, 446 (1827).

56. The State of Louisiana had granted exclusive privileges of navigation to Fulton and Livingston for any steamboats. This effectively required that any owner of a boat pay royalties to Fulton and Livingston for operating a steamboat on most reaches of the Mississippi because the end market was in New Orleans. As a result, very few steamboats ran on the Ohio or Mississippi for a number of years. In 1816, the State of Ohio passed a resolution to inquire into Louisiana's right to injure the commerce of sister states by granting the monopoly. The political uproar was so strong that Louisiana appointed a commission to investigate revoking the charter of Livingston and Fulton. However, this charter was not revoked. The upstream states

denied the right of Louisiana to prohibit them from using their natural passageways to the ocean for it amounted to this, since "the legislature might as well have extended the restriction to a total interdict of the navigation of the Mississippi within the border of the State or shut the port of New Orleans against us."

CARNEGIE, *supra* note 32, at 106. A lawsuit was tried in the District Court of Louisiana and was on appeal to the Supreme Court when *Gibbons v. Ogden* was decided. *Id.*

57. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) at 195.

improvements.⁵⁸

The Supreme Court, because of the intrinsic importance of these resources and the priority that Congress and the new states placed on them, was asked to rule on a number of major issues relating to navigable watercourses. During the nineteenth century, the Court developed four major doctrines—essentially an integrated package of state prerogatives, state obligations, and federal powers—dealing with these watercourses. The doctrines involve (1) state ownership of the beds and banks of navigable watercourses, (2) congressional regulatory authority over navigable watercourses, (3) the navigation servitude, and (4) the public trust doctrine. They are taken up in the next two sections.

III. NAVIGABLE WATERCOURSES: STATE PREROGATIVES

In England, there was no doubt as to the identity of the owner of lands under navigable watercourses. England was not a federal government since all authority emanated from the Crown. In the United States, however, there were two potential owners, the United States and the state within which the navigable watercourse was located. The matter of ownership was not so pressing in the original thirteen states, where lands within state boundaries never passed to the United States; the colonies, now states, held title to lands within their borders before the union was formed and they retained ownership to those lands afterward.⁵⁹ The situation was different, however, with respect to the western lands that the United States obtained through treaties with France, England, Spain, Mexico, and Russia.⁶⁰ As to public lands not within any state, the United States initially was the owner, and Congress had legislative authority, apparently under the property clause of the Constitution, because it was “the only government which [could] impose laws upon” public lands before statehood.⁶¹ Nevertheless, the territorial citizens wanted state-

58. HULL, *supra* note 50, at 8.

59. Martin v. Waddell, 41 U.S. (16 Pet.) 367 (1842).

60. These treaties include the Louisiana Purchase (1803), the Convention of 1818 (with Great Britain), the Treaty with Spain (1819), the Treaty of June 15, 1846 (the Oregon Compromise with Great Britain), the Gadsden Purchase (1853), the Treaty of Guadalupe Hidalgo with Mexico (1848), and the Alaska Purchase (1867). See P. GATES, *HISTORY OF PUBLIC LAND LAW DEVELOPMENT* 86 (1968).

61. Shively v. Bowlby, 152 U.S. 1, 48 (1894). See generally Wilkinson, *The*

hood, and eventually state governments were formed.

The issue of ownership of the beds and banks of navigable watercourses within the boundaries of new states came before the Supreme Court in several cases during the mid-nineteenth century.⁶² The Court probably had a philosophical predisposition at the time, an era when federal prerogatives were at a low ebb, to view the states as the appropriate governments.⁶³ Nevertheless, it would take a considerable stretch to be able to justify ownership by the western states of lands under navigable watercourses.⁶⁴

The difficulty arose because of the nature of the transactions that led to statehood. Citizens in the West negotiated hard with federal representatives for favorable provisions in the statehood acts. One of the key issues was land ownership. Since the federal government owned the land, territorial representatives had to make an affirmative request of the United States for a transfer of federal lands to the new states.

The bargaining over the land transfers from the United

Public Trust Doctrine in Public Land Law, 14 U.C. DAVIS L. REV. 269, 301-02 n.146 (1980). Exceptions to federal ownership of western lands included valid grants by prior sovereigns—pueblos, Spanish and Mexican Grants, for example—and valid grants by the United States prior to statehood.

62. See, e.g., *Barney v. Keokuk*, 94 U.S. 324 (1876); *Weber v. Board of Harbor Comm'rs*, 85 U.S. (18 Wall.) 57 (1873); *Mumford v. Wardwell*, 73 U.S. (6 Wall.) 423 (1867); *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845); *Martin v. Waddell*, 41 U.S. (16 Pet.) 367 (1842).

63. A passage from *Dred Scott v. Sandford* is suggestive of that philosophical leaning:

The principle upon which our Governments rest, and upon which alone they continue to exist, is the union of States, sovereign and independent within their own limits in their internal and domestic concerns, and bound together as one people by a General Government, possessing certain enumerated and restricted powers, delegated to it by the people of the several States, and exercising supreme authority within the scope of the powers granted to it, throughout the dominion of the United States. A power, therefore, in the General Government to obtain and hold colonies and dependent territories, over which they might legislate without restriction, would be inconsistent with its own existence in its present form. Whatever it acquires, it acquires for the benefit of the people of the several States who created it. It is their trustee acting for them,

60 U.S. (19 How.) 393, 447-48 (1856).

64. The principal difficulty here was the silence of federal land grants, to states, on title to those beds and banks. See *infra* text accompanying notes 75-97.

States to the new states never failed to be heated.⁶⁵ Ohio was the first public land state in 1803.⁶⁶ Congress finally agreed to grant Ohio, along with other more minor grants, one section (section 16) out of every township;⁶⁷ a section is one square mile and each township contains thirty-six sections. In all, Ohio received about four percent of all land within its borders.⁶⁸ Over time, Congress became more generous with new states.⁶⁹ Later states received two sections in each township.⁷⁰ The latest states in the Lower Forty-Eight made even more favorable bargains. Utah, Arizona, and New Mexico each received four sections per township for school lands, and a total of fourteen to sixteen percent of all land within the state.⁷¹ In all cases, states received additional express grants in the statehood acts for various designated purposes.⁷² Finally, the United States agreed to transfer to Alaska 103 million

65. See, e.g., P. GATES, *supra* note 60, at 317:

From the admission of Ohio in 1803 to that of Alaska in 1959 the territorial- and state-making policy involved Congress and the people of the territories in complicated and lengthy political disputes in which there was [sic] being hammered out agreements concerning the management and sharing of the public lands as well as the basis for the fundamental law of each state. In the process the states were brought, with some reluctance, to give up any plans or ideas some of their leaders may have entertained of either acquiring or controlling and managing their public lands as the Original Thirteen and Texas did.

66. Vermont (previously within the borders of New York) and Kentucky (carved out of Virginia) were in a different situation because the federal government never owned any significant amount of land within their borders. As for Tennessee, North Carolina ceded the lands now comprising Tennessee to the United States. However, Congress failed to make any provision in Tennessee's Enabling Act as to federal ownership of public land. After a lengthy political and legal dispute, the state succeeded in obtaining title to the public land. Because the original states granted Ohio's lands to the United States, Ohio became a "proving ground" for several statehood issues, including state land grants. See P. GATES, *supra* note 60, at 285-91.

67. Ohio Enabling Act, ch. 37 § 7, 2 Stat. 173, 175 (1802).

68. P. GATES, *supra* note 60, at 291.

69. "States which entered the Union late profited from the experience of the older ones in bargaining with Congress and won double, and in 1896 quadruple, the earlier donations for schools and an elaboration of donations for higher educational institutions." P. GATES, *supra* note 60, at 317.

70. See, e.g., Act of August 14, 1848, ch. 177, § 20, 9 Stat. 323, 330 (1848) (establishment of Oregon Territory).

71. Utah Enabling Act, ch. 138, § 6, 28 Stat. 107, 109 (1894); Arizona and New Mexico Enabling Act, ch. 310, §§ 6 & 24, 36 Stat. 557, 561, 572 (1910).

72. See the various statehood acts assembled in P. GATES, *supra* note 60, at 285-318.

acres of the 365 million acres in the state.⁷³

In addition to the statehood grants, states subsequently obtained still more federal land through express statutory grant programs. As Paul Gates, the leading historian on public land law, explained,

These compacts [at statehood] were not to satisfy the new states for long. They soon urged the Federal government to give them additional lands to help finance the building of specified canals and wagon roads and the improvement of waterways. Later they wanted land grants for railroads and for the endowment of agricultural colleges. They demanded also that the swamplands, that is, all the overflowed, wet, swampy or poorly drained land, be turned over to the states to be reclaimed by them and made into cultivable farmlands. Far more land went to the states under the many general and special laws granting land for various purposes than was transferred to them under the provisions of the various enabling acts.⁷⁴

The United States never expressly granted to the new states, either in the statehood acts or in the later land grant statutes, the lands under navigable watercourses. Given the tremendous amount of attention that was trained on land grants at statehood and in subsequent years, it would have been easy for the courts to find that there was no intent to transfer such important property interests out of federal ownership.⁷⁵ The standard maxim of con-

73. Alaska Enabling act, Pub. L. No. 85-508, § 6(a)-(b), 72 Stat. 339, 340 (1958).

74. P. GATES, *supra* note 60, at 319.

75. Two passages in *Shively v. Bowlby* discuss the general rule of strict construction applied in construing grants made by the sovereign. The first states:

The rule of construction in the case of such a grant from the sovereign is quite different from that which governs private grants. The familiar rule and its chief foundation were felicitously expressed by Sir William Scott: "All grants of the Crown are to be strictly construed against the grantee, contrary to the usual policy of the law in the consideration of grants; and upon this just ground, that the prerogatives and rights and emoluments of the Crown being conferred upon it for great purposes, and for the public use, it shall not be intended that such prerogatives, rights and emoluments are diminished by any grant, beyond what such grant by necessary and unavoidable construction shall take away." . . . Many judgments of this court are to the same effect.

152 U.S. 1, 10 (1894).

In the second relevant passage, the Court states that under the common law,

It is equally well settled that a grant from the sovereign of land

struction, *inclusio unius est exclusio alterius* (the inclusion of one is the exclusion of another), seems tailor-made for this situation.⁷⁶ With so much express statutory action on the subject, how could there be room for an implied grant? Real property transactions are done by treaty, statute, deed, or patent. To leave a land transfer of such magnitude and complexity to implication is aberrational in the extreme.

Nonetheless, the Supreme Court concluded that lands under navigable watercourses did pass by implication to new states at the time of statehood. The leading cases were *Martin v. Waddell*⁷⁷ in 1842 and *Pollard's Lessee v. Hagan* in 1845.⁷⁸ The Court reached its holding as a matter of constitutional law.⁷⁹ The state-

bounded by the sea, or by any navigable tide water, does not pass any title below high water mark, unless either the language of the grant, or long usage under it, clearly indicates that such was the intention.

Id. at 13. See also *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 411 (1842) ("it will not be presumed that [the king] intended to part from any portion of the public domain, unless clear and especial words are used to denote it.").

76. An example of the Supreme Court's use of the principle of *inclusio unius est exclusio alterius* in the context of statehood is found in *Ervien v. United States*. In construing the Enabling Act of the State of New Mexico, the Court stated: "[t]here is in the Enabling Act a specific enumeration of the purposes for which the lands were granted and the enumeration is necessarily exclusive of any other purpose." 251 U.S. 41, 47 (1919). This application of *exclusio unius est exclusio alterius* to the purposes of a grant suggests, a fortiori, that the principle governs construction of the corpus of the grant.

77. 41 U.S. (16 Pet.) 367, 410 (1842). Although *Martin v. Waddell* involved a dispute over lands in one of the original 13 states, New Jersey, the case is foundational in the Court's analysis of the equal footing doctrine. See *supra* note 9.

78. 44 U.S. (3 How.) 212 (1845). *Pollard's Lessee* involved a title dispute in the new state of Alabama, which was created from lands ceded to the United States by Georgia and Virginia. *Id.* at 220-22. At issue was title to lands lying below the high watermark of the navigable, freshwater Mobile River. Plaintiffs claimed ownership under a federal patent issued after Alabama's admission to the Union; defendants claimed under a state grant. The Court held that lands below the high watermark of navigable watercourses passed to the states under the equal footing doctrine. The federal patent was therefore inoperative, as Congress had no power to transfer to individuals the title to state-owned lands. *Id.* at 229.

79. The *Pollard's Lessee* Court engaged in a lengthy discussion of the authority for its holding in the following passage:

The compact made between the United States and the state of Georgia, was sanctioned by the Constitution of the United States; by the 3d section of the 4th article of which it is declared, that "New states may be admitted by the Congress into this union; but no new state shall be formed or erected within the jurisdiction of any other state, nor any state be formed by the

hood clause, article 4, section 3, clause 1, provides that "New States may be admitted by the Congress into this Union. . . ." The Court, looking to the constitutional phrase "*this Union*,"⁸⁰ has developed the equal footing doctrine, requiring that new states enter the Union on a basis of full political equality with all other states.⁸¹ The mid-century Court reasoned that the western

junction of two or more states or parts of states, without the consent of the legislatures of the states concerned, as well as of Congress."

When Alabama was admitted into the union, on an equal footing with the original states, she succeeded to all the rights of sovereignty, jurisdiction, and eminent domain which Georgia possessed at the date of the cession Nothing remained to the United States, according to the terms of the agreement, but the public lands.

44 U.S. (3 How.) at 223.

The Court further stated, "[t]he right of Alabama and every other new state to exercise all the powers of government, which belong to and may be exercised by the original states of the union, must be admitted, and remain unquestioned . . ." *Id.* at 224. The Court found that any reservation or exercise of municipal sovereignty within a state by the United States would be "repugnant to the Constitution . . ." *Id.* Ultimately, the Court held that the rights of states include title to the beds and banks of navigable watercourses: "First, The shores of navigable waters, and the soils under them, were not granted by the Constitution to the United States, but were reserved to the states respectively. Secondly, The new states have the same rights, sovereignty, and jurisdiction over this subject as the original states." *Id.* at 230.

80. *Coyle v. Oklahoma*, 221 U.S. 559, 567 (1911). The Supreme Court refuted suggestions that the political power of states might be diminished by acts of Congress accepted as conditions to statehood, stating,

"This Union" was and is a union of States, equal in power, dignity and authority, each competent to exert that residuum of sovereignty not delegated to the United States by the Constitution itself. To maintain otherwise would be to say that the Union, through the power of Congress to admit new States, might come to be a union of States unequal in power, as including States whose powers were restricted only by the Constitution, with others whose powers had been further restricted by an act of Congress accepted as a condition of admission. Thus it would result, first, that the powers of Congress would not be defined by the Constitution alone, but in respect to new States, enlarged or restricted by the conditions imposed upon new States by its own legislation admitting them into the Union; and, second, that such new States might not exercise all of the powers which had not been delegated by the Constitution, but only such as had not been further bargained away as conditions of admission.

Id.

81. Different cases have phrased the scope of the political equality enjoyed by the states differently. Compare *supra* notes 9 and 80. A third formulation is found in *Illinois Central Railroad v. Illinois*, which states "[t]here can be no distinction between the several States of the Union in the character of the jurisdiction, sover-

states were entitled to own title to lands under navigable water-courses as a matter of equal footing: since the original states retained those lands, the Court reasoned, so too must the western states in order to achieve equality.⁸²

The Court's analysis can be criticized on a number of counts. First, the equal footing doctrine is, in all of its other aspects, a rule of political equality, not equality of actual power or real property.⁸³ Some states are larger than others, some have vast stores of natural resources, some are suitable for large populations. The equal footing doctrine has never been used to adjust such differences and it remains anomalous as to why the doctrine has in this one instance moved beyond political equality into the uncertain realm of equality of property rights. Second, while the original states retained lands within their borders, it was clear from all of the statehood transactions with western states that Congress did not intend a complete transfer of federal public

eignty and dominion which they may possess and exercise over persons and subjects within their respective limits." 146 U.S. 387, 434 (1892).

82. *Pollard's Lessee v. Hagan* has been consistently followed. See, e.g., *United States v. Holt State Bank*, 270 U.S. 49, 55 (1926) ("The State of Minnesota was admitted into the Union in 1858, . . . and under the constitutional principle of equality among the several States the title to the bed of Mud Lake then passed to the State, if the lake was navigable, and if the bed had not already been disposed of by the United States."); *Shively v. Bowlby*, 152 U.S. 1, 26 (1894) ("The new States admitted into the Union since the adoption of the Constitution have the same rights as the original States in the tide waters, and in the lands below the high water mark, within their respective jurisdictions."); *Weber v. Board of Harbor Comm'r's*, 85 U.S. (18 Wall.) 57, 65-66 (1873) ("Upon the admission of California into the Union upon equal footing with the original States, absolute property in, and dominion and sovereignty over, all soils under the tidewaters within her limits passed to the State"); *Mumford v. Wardwell*, 73 U.S. (6 Wall.) 423, 436 (1867).

83. The leading article on the equal footing doctrine thus concluded that "whatever may be or have been the accurate meaning of 'equal footing,' neither side at the time thought that it implied any transfer of property." *Hanna, Equal Footing in the Admission of States*, 3 BAYLOR L. REV. 519 (1951). On the scope of political powers held by states under the equal footing doctrine, see, e.g., *Coyle v. Oklahoma*, 221 U.S. 559, 573 (1911) ("when a new State is admitted into the Union, it is so admitted with all of the powers of sovereignty and jurisdiction which pertain to the original States, and . . . such powers may not be constitutionally diminished, impaired or shorn away by any conditions, compacts or stipulations embraced in the act under which the new State came into the Union, which would not be valid and effectual if the subject of congressional legislation after admission.").

land.⁸⁴ The equal footing doctrine has never been found to require an implied general transfer of all federal land to new states.⁸⁵ Thus the original states and the new states are unequal as far as the proportion of state land ownership within their borders is concerned. There has been no explanation as to how the equal footing doctrine could somehow make a distinction between expressly granted lands, lands under navigable watercourses, and all other lands retained by the United States.⁸⁶ Third, the implied transfer of lands under navigable watercourses has required an exceedingly complicated transfer process. It is one thing to provide for the transfer to new states of two or four sections in every township; the United States' rectangular survey system gives us an easy way to grant those patents. Lands under navigable watercourses, however, follow no survey lines and come in strips, half-moons, and blotches.⁸⁷ Further, determining navigability for title, which defines the extent of the grants, raises exceedingly complex fact questions.⁸⁸ Thus one result of the mid-nineteenth century cases, as a matter of judicial administration, is that the Court bought into one and a half centuries of maddening litigation with many more years to come. Finally, as already discussed, the Court never addressed the issue of how such a far-flung grant by implication could be justified amidst an extensive program of express

84. See *supra* text accompanying notes 61-75.

85. See, e.g., *Nevada ex rel. Nev. State Bd. of Agric. v. United States*, 512 F. Supp. 166 (D. Nev. 1981), *aff'd*, 699 F.2d 486 (9th Cir. 1983).

86. To be sure, the Court has traditionally explained the transfer of title to the states as being "incident to the transfer to the State of local sovereignty . . ." *United States v. Oregon*, 295 U.S. 1, 14 (1935). See also the cases assembled in R. CLARK, *supra* note 29, at 195 n.76. This explanation begs the question: no reason was given for distinguishing beds and banks of navigable watercourses from fast lands as an "incident of sovereignty."

Furthermore, the argument that title to the beds of navigable watercourses is itself a source of state authority—sovereignty—is belied by the common relinquishment of such title to riparian proprietors under the laws of many states. See, e.g., the survey of state law as to title in *Shively v. Bowlby*, 152 U.S. 1, 18-26 (1894). Given the expansive powers of Congress to regulate interstate commerce, see *supra* note 13, no ultimate regulatory authority is conferred on the states by virtue of the implied grants under *Martin* and *Pollard's Lessee*. Thus, the "incident of sovereignty" argument is unpersuasive.

87. The matter is additionally complicated because watercourses can and do move. For a discussion of what happens to the underlying title to the riverbed when a river meanders, shifts, or cuts a new channel during a flood, see *Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363 (1977).

88. See *supra* note 8.

statutory land grants.⁸⁹

The Court found for the states on another major issue, the geographical reach of the navigability-for-title doctrine. Rather than limiting the reach of the doctrine to those waters affected by the ebb and flow of the tide, as was the case under English common law, the Court found in *The Genesee Chief*⁹⁰ and *Barney v. Keokuk*⁹¹ that "the broad differences existing between the extent and topography of the British island and that of the American continent" required a different rule.⁹² The United States possessed "great rivers and inland seas"⁹³ that in fact are navigable and should come within the scope of the implied statehood grant.⁹⁴ Over time, the Court developed a complicated federal test, often looking to evidence of log floats and commercial fur trade, to determine whether a river is navigable in fact.⁹⁵ Thus,

89. See *supra* note 76 and accompanying text.

90. 53 U.S. (12 How.) 443 (1851).

91. 94 U.S. 324 (1876).

92. *Id.* at 338.

93. *Id.*

94. See also *Packer v. Bird*, 137 U.S. 661 (1891). In *Packer*, the Court quoted with approval an earlier statement of the Supreme Court of Pennsylvania that had rejected the British rule:

In Pennsylvania the common law doctrine was never recognized. . . . [T]he Supreme Court of that State, in holding that the river Monongahela was a navigable stream, and that its soil up to low-water mark, and the river itself, were the property of the Commonwealth, said:

"We are aware that by the common law of England such streams as the Mississippi, the Missouri, the rivers Amazon and Platte, the Rhine, the Danube, the Po, the Nile, the Euphrates, the Ganges and the Indus, were not navigable rivers, but were the subject of private property, whilst an insignificant creek in a small island was elevated to the dignity of a public river, because it was so near the ocean that the tide ebbed and flowed up the whole of its petty course. The Roman law, which has pervaded Continental Europe, and which took its rise in a country where there was a tideless sea, recognized all rivers as navigable which were really so, and this common sense view was adopted by the early founders of Pennsylvania, whose province was intersected by large and valuable streams, some of which are a mile in breadth."

Id. at 668-69.

95. The classic definition of "navigable waters" was provided in *The Daniel Ball*:

Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for com-

navigability for purposes of title under American law reaches much further inland than under British law. In Oregon, for example, the McKenzie River is navigable up to mile point thirty-seven, more than 200 miles above tidewater.⁹⁶

I emphasize that I have no objection, as a matter of policy, to the broad ownership rights of states as to the lands under navigable watercourses. Indeed, it strikes me as a perfectly proper subject for negotiation at the time of statehood. But the transaction did not come about in that manner. We need to appreciate how extraordinary it was for the Court to be so activist, to make so many leaps of doctrine, and finally to embed this far-flung implied land transfer to the states as a constitutional mandate. Nevertheless, today, there is no longer a question as to this issue. The states have a constitutional right to receive the lands under navigable waterways. As the Court stated in *Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.* in 1977, "the State's title to lands underlying navigable waters within its boundaries is conferred not by Congress but by the Constitution itself."⁹⁷

merce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

77 U.S. (10 Wall.) 557, 563 (1870). An early and enlightened explanation of the navigability-in-fact test was made in *The Montello*, where the Court stated:

The capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use. If it be capable in its natural state of being used for purposes of commerce, no matter in what mode the commerce may be conducted, it is navigable in fact, and becomes in law a public river or highway. Vessels of any kind that can float upon the water, whether propelled by animal power, by the wind, or by the agency of steam, are, or may become, the mode by which a vast commerce can be conducted, and it would be a mischievous rule that would exclude either in determining the navigability of a river.

87 U.S. (20 Wall.) 430, 441-42 (1874).

96. *Oregon ex rel. Div. of State Lands v. Riverfront Protection Ass'n*, 672 F.2d 792 (9th Cir. 1982).

97. 429 U.S. 363, 374 (1977). See also *Summa Corp. v. California ex rel. State Lands Comm'n*, 466 U.S. 198, 205 (1984) ("The Federal Government, of course, cannot dispose of a right possessed by the State under the equal-footing doctrine of the United States Constitution."); *United States v. Holt State Bank*, 270 U.S. 49, 55 (1926) ("The State of Minnesota was admitted into the Union in 1858, . . . and under the constitutional principle of equality among the several States the title to the bed of Mud Lake then passed to the State, if the lake was navigable . . ."); *Shively v. Bowlby*, 152 U.S. 1, 27-28 (1894) ("To maintain any other doctrine is to deny that Alabama has been admitted into the Union on an equal footing

IV. NAVIGABLE WATERCOURSES: STATE OBLIGATIONS AND FEDERAL PREROGATIVES

Given the national importance of watercourses navigable for title and the circumstances under which they were transferred to the states, it is understandable that the judiciary might structure some limits on the states in their administration of lands under navigable watercourses. Three such limitations have emerged. First, under the commerce clause, Congress has authority to regulate these watercourses. Of course, today the Court has found federal regulatory power over commerce to be nearly unlimited,⁹⁸ but the issue of federal supremacy over commerce was hotly disputed during the Marshall years and the issue was decided in the context of navigable watercourses.⁹⁹ Second, the navigation servitude applies to navigable watercourses. This allows the United States to condemn land, including state land, up to the high water mark without being required to pay just compensation.¹⁰⁰ This limit on the states' land title is also based on the Constitution: "The Com-

with the original States, the Constitution, laws and compact to the contrary notwithstanding." (quoting *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 229 (1845))).

98. See, e.g., *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985); *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964); *Katzenbach v. McClung*, 379 U.S. 294 (1964).

99. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824).

100. See, e.g., *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53 (1913) (denying compensation for the lost power-generating value of a hydroelectric site taken under condemnation by Congress). The Court stated that the title of private owners to the beds of navigable river

is subordinate to the public right of navigation, and however helpful in protecting the owner against the acts of third parties, is of no avail against the exercise of the great and absolute power of Congress over the improvement of navigable rivers. . . . If, in the judgment of Congress, the use of the bottom of the river is proper for the purpose of placing therein structures in aid of navigation, it is not thereby taking private property for a public use, for the owner's title was in its very nature subject to that use in the interest of public navigation.

Id. at 62. See also *United States v. Twin City Power Co.*, 350 U.S. 222, 227 (1956) stating:

It is no answer to say that these private owners had interests in the water that were recognized by state law. We deal here with the federal domain, an area which Congress can completely pre-empt, leaving no vested private claims that constitute "private property" within the meaning of the Fifth Amendment.

See also *United States v. Rands*, 389 U.S. 121 (1967).

merce Clause confers a unique position upon the Government in connection with navigable waters. . . . 'For this purpose they are the public property of the nation, and subject to all the requisite legislation by Congress.' . . . This power to regulate navigation confers upon the United States a 'dominant servitude . . .' "101

The third limitation on state ownership is another servitude¹⁰²—the public trust doctrine. Trust language first appeared in *Martin v. Waddell*¹⁰³ in 1842, but the leading case on the traditional public trust doctrine is *Illinois Central Railroad v. Illinois*,¹⁰⁴ Justice Stephen J. Field's opinion that belongs on any short list of great natural resource opinions.¹⁰⁵

Stephen J. Field came to California during the gold rush and

101. *United States v. Rands*, 389 U.S. at 122-23.

102. For recent references to the public trust as both a "servitude" and an "easement," see *Summa Corp. v. California ex rel. State Lands Comm'n*, 466 U.S. 198, 200-05 (1984).

103. 41 U.S. (16 Pet.) 367 (1842); *see also Hardin v. Jordan*, 140 U.S. 371, 381 (1891); *Smith v. Maryland*, 59 U.S. (18 How.) 71, 74 (1855); *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 220-23 (1845). By 1892, Justice Field was able to state "the decisions are numerous which declare that such property [title to submerged lands] is held by the State, by virtue of its sovereignty, in trust for the public." *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 455 (1892).

One of these was *Arnold v. Mundy*, the earliest state court decision to acknowledge the public trust in the United States. 6 N.J.L. 1 (1821). In *Arnold*, the Supreme Court of New Jersey ruled that the state held the beds of navigable waters as had the King—in trust for the common use of the people. A grant purporting to divest the citizens of common rights was therefore void. 6 N.J.L. at 78. *Arnold* was subsequently cited as authority in several cases, including *Martin v. Waddell*, 41 U.S. (16 Pet.) at 389-91, and *Illinois Cent. R.R. v. Illinois*, 146 U.S. at 456.

Smith v. Maryland includes a compilation of other state court decisions recognizing public rights in navigable waters. 59 U.S. (18 How.) at 74-75. In *Smith*, the Supreme Court declared:

But this soil ['below low-water mark'] is held by the State, not only subject to, but in some sense in trust for, the enjoyment of certain public rights, among which is the common liberty of taking fish, as well shellfish as floating fish. . . . [The State] may forbid all such acts as would render the public right less valuable, or destroy it altogether. This power results from the ownership of the soil, from the legislative jurisdiction of the State over it, and from its duty to preserve unimpaired those public uses for which the soil is held.

Id. (citations omitted).

104. 146 U.S. 387 (1892).

105. *Illinois Central* has been called the "Lodestar in American Public Trust Law." *Sax, Judicial Intervention*, *supra* note 3, at 489.

wrote the famous Field Code in California's civil procedure.¹⁰⁶ He was elected to the California Supreme Court in 1857, two years after *Irwin v. Phillips*,¹⁰⁷ the first case to announce the prior appropriation doctrine as a fruit of local custom, but Field later wrote a number of "local custom" opinions.¹⁰⁸ In 1863, Field became the first westerner appointed to the United States Supreme Court and served until 1897, a tenure on the Supreme Court bench exceeded only by Justice William O. Douglas.

Field's biographer, Professor Charles W. McCurdy, properly describes Field as "a massive figure in the history of the United States Supreme Court."¹⁰⁹ Writing in 1909, Edward S. Corwin assessed Field as "the pioneer and prophet of our modern constitutional law."¹¹⁰ As a westerner, Field was keenly attuned to natural resources issues. As one writer explained, he was one of the first—in a time when such concepts did not come easily—to recognize that the nation's natural resources are "a pie to be divided" rather than "a ladder stretching out beyond the horizon."¹¹¹ Of course, *Illinois Central* and the traditional public

106. McCurdy, *Stephen J. Field and Public Land Law Development in California, 1850-1866: A Case Study of Judicial Resource Allocation in Nineteenth-Century America*, 10 L. & Soc'y REV. 235, 239 (1975) [hereinafter McCurdy, *Field Case Study*]. For a suggestion that the Field Code was a modified version of a code advanced by Stephen's older brother, David Dudley Field, a prominent New York attorney, see W. REHNQUIST, THE SUPREME COURT 156 (1987). For Chief Justice Rehnquist's treatment of Stephen Field's years on the Supreme Court, and his career in general, see *id.* at 153-86.

107. 5 Cal. 140 (1855).

108. On Justice Field's California decisions, see McCurdy, *Field Case Study*, *supra* note 106.

109. McCurdy, *Stephen J. Field and the American Judicial Tradition*, in THE FIELDS AND THE LAW 5 (1986) [hereinafter McCurdy, *Stephen J. Field*]. Earlier, Professor McCurdy called Field "[t]he most important figure among an entire generation of energetic California jurists . . ." McCurdy, *Field Case Study*, *supra* note 106, at 239-40. During his term as Chief Justice of the California Supreme Court (1859-1863), Field "earned a national reputation as 'the end of the law' on far-western resource matters." McCurdy, *Stephen J. Field*, *supra*, at 5.

110. McCurdy, *Stephen J. Field*, *supra* note 109, at 5.

111. McCurdy, *Field Case Study*, *supra* note 106, at 265. The strength of Justice Field's views on the government's trust responsibilities is evidenced by the opinion's departure from Field's usually strong support of private property and contract rights. See Currie, *The Constitution in the Supreme Court: The Protection of Economic Interests, 1889-1910*, 52 U. CHI. L. REV. 324, 331-35 (1985) (commenting on the authorship of *Illinois Central* "by no less a friend of private property than Justice Field . . .").

trust doctrine are bulwarks upon which such conclusions rest.

In 1869, the state of Illinois had granted to the Illinois Central Railroad more than 1000 acres comprising a substantial part of Chicago's waterfront on Lake Michigan, a navigable lake. The grant included submerged lands in Chicago's harbor; the area

is as large as that embraced by all the merchandise docks along the Thames at London; is much larger than that included in the famous docks and basins at Liverpool; is twice that of the port of Marseilles, and nearly if not quite equal to the pier area along the water front of the city of New York.¹¹²

Four years later, amid cries of corruption, the state of Illinois revoked its earlier absolute¹¹³ grant.

The Supreme Court recognized that Illinois received title to the harbor by implication at statehood.¹¹⁴ The state's title, however, was impressed with a public trust in order to keep these waterways open to the public for uses such as navigation, commerce, and fishing.¹¹⁵ Accordingly, “[a]ny grant of the kind is necessarily revocable, and the exercise of the trust by which the property was held by the State can be resumed at any time.”¹¹⁶ The opinion left no doubt that the traditional public trust doctrine imposes obligations on the states:

A grant of all the lands under the navigable waters of a State has never been adjudged to be within the legislative power; and any attempted grant of the kind would be held, if not absolutely void on its face, as subject to revocation. The State can no more abdi-

112. Illinois Cent. R.R. v. Illinois, 146 U.S. 387, 454 (1892).

113. Although the state maintained that certain limitations had been placed on the railroad company's control of the harbor beds, 146 U.S. at 451, the railroad company treated the conveyance as an

absolute conveyance to it of title to the submerged lands, giving it as full and complete power to use and dispose of the same, except in the technical transfer of the fee, in any manner it may choose, as if they were uplands, in no respect covered or affected by navigable waters

Id. at 450.

114. *Id.* at 434-35.

115. See *id.* at 452:

[I]t is a title different in character from that which the State holds in lands intended for sale. . . . It is a title held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.

116. *Illinois Central*, 146 U.S. at 455.

cate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties, except in the instance of parcels mentioned for the improvement of the navigation and use of the waters, or when parcels can be disposed of without impairment of the public interest in what remains, than it can abdicate its police powers in the administration of government and the preservation of the peace.¹¹⁷

Thus was the traditional public trust doctrine, the third limitation on states' ownership of the beds and banks of navigable watercourses, explained in a comprehensive way.

V. THE SOURCE AND SCOPE OF THE TRADITIONAL TRUST

Today, nearly a century later, after all of the words on the subject, two foundational issues concerning the traditional doctrine have still not been decided. The first matter is the source of the trust—where does it come from? The second is the scope and definition of the trust—what law defines the trust and what is the content of the trust?

The doctrine, as first announced by Justice Field, might be viewed as stemming either from federal law or from the internal law of Illinois. *Illinois Central*, however, seems plainly to have been premised on federal law. The briefs relied upon both federal cases and authority from many different states, of which Illinois was just one.¹¹⁸ The parties were plainly arguing principles of

117. *Id.* at 453.

118. See 36 L.Ed. 1018, at 1027-31 for briefs of appellant Illinois Central Railroad Co.; *id.* at 1031-34 for briefs of the City of Chicago; *id.* at 1034-35 for briefs of the State of Illinois. The wide variety of law argued in brief by the attorneys indicates the inconsequential role played by the law of Illinois in the analysis of the case.

Mr. Benjamin F. Ayer, for appellant, the Illinois Central Railroad Co., cited federal law repeatedly, and state court decisions from Illinois, Iowa, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Vermont, and Wisconsin, as well as the English and Irish Appellate Cases Reporter. *See id.* at 1027-30.

Mr. J. N. Jewett, also for appellant, likewise drew from a wide array of authority including federal cases and state court decisions from California, Illinois, Iowa, Kentucky, Missouri, New York, Pennsylvania, Vermont, and Wisconsin. *See id.* at 1030-31.

Mr. John S. Miller, for the City of Chicago, cited both federal cases and state court decisions from California, Connecticut, Illinois, Massachusetts, Michigan, Minnesota, New Jersey, New York, and Wisconsin. *See id.* at 1031-33.

general applicability, not just Illinois law. The *Illinois Central* opinion itself leaves little doubt that the Court conceived of a general trust that applied to all states. Throughout the opinion, the Court refers to "a state" and employs other phrases of general applicability.¹¹⁹ In describing the trust, the Court made it clear that the trust derives from federal law and is binding on all states:

It is the settled law of this country that the ownership of and dominion and sovereignty over lands covered by tide waters, within the limits of the several States, belong to the respective States within which they are found, with the consequent right to use or dispose of any portion thereof, when that can be done without substantial impairment of the interest of the public in the waters, and subject always to the paramount right of Congress to control their navigation so far as may be necessary for the regulation of com-

Mr. S. S. Gregory, also for the City of Chicago, cited federal cases and state court decisions from Illinois, Kentucky, Maryland, Massachusetts, Minnesota, New Jersey, and New York. *See id.* at 1033-34.

Mr. George Hunt, Attorney General of the State of Illinois, cited both federal law and state court decisions from California, Illinois, Indiana, Maine, Michigan, New Jersey, and New York, as well as the King's Bench. *See id.* at 1034-35.

Further, Justice Stephen Field's opinion cites no Illinois statutes or case law in discussing the issue of the state's ownership of submerged lands, its trust obligations thereto, or its consequent authority to revoke the grant. The Court does not cite Illinois law until it turns to a sub-issue involving the City of Chicago's claim to certain fast lands. *See Illinois Central*, 146 U.S. at 462.

119. As previously noted, the opinion states: "A grant of all the lands under the navigable waters of a State has never been adjudged to be within the legislative power, and any attempted grant of the kind would be held, if not absolutely void on its face, as subject to revocation." 146 U.S. at 453. Further examples include: "Any grant of the kind is necessarily revocable . . ." *Id.* at 455. *See also id.* at 456. In another passage strongly suggesting that *Illinois Central* is not a ruling of Illinois law, the Court stated:

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 tide waters on the borders of the sea, and that the lands are held by the same right in the one case as in the other, and subject to the same trusts and limitations.

Id. at 436-37. By its own terms, then, one holding of *Illinois Central*, that lands underlying the navigable waters of the Great Lakes "are held . . . subject to the same trusts and limitations" as tide lands bordering the sea, *id.* at 437, must apply at least to all states with lands underlying the Great Lakes—Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

merce with foreign nations and among the States.¹²⁰

Later Supreme Court decisions have recognized that states are accorded broad discretion in administering the trust.¹²¹ Nevertheless, the subsequent opinions do not disturb *Illinois Central's* premise that the public trust doctrine applies on all navigable watercourses as a matter of federal law.¹²²

The Court has never explicitly stated the specific source of "the settled law of this country" that mandates the trust in the "several States."¹²³ There are at least four possibilities. First, the public trust doctrine could be viewed as a matter of federal common law. This source of law, however, is not in favor and is unlikely to be employed in light of the more specific available sources discussed below.¹²⁴ Second, the *Illinois Central* Court em-

120. *Id.* at 435. See also *supra* note 119; *infra* note 122.

121. See *infra* notes 156-63 and accompanying text.

122. The "substantial impairment" language of *Illinois Central*, see *supra* text accompanying note 120, has been repeated with approval by the Supreme Court. See, e.g., *Morris v. United States*, 174 U.S. 196, 236 (1899); *Shively v. Bowlby*, 152 U.S. 1, 46-47 (1894). More recently, the Court affirmed the federal nature of the ruling in *Illinois Central*. See *Utah Div. of State Lands v. United States*, 482 U.S. 193, 203 (1987), where *Illinois Central* is cited as an example of the "general land laws."

123. *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 435 (1892). Justice Field noted that "[t]his doctrine has been often announced by this court, and is not questioned by counsel of any of the parties." *Id.*, (citing *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845); *Weber v. Board of Harbor Comm'r's*, 85 U.S. (18 Wall.) 57 (1873)).

Indeed, the dissent concurred here as well, stating "[t]he able and interesting statement, in the opinion of the majority, of the rights of the public in the navigable waters, and of the limitation of the powers of the State to part with its control over them, is not dissented from." 146 U.S. at 474 (Shiras, J., dissenting). Thus, the "no substantial impairment" rule of *Illinois Central*, like other aspects of the trust doctrine set forth in Justice Field's opinion, is stronger than the four-to-three ruling might otherwise suggest. The dissenters argued principally that the grant was reasonable under the circumstances, *id.* at 467, and that the Illinois State Legislature's revocation of the grant was an impairment of contracts in violation of the United States Constitution. *Id.* at 473-75 (Shiras, J., dissenting).

124. Federal common law has been disfavored since Justice Brandeis' ruling in *Erie R.R. v. Tompkins*, 304 U.S. 64 (1938). Nevertheless, some commentators seem to view the public trust doctrine as being a part of British and early American common law, elevated to the federal common law by Supreme Court endorsement. See, e.g., Stevens, *The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right*, 14 U.C. DAVIS L. REV. 195, 199-200, 210 (1980) ("the concept of the public trust in navigable waters was adopted early in the country and accepted without hesitation by the United States Supreme

ployed language similar to that commonly used in the guaranty clause cases.¹²⁵ The guaranty clause also has fallen into disuse and, again, it is unlikely that a modern court would look to it as a basis for the public trust doctrine.¹²⁶

The other two alternatives—the public trust as the product of congressional preemption resulting from a comprehensive legislative program to keep the major watercourses open and free, or as constitutionally founded in the commerce clause—are both much more consonant with the extensive body of law that has developed around those watercourses that are navigable for title.

A persuasive case can be made that the trust is based on congressional preemption, manifested by implication either through a comprehensive legislative scheme or, more specifically, through the statehood acts. Congress' tradition of mandating that navigable watercourses be kept open to the public runs deep, from the Northwest Ordinance's guarantee in 1787 that such rivers and lakes must be "forever free" through the comprehensive matrix of legislation that Congress has since enacted on the subject of navigation.¹²⁷ Importantly, the "forever free" language from the

Court."); Note, National Audubon Society v. Superior Court: *The Expanding Public Trust Doctrine*, 14 ENVTL. L. 617, 623 (1984) ("In the early 1800s, the United States Supreme Court incorporated the common law public trust doctrine into American law." (footnote omitted)). For an extensive reconsideration of the appropriate bounds for federal common law, see Field, *Sources of Law: The Scope of Federal Common Law*, 99 HARV. L. REV. 883 (1986).

125. The guaranty clause provides "The United States shall guarantee to every State in this Union a Republican Form of Government . . ." U.S. CONST. art. IV, § 4, cl. 1. Justice Field's assertion that "[t]he State can no more abdicate its trust . . . than it can abdicate its police powers in the administration of government and the preservation of the peace," Illinois Cent. R.R. v. Illinois, 146 U.S. 387, 453 (1892), suggests the concept of a minimum level of state authority below which a republican government would not exist. The Supreme Court's initial considerations of the guaranty clause are found in, e.g., *Luther v. Borden*, 48 U.S. (7 How.) 1, 37-46 (1849); *Kies v. Lowrey*, 199 U.S. 233, 239 (1905).

126. See, e.g., *Pacific States Tel. & Tel. Co. v. Oregon*, 223 U.S. 118 (1912) (holding that whether a state government is "republican" is a question which federal courts are not competent to answer). The import of *Pacific States*, in Professor Tribe's words, is that "the guaranty clause is not a source of judicially enforceable private rights." L. TRIBE, AMERICAN CONSTITUTIONAL LAW 99 (2d ed. 1988).

127. See, e.g., *supra* notes 50-58 and accompanying text. See generally Leighty, *The Source and Scope of Public and Private Rights in Navigable Waters*, 5 LAND & WATER L. REV. 391 (1970).

Northwest Ordinance,¹²⁸ one of this country's most luminous enactments,¹²⁹ was expressly included in the statehood acts of all the states in the old Northwest Territory¹³⁰ and in the charters of several other states as well.¹³¹ The Supreme Court has recognized Congress' determination to keep the major waterways open in numerous opinions. As Justice Swayne explained in *Gilman v. Philadelphia*,¹³² "Commerce includes navigation. . . . This necessarily includes the power to keep [major watercourses] open and free from any obstruction to their navigation"¹³³

128. See *supra* text accompanying note 49.

129. Joseph Story called "the famous ordinance" of 1787 "the model of all our territorial governments . . . equally remarkable for the brevity and exactness of its text, and for its masterly display of the fundamental principles of civil and religious liberty." 3 J. STORY, *COMMENTARIES ON THE CONSTITUTION OF THE UNITED STATES* 187 (1833). Story also called the ordinance a "notable and imperishable monument." *Id.* at 190 n.1. Paul Gates remarked on the stature of the Northwest Ordinance, stating:

The Northwest Ordinance of 1787 was simply an act of the Congress of the Confederation, and therefore subject to whatever revision any later Congress might wish to make. Nevertheless, it became something more because of liberal features written into it and the great prestige it early acquired as part of American democratic traditions.

P. GATES, *supra* note 60, at 285. The Northwest Ordinance became part of American democratic traditions early; it was re-enacted by the First Congress on August 7, 1789, the eighth statute passed under the new Constitution. 1 Stat. 50 (1789).

130. See HULL, *supra* note 50, at 3-7.

131. One authority notes,

After Congress had adopted the Ordinance of 1787 as a statute of the United States, it then extended to the inhabitants of the Southwest Territory by the Ordinance of May 26, 1790, the "privileges, benefits and advantages" of the Northwest Ordinance. As a result of this extension, Article IV of the Compact of the Ordinance of 1787 pertained directly to the rights of Kentucky, Tennessee and Alabama as well as to the rights of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota (east of the Mississippi River) and Pennsylvania (that part included in the Erie Purchase).

Id. at 6.

The "forever free" provision of Article IV of the Northwest Ordinance was also included in the state constitutions of Alabama, Alaska, California, Minnesota, Mississippi, Missouri, Tennessee, and Wisconsin. For citations, see *id.* at 56 n.27. The "forever free" language was also reaffirmed in the enabling acts or admission acts of Alabama, California, Illinois, Indiana, Iowa, Louisiana, Minnesota, Mississippi, Missouri, Ohio, Oregon, and Wisconsin. For citations to the specific acts, see *id.* at 56 n.28.

132. 70 U.S. (3 Wall.) 713 (1865).

133. *Id.* at 724-25. See also, e.g., *United States v. Coombs*, 37 U.S. (12 Pet.) 72 (1838); *Hobart v. Drogan*, 35 U.S. (10 Pet.) 108 (1836); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824).

Since all new states took title to the beds and banks of navigable watercourses at statehood as a matter of implication, and since the public trust applies to the same bodies of water, it is logical to view the trust as an implied condition of statehood—a key adjunct of Congress' general purpose of keeping those watercourses "forever free." Congressional power to impose such a condition, in implementing the commerce authority, is beyond question.¹³⁴ This analysis, of course, would mean that the public trust doctrine is not constitutionally mandated. Rather, it is accomplished by preemption, with congressional policy being effected through the statehood acts and the many statutes governing navigation.¹³⁵ The approach would be attractive to modern courts because preemption, rather than recognition of constitutional standards, is the preferred method of analysis in constitutional adjudication.¹³⁶

Nevertheless, in the context of the law involving watercourses navigable for title, with its special traditions and heavy overlay of constitutional doctrine, locating the public trust doctrine in the Constitution itself is perhaps more persuasive. The navigation servitude, a limit on state authority on exactly the same watercourses, is an implied component of the commerce clause.¹³⁷ The

134. See *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 229-30 (1844), where the Court upheld Congress' power to include the "common highways, and forever free" condition in a statehood act under the commerce power. In determining the validity of such a condition in the statehood act of Alabama, the Court stated:

[a]s the provision of what is called the compact [that all navigable waters within the said State shall forever remain public highways, free to the citizens] between the United States and the state of Alabama does not, by the above reasoning [from *Gibbons v. Ogden*, 22 (9 Wheat.) at 196], exceed the power thereby conceded to Congress over the original states on the same subject

This supposed compact is, therefore, nothing more than a regulation of commerce, to that extent, among the several States

Id. at 230. See also *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985); *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964); *Katzenbach v. McClung*, 379 U.S. 294 (1964).

135. On the statehood acts and statutes governing navigation, see *supra* notes 50 and 131 respectively.

136. See generally Note, *Preemption As a Preferential Ground: A New Canon of Construction*, 12 STAN. L. REV. 208 (1959).

137. See *supra* note 100 and text accompanying note 101. Several other constitutional provisions augment the commerce clause and demonstrate the framers' concern with free navigation. See *supra* note 53.

navigation servitude and the public trust doctrine are parallel doctrines, both affording complementary protections to major watercourses—the Court has recently, and correctly, described the public trust as a “servitude.”¹³⁸ Similarly, the Court has found that the extraordinary implied land transfer to the states upon admission is guaranteed to the states under the Constitution by the equal footing doctrine.¹³⁹ It follows that the trust, a “servitude”¹⁴⁰ or “easement”¹⁴¹ on the underlying land title, is also imposed by the same source, the Constitution. For more than 150 years, the Supreme Court has consistently given a constitutional cast to state and federal prerogatives and obligations with regard to waters navigable for title, due ultimately to the key role of these watercourses in the country’s commerce and society and in the formation of the national government.¹⁴² Thus, although the other federal alternatives mentioned above have characteristics that cut in their favor, the fairest and most principled conclusion is that the public trust doctrine is rooted in the commerce clause and became binding on new states at statehood.

The second unresolved question is whether the substantive standards for administering the trust are defined by state or federal law. There are three possibilities. First, there is language in

138. See *Summa Corp. v. California ex rel. State Lands Comm’n*, 466 U.S. 198, 206 (1984). The two doctrines are parallel and complementary because the public trust doctrine prevents the substantial impairment of public rights in navigable waterways, *see supra* text accompanying note 120, while the navigation servitude prevents the acquisition of compensable private interest in navigable waterways, *see supra* note 100. Neither doctrine is truly indispensable, given Congress’ ability to exercise the eminent domain power in any event. Yet, given implied state ownership, the most sensible reconciliation of federal and states’ rights under the Constitution recognizes both the public trust servitude and the navigation servitude as federal prerogatives encompassed by the commerce clause.

139. See *supra* note 9 & 97 on the constitutional stature of the states’ land title under the equal footing doctrine. The trust obligations passed with the land title to the states upon statehood. *See, e.g., Dunning, The Significance of California’s Public Trust Easement for California Water Rights Law*, 14 U.C. DAVIS L. REV. 357, 363-67 (1980) (the public trust “springs from the ownership of land conferred on the State of California upon admission to the United States . . . ”).

140. *See supra* note 102.

141. *Id.*

142. For Chief Justice Marshall’s view of the role of commerce, including navigation, in forming the federal government, see text accompanying notes 53-57. On the importance of navigable watercourses for the young nation, *see generally* text accompanying notes 32-58.

both old and new cases suggesting that the content of the traditional trust is purely a matter of state law. Thus, for example, the Supreme Court in the 1926 opinion in *Appleby v. City of New York*¹⁴³ stated that "the conclusion reached [in *Illinois Central*] was necessarily a statement of Illinois law . . ."¹⁴⁴ United States Supreme Court decisions during the 1980s have not addressed the issue directly but have made repeated references to state prerogatives over lands navigable for title.¹⁴⁵

A second, and opposite, conclusion is that the trust is defined solely by federal law. Certainly this is the fairest reading of *Illinois Central*.¹⁴⁶ Although the opinion necessarily refers to the state of Illinois occasionally, much of the opinion is written more comprehensively with references to "a State"¹⁴⁷ and with phrases that are plainly of general applicability, such as "[a]ny grant of the kind is necessarily revocable . . .".¹⁴⁸ Suggestions that trust standards are established as a matter of federal law are also found in many other court opinions.¹⁴⁹

My conclusion, however, is that there is a third approach that provides a middle ground that is more sensitive to the many different factors at work here. Both the implied transfer and the overlying trust in favor of public access are now settled parts of

143. 271 U.S. 364, 395 (1926) (state acts of dominion over submerged lands, previously granted by City of New York in fee simple absolute to the plaintiffs' testator, were an unconstitutional impairment of contracts under state law).

144. *Id.* The *Appleby* Court went on to note that "the general principle and the exception [of *Illinois Central*] have been recognized the country over and have been approved in several cases in the State of New York." *Id.* See also Lazarus, *supra* note 3, at 638-40. The *Appleby* ruling contains an involved and comprehensive analysis of New York state law and state court decisions, in contrast to the very limited treatment of Illinois authority in *Illinois Central*. Compare *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387 (1892) with *Appleby v. New York*, 271 U.S. 364 (1926).

145. The most recent Supreme Court cases in this field are *Phillips Petroleum Co. v. Mississippi*, 108 S. Ct. 791 (1988); *Utah Div. of State Lands v. United States*, 482 U.S. 193 (1987); *Summa Corp. v. California ex rel. State Lands Comm'n*, 466 U.S. 198 (1984); *Block v. North Dakota ex rel. Bd. of Univ. & School Lands*, 461 U.S. 273 (1983); *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); *Vaughn v. Vermilion Corp.*, 444 U.S. 206 (1979). See *infra* notes 156-62 and accompanying text.

146. See 146 U.S. 387 (1892).

147. E.g., *id.* at 453.

148. *Id.* at 455. See generally note 119 and accompanying text.

149. See *infra* note 163.

our jurisprudence. There are powerful state interests—powerful enough to induce the implied transfer in the first place—and strong national interests—strong enough to impress an implicit trust on these highly valued natural resources. It does not make sense that a state could abdicate a federally and constitutionally imposed trust completely.¹⁵⁰ As Justice Field put it in *Illinois Central*, if there were no trust at all, such a situation “would place every harbor in the country at the mercy of a majority of the legislature of the State in which the harbor is situated.”¹⁵¹ At the same time, there is plainly broad state discretion; *Illinois Central* recognized the propriety both of state transfers consistent with navigation and of nonnavigation-related transfers that did not substantially impair the trust.¹⁵² Later cases have approved a variety of state transactions of trust lands.¹⁵³ Probably the most satisfactory formulation is the standard, set out in *Illi-*

150. This thought is at the core of public trust law. As the Court stated in *Shively v. Bowby*:

Lands under tide waters are incapable of cultivation or improvement in the manner of lands above high water mark. They are of great value to the public for the purposes of commerce, navigation, and fishery. Their improvement by individuals, when permitted, is incidental or subordinate to the public use and right. Therefore the title and the control of them are vested in the sovereign for the benefit of the whole people.

152 U.S. 1, 57 (1894). Thus, while the states can relinquish title to trust lands, [t]he control of the State for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining.

Illinois Central, 146 U.S. at 453.

Modern cases have recognized that state “control” for public trust purposes exceeds the scope of state title over navigable waterways. Thus, in *Marks v. Whitney*, 6 Cal. 3d 251, 491 P.2d 374, 98 Cal. Rptr. 790 (1971), the California Supreme Court held that submerged lands sold by the state for other than trust purposes continue to be impressed with the public trust, despite their private ownership. Such cases are entirely consistent with the “no substantial impairment” rule of *Illinois Central*, and with modern treatment of the public trust, see *infra* note 152 and accompanying text, since state title law is a separate issue.

151. 146 U.S. at 455. This language has been cited as suggesting that the Court intended a national application of the *Illinois Central* rule. See *Lazarus, supra* note 3, at 639 n.37.

152. See 146 U.S. at 453.

153. See, e.g., *Caminiti v. Boyle*, 107 Wash. 2d 662, 732 P.2d 989 (1987), cert. denied, 108 S. Ct. 703 (1988); *Kootenai Envtl. Alliance v. Panhandle Yacht Club*, 105 Idaho 622, 671 P.2d 1085 (1983). See generally *Phillips Petroleum Co. v. Mississippi*, 108 S. Ct. 791, 799 (1988).

nois Central and reaffirmed in *Shively v. Bowlby*, that the states have extensive leeway but that the purposes of the trust cannot be "substantially impair[ed]."¹⁵⁴ Professor Sax has explained the basic legal rule this way,

[T]he Court [in *Illinois Central*] articulated a principle that has become the central substantive thought in public trust litigation. When a state holds a resource which is available for the free use of the general public, a court will look with considerable skepticism upon *any* governmental conduct which is calculated *either* to relocate that resource to more restricted uses *or* to subject public uses to the self-interest of private parties.¹⁵⁵

To be sure, there is language in some cases suggesting that states have unfettered discretion in administering the trust. The most recent opinion, *Phillips Petroleum Co. v. Mississippi*,¹⁵⁶ stated that "ownership of [public trust tide]lands . . . is a question of state law."¹⁵⁷ *Phillips*, however, was only a dispute over real property title to tidelands.¹⁵⁸ It did not involve the right of the public to obtain access to the overlying waters, which is the essence of the public trust doctrine.¹⁵⁹ Indeed, two other recent

154. *Illinois Central*, 146 U.S. at 453; *Shively*, 152 U.S. at 47.

155. Sax, *Judicial Intervention*, *supra* note 3, at 490.

156. 108 S. Ct. 791 (1988).

157. *Id.* at 799 (1988). The Court also quoted from *Shively v. Bowlby* to the same effect: "[T]here is no universal and uniform law upon the subject; but . . . each state has dealt with the lands under the tide waters within its borders according to its own views of justice and policy." *Id.* at 798.

158. See *id.* at 793 ("This is in the end a title suit." quoting, *Cinque Bambini Partnership v. Mississippi*, 491 So. 2d 508, 510 (Miss. 1986), *aff'd sub nom. Phillips Petroleum Co. v. Mississippi*, 108 S. Ct. 791 (1988)). *Shively v. Bowlby* also involved a title transfer. 152 U.S. 1 (1893).

159. *Phillips* also stated, even where States have given dominion over tidelands to private property owners, some States have retained for the general public the right to fish, hunt, or bathe on these lands. . . . These long-established rights may be lost with respect to nonnavigable tidal waters if we adopt the rule adopted by petitioners [that the lands at issue were nonnavigable].

108 S. Ct. at 799. See also *id.* at 799 n.12. This language seems to suggest that public access may depend on state law, but such a reading is inconclusive dictum made in summary fashion without analysis of the Supreme Court opinions. Also, such a reading is contrary both to *Illinois Central* and the assumption of the Court in *Kaiser Aetna* and *Vaughn* in 1979, that federal law guarantees public access to lands navigable for title. See *infra* note 162.

Supreme Court cases, *Kaiser Aetna v. United States*¹⁶⁰ and *Vaughn v. Vermilion Corp.*¹⁶¹ were plainly premised on the idea that the public has a right to use the surface of watercourses navigable for title, regardless of relevant state law.¹⁶² State court opinions have also regularly operated on the assumption that states are bound, as a matter of national law, to keep navigable watercourses open to public use.¹⁶³ Neither the Supreme Court

160. 444 U.S. 164 (1979).

161. 444 U.S. 206 (1979).

162. Both *Kaiser Aetna* and *Vaughn* ultimately held that the watercourses in question were not navigable for title, but the Supreme Court assumed that the public would have had access under federal law if the watercourses had been navigable for title. Thus, in *United States v. Kaiser Aetna*, the court of appeals upheld public access on the basis of navigability for title. 584 F.2d 378, 383-84 (9th Cir. 1978), *rev'd*, 444 U.S. 164 (1979). The Supreme Court seemed to accept the government's position that "[t]he public thereby acquired a right to use Kuapa Pond as a continuous highway for navigation . . ." if the pond had been navigable for title. 444 U.S. at 170. The law of the State of Hawaii did not allow such public access. 584 F.2d at 383-84.

The Supreme Court in *Kaiser Aetna* described the public right of access as being guaranteed by the navigation servitude, not the public trust, but that characterization seems wrong. The navigation servitude is a rule of noncompensation (an exception to the requirement of fifth amendment compensation) when the United States develops watercourses navigable for title. *See supra* note 100. The public trust, on the other hand, has traditionally been used to protect the public's right of access to navigable watercourses. In general, the opinions have not always precisely distinguished among the three distinctive rules that apply to watercourses navigable for title: (1) the states' right to ownership (with the federal government holding title, before statehood, in trust for the States); (2) the public trust doctrine (with the state, after statehood, owing a trust obligation to the public in order to assure access); and (3) the navigation servitude. Professor Huffman discusses the distinction between state ownership and public access in Huffman, Phillips Petroleum Co. v. Mississippi: *A Hidden Victory for Private Property?*, 19 Envtl. L. Rep. (Envtl. L. Inst.) 10,051, 10,055-56 (1988).

163. The state court opinions, like the federal cases, do not always state explicitly whether the trust standards are set as a matter of federal or state law. Nevertheless, many state courts, citing *Illinois Central*, have treated its principle of open public access to watercourses navigable for title as a rule of general applicability. *See, e.g.*, State *ex rel.* Rohrer v. Credle, 322 N.C. 522, 526, 369 S.E.2d 825, 827 (1988) ("Under the public trust doctrine, each state could regulate or dispose of its tidal lands, provided that it could be done 'without substantial impairment of the interest of the public in the waters.'"); CWC Fisheries, Inc. v. Bunker, 755 P.2d 1115, 1118 (Alaska 1988) ("*Illinois Central* remains the leading case regarding public rights in tide and submerged lands conveyed by the state."); Caminiti v. Boyle, 107 Wash. 2d 662, 670, 732 P.2d 989, 994 (1987) (citing *Illinois Central* as providing "[t]he test of whether or not an exercise of legislative power with respect to tidelands and shorelands violates the 'public trust doctrine' . . .")

nor any state courts have disavowed the prohibition of "substantial impairment" of public rights of navigation, commerce, and fishing announced in *Illinois Central* and *Shively v. Bowlby*.

The standards for the trust, then, are best understood as having very broad parameters set as a matter of federal mandate, either by way of congressional preemption or constitutional law; the constitutional rationale is more consonant with the whole body of law. The traditional trust allows the states wide latitude, but the states are federally prohibited from abrogating the public trust entirely.

I do not wish to make too much of the fact that the most principled analysis leads to the conclusion that the public trust has minimum requirements set by the Constitution. The states have such broad discretion to fashion their own individual bodies of trust law that the constitutional standards will seldom be called into play. This has proved to be the case in the litigation to date. Thus, the main value of understanding the federal constitutional source and scope of the trust probably does not lie in a constitutional mandate that some presumptively valid uses must be forgone. Rather, as the next section explores, the constitutional dimensions of the traditional doctrine are perhaps most useful in setting a context for state court and legislative decision-making when fashioning public trust remedies under state law.¹⁶⁴

cert. denied, 108 S. Ct. 703 (1988); *Kootenai Envtl. Alliance v. Panhandle Yacht Club*, 105 Idaho 622, 625, 671 P.2d 1085, 1088 (1983) ("*Illinois Central* . . . is the seminal case on the scope of the public trust doctrine and remains the primary authority today."). See also *West Indian Co. v. Virgin Islands*, 844 F.2d 1007, 1018 (3d Cir. 1988) (applying the law of the Virgin Islands, the case cites *Illinois Central* as a "rule[] of the common law . . . as generally understood and applied in the United States.") *cert. denied*, 109 S. Ct. 31 (1988). *National Audubon Soc'y v. Superior Court (Mono Lake)* stated,

As we noted recently in *City of Berkeley v. Superior Court*, *supra*, 26 Cal. 3d 515, 162 Cal. Rptr. 327, 606 P.2d 362, the decision of the United States Supreme Court in *Illinois Central Railroad Company v. Illinois*, . . . "remains the primary authority even today, almost nine decades after it was decided."

33 Cal. 3d 419, 437, 658 P.2d 709, 721, 189 Cal. Rptr. 346, 358, *cert. denied*, 464 U.S. 977 (1983). For contrary authority, see *Montana Coalition for Stream Access v. Curran*, 682 P.2d 163, 168 (Mont. 1984) (suggesting that the extensive public access to Montana watercourses is mandated, not by federal law, but by Montana state law, including the Montana Constitution), quoted *infra* note 165.

164. Thus, as with other constitutional doctrines, the federal constitution creates a set of minimum standards that can be expanded, but not contracted, by the

VI. BEYOND THE TRADITIONAL DOCTRINE

Court decisions and legislation in most states have supplemented the traditional federal doctrine, and most of the remaining states are likely to follow eventually. The developments have been many, but the major developments are these. First, some states have extended the coverage of the trust beyond those watercourses navigable for title to all, or nearly all, waters of the state. A leading example is Montana,¹⁶⁵ where the courts and legislature have applied the public trust to all waters usable for recreational purposes. Second, cases have extended the trust beyond the traditional purposes of commerce, navigation, and fishing, with the most common "new" purposes being various forms of recreation.¹⁶⁶ Third, various cases have extended the reach beyond watercourses per se.¹⁶⁷ Thus, decisions and state constitutions extend the trust to dry sand beaches,¹⁶⁸ wildlife,¹⁶⁹ and state

states. See generally Brennan, *State Constitutions and the Protection of Individual Rights*, 90 HARV. L. REV. 489 (1977), where Justice Brennan discusses the states' role in providing greater protection of individual rights and encourages states to exceed federal constitutional standards by recognizing additional rights at the state level. In the sphere of the public trust, many states have expanded the basic federal guarantee in numerous respects. See *infra* notes 167-78 and accompanying text.

165. See *Montana Coalition for Stream Access v. Curran*, 682 P.2d 163, 171 (Mont. 1984) ("we hold that, under the public trust doctrine and the 1972 Montana Constitution, any surface waters that are capable of recreational use may be so used by the public without regard to streambed ownership or navigability for nonrecreational purposes."). The legislative stream access provisions are found in MONT. CODE ANN. §§ 23-2-311 to -322 (1988). For subsequent litigation in which some provisions were struck down, see *Galt v. Montana Dep't of Fish, Wildlife & Parks*, 731 P.2d 912 (Mont. 1987).

166. See, e.g., *Marks v. Whitney*, 6 Cal. 3d 251, 259-60, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971) (trust purposes are far broader than traditional uses of navigation, commerce, and fishing, and include use as open space and wildlife habitat, and use for scientific purposes, hunting, bathing, and swimming); *Orion Corp. v. Washington*, 109 Wash. 2d 621, 640-41, 747 P.2d 1062, 1073 (1987), cert. denied, 108 S. Ct. 1996 (1988) (public trust rights include navigation, fishing, swimming, water skiing, and other related recreational purposes); *Menzer v. Village of Elkhart Lake*, 51 Wis. 2d 70, 81, 186 N.W.2d 290, 296 (1971) (purposes of trust include all public uses of water).

167. For a compilation of these cases, see Reed, *The Public Trust Doctrine: Is It Amphibious?* 1 ENVT'L. L. & LIT. 107, 116-21 (1986).

168. See, e.g., *Matthews v. Bay Head Improvement Ass'n*, 95 N.J. 306, 471 A.2d 355 (1984).

169. See, e.g., *Wade v. Kraemer*, 121 Ill. App. 3d 377, 459 N.E.2d 1025 (1984).

parks.¹⁷⁰ One recent decision in New Jersey even extended the trust to drinking water in a dispute over the distribution of proceeds from a water supply company.¹⁷¹

Last, and the subject of this issue of *Environmental Law*, a number of state courts have moved into the area of appropriation of water. These courts hold or suggest that water rights obtained under the prior appropriation doctrine might be curtailed if such appropriations substantially impair watercourses navigable for title. The *Mono Lake*¹⁷² case and the *Bay Delta*¹⁷³ case, both in California, are the most notable opinions on this point. Variations of this reasoning can be found in Idaho,¹⁷⁴ Alaska,¹⁷⁵ and North Dakota.¹⁷⁶

Other articles in this issue will explore specific instances in which the traditional doctrine has been expanded, particularly in the area of appropriation of water. I would like, however, to discuss one last foundational issue. That question is whether it is appropriate for the judiciary to take such an active role in this field, and whether the state and federal judiciary ought to remain active in formulating the public trust doctrine.

The most articulate attack on the modern expansion of the public trust doctrine is a major article by Richard J. Lazarus.¹⁷⁷ Lazarus sharply criticizes what he believes to be unprincipled judicial activism:

[T]he doctrine threatens to fuel a developing clash in liberal ideol-

170. See, e.g., *Gould v. Greylock Reservation Comm'n*, 350 Mass. 410, 215 N.E.2d 114 (1966). For a case extending the trust to a national park, see *Sierra Club v. Department of Interior*, 398 F. Supp. 284 (N.D. Cal. 1975). For a discussion of the Redwood National Park cases, see Wilkinson, *supra* note 61, at 285-90.

171. *Mayor & Mun. Council of Clifton v. Passaic Valley Water Comm'n*, 224 N.J. Super. 53, 64, 539 A.2d 760, 765 (1987).

172. *National Audubon Soc'y v. Superior Court (Mono Lake)*, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, *cert. denied*, 464 U.S. 977 (1983).

173. *United States v. State Water Resources Control Bd.*, 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986).

174. *Shokal v. Dunn*, 109 Idaho 330, 707 P.2d 441 (1985); *Kootenai Envtl. Alliance v. Panhandle Yacht Club*, 105 Idaho 622, 671 P.2d 1085 (1983).

175. *CWC Fisheries, Inc. v. Bunker*, 755 P.2d 1115 (Alaska 1988).

176. *United Plainsmen Ass'n v. North Dakota State Water Conservation Comm'n*, 247 N.W.2d 457 (N.D. 1976).

177. Lazarus, *supra* note 3. For another spirited attack on the public trust doctrine, see Comment, *The Public Trust Totem in Public Land Law: Ineffective—And Undesirable—Judicial Intervention*, 10 ECOLOGY L.Q. 455 (1982).

ogy between furthering individual rights of security and dignity, bound up in notions of private property protection, and supporting environmental protection and resource preservation goals, inevitably dependent on intrusive governmental programs designed to achieve longer-term collectivist goals. . . .

. . .

The doctrine . . . unduly relies on a proenvironment judicial bias.¹⁷⁸

Without necessarily referring to Mr. Lazarus, one must note a considerable irony when one hears complaints against the public trust doctrine, on the grounds of judicial activism, from those who advocate rigid, absolute protection of rights granted under state law and who advocate states' rights generally. Remember, after all, the context in which the traditional trust doctrine arose. The trust was necessary to complement the implied real estate transfer that was so extraordinarily favorable to the states.¹⁷⁹ It is discordant, therefore, to hear criticism of half a formula on the basis of states' rights and judicial activism, when the other half of the formula is pro-states' rights and demonstrably the product of judicial activism.

But one must follow the criticism of the judiciary's role in the development of the trust further. The issue of the judiciary's legitimate role is fairly raised by the fact that most development of the doctrine has come from the courts when we are plainly in a time when the field of natural resources law and policy has become heavily statutory.¹⁸⁰ Surely that characterizes western water law. How can there be room for the substantial development of judge-made doctrines?

178. Lazarus, *supra* note 3, at 633, 692.

179. See *supra* notes 75-97 and accompanying text.

180. This argument is forcefully advanced in Lazarus, *supra* note 3, at 675-91. Lazarus continues:

The tremendous expansion in the nature of sovereign authority and the degree of governmental oversight does more, however, than undercut any meaningful role for the public trust doctrine in promoting governmental authority. The implications of this expansion question the central premise of the trust doctrine's origins—that the doctrine provides a needed legal basis to ensure public accountability for governmental decisions that adversely affect the environment.

Id. at 679.

The leading discussion of this general topic is Professor Guido Calabresi's book, *A Common Law for the Age of Statutes*.¹⁸¹ Calabresi assesses these issues with real care and, among other things, finds a particularly appropriate judicial role when cases involve constitutional interpretation or the interpretation of archaic laws.¹⁸² Similar themes resonate in the writings of some of our greatest judges. Oliver Wendell Holmes wrote this in *The Common Law*,

A very common phenomenon, and one very familiar to the student of history, is this. The customs, beliefs, or needs of a primitive time establish a rule or a formula. In the course of centuries the custom, belief, or necessity disappears, but the rule remains. The reason which gave rise to the rule has been forgotten, and ingenious minds set themselves to inquire how it is to be accounted for. . . . The old form receives a new content, and in time even the form modifies itself to fit the [new] meaning which it has received.¹⁸³

181. G. CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* (1982). Calabresi focuses principally on some of the "disparate current legal-political phenomena" that have arisen in reaction to the "orgy of statute making" which has occurred in the past 50 to 80 years. *Id.* at 1. Calabresi suggests,

[t]hese phenomena include events as diverse as: the increasing tendency of courts to find that constitutions, and especially notions of equal protection, require the invalidation of statutes; the development of "passive-virtue" theories, . . . which would enable courts to force legislatures to take a second look at constitutionally doubtful statutes; . . . the delegation of substantial authority in lawmaking to administrative agencies; [and] the pressure for sunset laws

Id.

182. See *id.* at 8, 91. Calabresi suggests that judges are especially well qualified to address a key problem caused by this flood of statute making—the problem he calls "legal obsolescence." *Id.* at 2. He argues that because courts are selected for their capacity to discern principles of law and to act rationally on them, "courts are better than other institutions at discerning principles of law and at working out the demands of the ever changing legal topography." *Id.* at 96. Further, "the way judges are trained and selected, their relative independence, the limitations imposed on their staff, the fact that they make law incrementally in response to specific situations, and the requirement that they explain the grounds of their decisions, all seem designed to lead them to perform . . ." the job of making the conditional rules of society and, "at common law at least, set[ting] the starting points for legislative reaction." *Id.*

Calabresi's own conclusion is that "there is nothing in democratic or majoritarian theory which supports the notion that old statutes, as a group, are more entitled to a conservative bias than old common law rules . . ." *Id.* at 103.

183. O. HOLMES, *THE COMMON LAW* 5 (1881).

Jerome Frank said:

New instruments of production, new modes of travel and of dwelling, new credit and ownership devices, new concentrations of capital, new social customs, habits, aims and ideals—all these factors of innovation make vain the hope that definitive legal rules can be drafted that will forever after solve all legal problems. . . . Our society would be strait-jacketed were not the courts, with the able assistance of the lawyers, constantly overhauling the law and adapting it to the realities of ever-changing social, industrial and political conditions . . .¹⁸⁴

Such assessments of the role of the judiciary fit the public trust doctrine, particularly in the area of the appropriation of water. First, the public trust doctrine has strong constitutional overtones and thus, in significant part, courts are engaging in state or federal constitutional adjudication, where the role of the courts traditionally is the broadest.¹⁸⁵ Second, although western water law has been modernized in some respects, prior appropriation presents a classic example of how the passage of time and a changed social consciousness can make legal rules archaic. The "first in time, first in right" rule, developed as a matter of judge-made common law,¹⁸⁶ is a rule of capture, a blunt instrument, one of the most primitive forms of property ownership. Originally the law of prior appropriation grew up from and conformed itself perfectly to the society it was expected to serve, just as good law should. But the time has long passed when prior appropriation met all of the calls of western states.¹⁸⁷

Prior appropriation was cemented in place, in its mid-nineteenth century form, by state water agencies. They were chartered at the behest of water interests at the turn of the century for the twin purposes of protecting existing appropriative rights and creating a sense of order. The United States insisted

184. J. FRANK, *LAW AND THE MODERN MIND* 6-7 (1930).

185. This tradition derives from *Marbury v. Madison*, where Chief Justice Marshall declared, in the context of constitutional adjudication, "[i]t is emphatically the province and duty of the judicial department to say what the law is. Those who apply the rule to particular cases, must of necessity expound and interpret that rule." 5 U.S. (1 Cranch) 137, 177 (1803).

186. *Irwin v. Phillips*, 5 Cal. 140 (1855). See *supra* note 107 and accompanying text.

187. For one of the many recent calls for reform of western water law and policy, see M. REISNER, *CADILLAC DESERT* (1986).

upon this as a requisite for the big reclamation projects so cherished by western water developers. From the beginning, these were captured agencies in the fullest sense: publicly-funded bodies whose mission was to protect and promote a limited class of private rights. Despite improvements in western water administration during the last decade or so, the interests that created the agencies in the first place, and served as the agencies' sole constituency, had already locked in well over a century of private uses.¹⁸⁸

One can sense that modern courts find in the extreme reaches of prior appropriation, both in its substance and its administration, a one-dimensional rule of law, founded in another time, that is ill-suited for this age. Faced with overriding natural resource calamities, such as the massive drawing-down of a major lake,¹⁸⁹ the relentless salt water intrusion into one of our great deltas,¹⁹⁰ or the drying up of a whole river, the courts understandably respond to a doctrine that can, in a principled way, provide balance. That is precisely how the traditional doctrine arose in the first place, with the dedication of far too much of Chicago harbor to the private interests.¹⁹¹ Then, as now, judges can be expected to employ old and honored notions of trusteeship in order to fulfill the interests and the expectations of the public.¹⁹²

188. See generally Wilkinson, *Aldo Leopold and Western Water Law: Thinking Perpendicular to the Prior Appropriation Doctrine*, XXIV LAND & WATER L. REV. 1, 2-12 (1988).

189. National Audubon Soc'y v. Superior Court (*Mono Lake*), 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983).

190. United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986).

191. See Illinois Cent. R.R. v. Illinois, 146 U.S. 387, 454 (1892).

192. In an excellent piece on the philosophical and customary origins of the public trust doctrine, Professor Sax asserts that "[t]he central idea of the public trust is preventing the destabilizing disappointment of expectations held in common but without formal recognition such as title." *Sax, Liberating*, *supra* note 5, at 188. Sax argues that judges

can assure that decisions made by mere administrative bodies are not allowed to impair trust interests in the absence of explicit, fully considered legislative judgments. . . . [T]he courts can reduce the pressures that claims of private ownership put on public trust resources by looking to the history of common rights. The courts should recognize that mere unutilized title, however ancient, does not generate the sort of expectations central to the justness of property claims, and that long-standing public uses have an important place in the analysis.

Id. at 194. Professor Sax had earlier alluded to the proper role of the courts, in stating,

VII. CONCLUSION

The public trust, as it is applied to the appropriation of water, is based on a set of modest beliefs: a belief that the public benefits mightily from private development, but that the public interest is in fact greater than the sum of the private interests; a belief that property ownership must be profoundly respected but that property rights in water, like rights in land, are not absolute but rather can be regulated and adjusted in reasonable ways for the good of the citizenry as a whole;¹⁹³ a belief that wasteful uses of public resources are wrong and are not excused by return flows that return to our rivers not just water but also silt, salts, agrochemicals, and temperature changes;¹⁹⁴ a belief that our rivers and canyons are more than commodities, that they have a trace of

Illinois Central also raises more far-reaching issues. For example, what are the implications for the workings of the democratic process when such programs, although ultimately found to be unjustifiable, are nonetheless promulgated through democratic institutions? Furthermore, what does the existence of those seeming imperfections in the democratic process imply about the role of the courts, which, *Illinois Central* notwithstanding, are generally reluctant to hold invalid the acts of co-equal branches of government?

Sax, *Judicial Intervention*, *supra* note 3, at 491.

193. Of course, the constitutional validity of land use planning has long been established. For recent Supreme Court treatment of the issue, see, e.g., *Pennell v. City of San Jose*, 108 S. Ct. 849 (1988); *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987); *First English Evangelical Lutheran Church v. County of Los Angeles*, 482 U.S. 304 (1987); *California Coastal Comm'n v. Granite Rock Co.*, 480 U.S. 572 (1987); *Keystone Bituminous Coal Ass'n v. DeBenedictis*, 480 U.S. 470 (1987). Professor Sax has noted that "[l]and-use regulation, whether effectuated by private covenant or by public zoning, reflects a recognition of values common to the community. The regulation most often is a joint effort to protect values diffused among all property owners within the regulated area." Sax, *Liberating*, *supra* note 5, at 188 n.12. See generally Sagoff, *On Preserving the Natural Environment*, 84 YALE L.J. 205, 267 (1974) ("[N]othing is sacred; everything changes. It is just that changes which inhibit us from sharing our common heritage should not come at the whim of the developer. Nor should they depend on the conflicting interests of outdoors-people who like to hike and swim. Far different issues are at stake. They go to our sense of ourselves as a national community.").

194. On the increasing seriousness of, and growing costs associated with, water quality problems (including discussion of ground and surface water, point-and non-point source pollution), see, e.g., THE CONSERVATION FOUNDATION, STATE OF THE ENVIRONMENT: AN ASSESSMENT AT MID-DECADE 105-28 (1984). See also THE CONSERVATION FOUNDATION, AMERICA'S WATER: CURRENT TRENDS AND EMERGING ISSUES 42-53 (1984).

the sacred; a belief that words like "trust" ought to be taken seriously.

The public trust is one doctrine, one idea, in a historic reform movement that, slowly but steadily, is reshaping water law and policy in the West. The trust, however, has a special place in that movement because of its ancient roots, because of the context in which it was first announced in this country, because of the dynamic way in which it has been applied to a whole range of resource controversies, and because of the intangible way in which it evokes a sense of dignity and calls out the best and highest in us as a people. The trust, whether invoked by courts or legislatures, can play a principled part in structuring a system that really does reflect the vitality, diversity, and sacredness of both our ever-changing society and our inspiring, magnificent river systems.