

THE ANCIENT MARINER OF CONSTITUTIONAL LAW: THE HISTORICAL, YET DECLINING ROLE OF NAVIGABILITY

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It is an ancyent Mariner,
And he stoppeth one of three:
“By thy long grey beard and thy glittering eye
“Now wherefore stoppest thou me?”¹

I. INTRODUCTION

“Navigability”²—the degree to which a particular water body can be used by various boats and other watercraft—has a long, important history in federal constitutional and statutory law.³ U.S. Supreme Court cases involving navigability⁴ helped to shape the scope of federal authority under the Commerce Clause⁵ and the Necessary and Proper Clause⁶ of the U.S. Constitution. The legal concept of navigability has also been critical

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1. Samuel Taylor Coleridge, *The Rime of the Ancyent Marinere*, in WILLIAM WORDSWORTH, LYRICAL BALLADS, AND OTHER POEMS, 1797–1800, at 769 (James Butler & Karen Green eds., 1992).

2. Generally speaking, “navigability” refers to the degree to which a particular body of water can be used by various kinds of boats and other watercraft for purposes ranging from recreation to commerce to national defense. As explained extensively below, however, the Supreme Court has used slightly different definitions or legal tests of navigability for different constitutional purposes. See *infra* notes 34–36 and accompanying text for a preliminary discussion.

3. See Glenn J. MacGrady, *The Navigability Concept in the Civil and Common Law: Historical Development, Current Importance, and Some Doctrines That Don't Hold Water*, 3 FLA. ST. U. L. REV. 513, 569–96 (1975). Navigability under state law is also important for purposes to define riparian rights, see, e.g., *Thompson v. Enz*, 154 N.W.2d 473 (Mich. 1967), title as between the state and private parties, see, e.g., *Arnold v. Mundy*, 6 N.J.L. 1 (N.J. 1821), or recreational access, see, e.g., *Arkansas v. McIlroy*, 595 S.W.2d 659 (Ark. 1980). For more on the importance of navigability under state law, see generally Robert Haskell Abrams, *Governmental Expansion of Recreational Water Use Opportunities*, 59 OR. L. REV. 159 (1980); Leighton L. Leighty, *The Source and Scope of Public and Private Rights in Navigable Waters*, 5 LAND & WATER L. REV. 391, 398 (1970) (identifying state law purposes for navigability test). This Article focuses on the role of navigability in federal law.

4. See *Pennsylvania v. Wheeling & Belmont Bridge Co.*, 59 U.S. (18 How.) 421 (1855) (upholding an Act of Congress authorizing a bridge over the Ohio River as valid exercise of Commerce Clause authority); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 190 (1824) (“The 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.”).

5. U.S. CONST. art. I, § 8, cl. 3.

6. U.S. CONST. art. I, § 8, cl. 18.

in defining private versus public property rights in water bodies,⁷ allocating property between the federal and state governments,⁸ and delineating the scope of Article III federal court admiralty jurisdiction.⁹ Navigability also played a key role in the evolution of various common law doctrines, and the connections between those doctrines and the Constitution remain unclear.¹⁰

Given this pedigree, to borrow from the poet Coleridge, wherefore should we stop today to question the relevance of navigability to constitutional law? In several ways the role of navigability in constitutional law began to decline long ago. Dramatic changes in the U.S. economy and in our understanding and valuation of aquatic ecosystems and resources help explain why navigability may be even less important today than it has been in the past. The role and significance of navigability, however, varies greatly depending on the purpose of the differing legal doctrines for which it is used.

During its October 2011 term, for the first time in more than three decades,¹¹ the U.S. Supreme Court decided a case¹² about the meaning of the term “navigability” to establish “navigability for title,” i.e., whether a state holds title to the beds and banks of its waterways under the equal footing doctrine of the U.S. Constitution¹³ and for purposes of the public trust doctrine as defined by that state’s law.¹⁴ The Court granted certiorari

7. See, e.g., *Smith v. Maryland*, 59 U.S. (18 How.) 71 (1855) (upholding state regulatory authority to protect oyster beds within navigable waters); *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367 (1842) (confirming state public trust ownership of the beds of navigable waters).

8. See, e.g., *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845) (holding under the equal footing doctrine that newly admitted states have same rights to title to beds of navigable waters as original thirteen states, and that prior to statehood the federal government held title those lands temporarily, in trust for future states).

9. See, e.g., *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443 (1851) (extending federal admiralty jurisdiction from waters subject to the ebb and flow of the tide to all waters that are “navigable in fact”).

10. See generally Daniel J. Hulsebosch, *Writs to Rights: “Navigability” and the Transformation of the Common Law in the Nineteenth Century*, 23 *CARDOZO L. REV.* 1049 (2002); T. E. Lauer, *The Common Law Background of the Riparian Doctrine*, 28 *MO. L. REV.* 60 (1963).

11. The last case in which the Court actually addressed the definition of navigability is *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) (finding Hawaiian coastal pond with artificially improved access to Mauna Loa Bay navigable for Commerce Clause authority but not for federal navigational servitude). More recent cases address navigability for other purposes. See, e.g., *Idaho v. United States*, 533 U.S. 262 (2001) (finding intent in federal treaty to reserve beds of navigable waters for Tribe); *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988) (confirming state ownership of lands submerged by tidal but non-navigable waters).

12. *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215 (2012).

13. See *Pollard*, 44 U.S. (3 How.) at 212.

14. See *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367 (1842). The so-called “public trust doctrine” is really a series of state-defined doctrines, although scholars continue to debate whether federal law ultimately establishes the doctrine’s minimum parameters. See Robin Kundis Craig, *A*

on the single issue of whether the Montana Supreme Court applied the correct federal legal standard¹⁵ for determining whether the Missouri, Clark Fork, and Madison Rivers were navigable at the time of statehood.¹⁶

Petitioner PPL Montana (PPL) raised three narrow challenges to the Montana Supreme Court's approach to determining navigability for title: first, whether the Montana court focused on the navigability of particular river segments rather than the river as a whole; second, whether the Montana court erred by considering evidence of current-day navigability as probative of navigability at statehood; and third, whether the Montana court employed too liberal a standard for navigability.¹⁷ The U.S. Supreme Court ruled unanimously in PPL's favor on the first two issues,¹⁸ holding that the seventeen-mile Great Falls reach of the Missouri River was not navigable for title and remanding with respect to the remaining disputed segments.¹⁹ Given the Court's unanimous decision on evidentiary grounds, why is this case important?

Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries, 16 PENN ST. L. REV. 1, 4–10 (2007). In *PPL Montana*, the Supreme Court reiterated earlier holdings that federal law controls the navigability for title test for purposes of the equal footing doctrine, but that state law governs the scope of the public trust doctrine within individual states. *PPL Montana*, 132 S. Ct. at 1235.

15. Navigability for state ownership is a question of federal law, *Utah v. United States*, 403 U.S. 9, 10 (1971), because it governs the extent to which the federal government conveyed title to states at the time of statehood. See *United States v. Utah*, 283 U.S. 64, 75 (1931).

16. *PPL Montana, LLC v. Montana*, 131 S. Ct. 3019 (2011) (granting certiorari). Montana was admitted as a state in 1889. *PPL Montana, LLC v. State*, 229 P.3d 421, 428 (Mont. 2010). The Supreme Court granted certiorari on only the first issue in the Petition:

Does the constitutional test for determining whether a section of a river is navigable for title purposes require a trial court to determine, based on evidence, whether the relevant stretch of the river was navigable at the time the State joined the Union as directed by *United States v. Utah*, 283 U.S. 64 (1931), or may the court simply deem the river as a whole generally navigable based on evidence of present-day recreational use, with the question “very liberally construed” in the State’s favor?

Petition for Writ of Certiorari at i–ii, *PPL Montana*, 132 S. Ct. 1215 (No. 10-218), 2010 WL 3236721 at *i.

17. *PPL Montana*, 132 S. Ct. at 1226.

18. The Court held that the “primary flaw” in the Montana Supreme Court reasoning was its failure to engage in a segment-by-segment analysis to decide whether the disputed river segments were navigable at statehood, so long as each segment is sufficiently discrete and defined to warrant analysis. *Id.* at 1229–31. The Court found that present-day use may be considered, but only if it “shows the river could sustain the kinds of commercial use that, as a realistic matter, might have occurred at the time of statehood.” *Id.* at 1233.

19. *Id.* at 1232–33. Given these holdings, the Supreme Court found no need to reach the burden of proof issue. *Id.* at 1234. For additional summaries and analysis of the decision, see Rachael Lipinski, Note, *The Dividing Line: Applying the Navigability-for-Title Test After PPL Montana*, 91 OR. L. REV. 247 (2012) (arguing that the legal test for waters deemed navigable for title is not as clear as it might seem after *PPL Montana*); Amy Wegner Kho, Case Note, *What Lies Beneath Troubled Waters: The Determination of Navigable Rivers in PPL Montana LLC v. Montana*, 132 S. CT. 1215, 15 U. DENV. WATER L. REV. 489 (2012) (describing case and holding).

At a basic level, *PPL Montana* will dictate the litigation burden states will bear in proving navigability for title, and in some cases, their ability to do so at all. In *PPL Montana*, the State offered as evidence a fascinating set of historical records, including the journals of the Lewis and Clark expedition,²⁰ which navigated many of the waters in question in dugout canoes in the early nineteenth century.²¹ PPL argued that historical records and expert affidavits regarding authenticity were inadmissible hearsay because no one alive today can testify to the validity of historical accounts based on personal knowledge.²² If neither historical records nor current evidence of navigability may be used, however, it is not clear what evidence would be both probative and admissible on the issue of navigability at statehood, making it difficult if not impossible for a state to prove its case.²³ Except perhaps in Alaska²⁴ and Hawaii,²⁵ no one alive today can testify to navigability at statehood based on personal knowledge or observation.²⁶

The Montana courts rejected PPL's hearsay objection,²⁷ and the U.S. Supreme Court has also decided navigability cases using similar historical evidence.²⁸ For most waterways, however, states do not have the luxury of relying on the most famous journals of exploration in U.S. history to prove their case. Historical records of navigation may be sparse or nonexistent for many water bodies. According to one survey, only three states have conducted comprehensive inventories of navigable streams, and those inventories were based on cursory examinations of available historical records.²⁹ Because settlement was often sparse at statehood, the relevant legal test is the susceptibility to navigation at statehood rather than actual

20. See *PPL Montana*, 132 S. Ct. at 1223.

21. See generally STEPHEN E. AMBROSE, UNDAUNTED COURAGE: MERIWETHER LEWIS, THOMAS JEFFERSON, AND THE OPENING OF THE AMERICAN WEST (1996).

22. *PPL Montana, LLC v. State*, 229 P.3d 421, 434–35 (Mont. 2010).

23. See *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 416 (1940) (“Use of a stream long abandoned by water commerce is difficult to prove by abundant evidence.”).

24. *Alaska v. Ahtna, Inc.*, 891 F.2d 1401 (9th Cir. 1989).

25. *Kaiser Aetna v. United States*, 444 U.S. 164 (1979).

26. Congress admitted Alaska and Hawaii as states in 1959. The next newest states are New Mexico and Arizona, which entered the Union as states in 1912, meaning any credible fact witnesses would now have to be well over 100 years old. See *Statehood Dates*, 50STATES.COM, <http://www.50states.com/statehood.htm> (last visited June 15, 2012).

27. *PPL Montana, LLC*, 229 P.3d at 434–38.

28. See *Utah v. United States*, 403 U.S. 9, 10–12 (1971) (discussing historical evidence of use of Great Salt Lake for navigation); *The Montello*, 87 U.S. (20 Wall.) 430, 440 (1874) (discussing use of Fox River by explorers Marquette and Joliet as well as later traders).

29. Bruce B. Dykaar & David A. Schrom, *Public Ownership of U.S. Streambeds and Floodplains: A Basis for Ecological Stewardship*, 53 BIOSCIENCE No. 4, at 2, 3 (2003).

commercial use.³⁰ Evidence of the physical condition of a waterway at statehood, however, will be even more scant if no one plied those waters at the time and therefore left no records to be evaluated. If evidence of current-day navigability is not admissible, it will be increasingly difficult to prove navigability for title.³¹

Aside from the economic stakes at issue in *PPL Montana*,³² and the possible effects on similar litigation nationwide,³³ litigation over the meaning and significance of “navigability” suggests (but does not formally raise) a far more serious question: What is—or should be—the continuing role of navigability as a central tenet of U.S. constitutional law? In addition to the navigability for title test, slightly different navigability tests govern the scope of: (1) federal authority under the Commerce Clause,³⁴ (2) the federal navigational servitude,³⁵ and (3) admiralty jurisdiction under Article III of the U.S. Constitution.³⁶ The fact that the Supreme Court has adopted multiple definitions of navigability may not be

30. See *United States v. Utah*, 283 U.S. 64, 82 (1931) (clarifying that “where conditions of exploration and settlement explain the infrequency or limited nature of such use, *the susceptibility to use* as a highway of commerce may still be satisfactorily proved” (emphasis added)); *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (holding that waters “are navigable in fact when they are used, *or are susceptible of being used*, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water” (emphasis added)).

31. See Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425, 446 (1989) (arguing “that the Court bought into one and a half centuries of maddening litigation with many more years to come”); Leighty, *supra* note 3, at 393 (asking whether navigability “is so inherently unworkable that it can no longer be employed as a meaningful standard”); *id.* at 437 (suggesting that evidence of navigability “becomes increasingly more difficult to obtain with the passing of years”).

32. The Montana courts awarded \$40 million in damages for past use of waterways without compensation, and the right to collect millions of dollars in future royalties. *PPL Montana*, 229 P.3d at 429–33. The Edison Electric Institute, the American Petroleum Institute, and the Solicitor General of the United States believed that the stakes were high enough to weigh in as *amicus curiae*. See Docket, *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215 (2012) (No. 10-218), available at <http://www.supremecourt.gov/Search.aspx?FileName=/docketfiles/10-218.htm>.

33. Litigation is pending in Utah regarding hundreds of stream miles following a Utah Supreme Court decision granting partial public access rights to non-navigable streams, *Conatser v. Johnson*, 194 P.3d 897 (Utah 2009) (finding public easement over non-navigable waters), and the legislative response thereto. Similar litigation has occurred in other states. See, e.g., *Ariz. Ctr. for Law in the Pub. Interest v. Hassell*, 837 P.2d 158, 166–69 (Ariz. Ct. App. 1991) (overturning blanket state legislation to eliminate state ownership); *Pa. Dep’t. of Env’t. Prot. v. Espy*, 4 Pa. D. & C. 5th 25 (Pa. Comm. Pl. 2007) (finding portion of Little Juniata River navigable and by the Commonwealth); *Dykaar & Schrom*, *supra* note 29, at 3 (discussing legislative debate in Alaska over ownership of more than 22,000 streams and one million lakes).

34. See *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940); *Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288 (1936).

35. See *United States v. Cress*, 243 U.S. 316 (1917).

36. See *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443 (1851).

surprising given the diverse constitutional origins and purposes of these doctrines. Each doctrine dates to a time when rivers and other waterways were our most important avenues of commerce.³⁷ In those times, navigability was one of the most critical defining characteristics of a waterway, if not the most important. A navigability test made sense in defining which waters should be subject to public ownership and in delineating which waters should be subject to federal or state legislative and judicial control.

Many inland U.S. waterways continue to serve as major avenues of commerce.³⁸ Through the lens of twenty-first century science and values, however, rivers and other waters serve a much broader range of public purposes and provide important ecosystem services,³⁹ such as water supply,⁴⁰ biodiversity and habitat,⁴¹ fish and wildlife production,⁴² recreational use,⁴³ flood control and watershed protection,⁴⁴ and pollution assimilation.⁴⁵ Under the public trust doctrine, states hold title to protect, pursuant to state law, common resources for the public at large, for purposes that typically include navigation but also fisheries and commerce.⁴⁶ Under modern state cases the doctrine can encompass

37. See Wilkinson, *supra* note 31, at 431–38; Note, *From Judicial Grant to Legislative Power: The Admiralty Clause in the Nineteenth Century*, 67 HARV. L. REV. 1214, 1217–20 (1954); see generally GILBERT C. FITE & JIM E. REESE, AN ECONOMIC HISTORY OF THE UNITED STATES 63–64, 188–95 (2d ed. 1965) (describing importance of water transportation to early American commerce).

38. U.S. ARMY CORPS OF ENGINEERS, AN OVERVIEW OF THE U.S. INLAND WATERWAYS TRANSPORTATION SYSTEM 8 (2005) (describing over 12,000 miles of navigable waters serving major commercial transportation functions in 41 states, carrying nearly 2.5 quadrillion short tons of products per year), available at <http://www.corpsnets.us/docs/other/05-NETS-R-12.pdf>.

39. See generally J. B. RUHL, STEVEN E. KRAFT & CHRISTOPHER L. LANT, THE LAW AND POLICY OF ECOSYSTEM SERVICES (2007); NATURE'S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS (Gretchen C. Daily ed., 1997) [hereinafter NATURE'S SERVICES].

40. See U.S. GEOLOGICAL SURVEY, ESTIMATED WATER USE IN THE UNITED STATES IN 2005, at 4 (2009), available at <http://www.corpsnets.us/docs/other/05-NETS-R-12.pdf>; see also Sandra Postel & Stephen Carpenter, *Freshwater Ecosystem Services*, in NATURE'S SERVICES, *supra* note 39, at 195, 196–98.

41. See ROBIN A. ABELL ET AL., FRESHWATER ECOREGIONS OF NORTH AMERICA, A CONSERVATION ASSESSMENT 25–58 (2000) (assessing biodiversity functions of North American freshwater ecosystems); Postel & Carpenter, *supra* note 40, at 204–06; ELLEN E. WOHL, DISCONNECTED RIVERS: LINKING RIVERS TO LANDSCAPES 26–29 (2004); Kristine Ciruna & David Braun, *Freshwater Fundamentals: Watersheds, Freshwater Ecosystems and Freshwater Biodiversity*, in A PRACTITIONER'S GUIDE TO FRESHWATER BIODIVERSITY CONSERVATION 11, 23–35 (Nicole Silk & Kristine Ciruna eds., 2004).

42. Postel & Carpenter, *supra* note 40, at 198–99.

43. *Id.* at 202–04.

44. Ciruna & Braun, *supra* note 41, at 12–23.

45. Postel & Carpenter, *supra* note 40, at 200–01.

46. See *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387 (1892); *Smith v. Maryland*, 59 U.S. (18 How.) 71, 74–75 (1855) (public fisheries included in trust purposes).

ecological values as well, and earlier scholars have urged that it be extended to protect other uses and values.⁴⁷ But these issues of scope differ from the nature of water bodies reached by the public trust doctrine. In Commerce Clause cases, for which navigation played such an important early role,⁴⁸ navigation has faded into the background relative to other public values.⁴⁹ Yet the Supreme Court continues to struggle with Congress's continued use of the term "navigable waters" in federal statutes enacted under Commerce Clause authority, most recently the Clean Water Act.⁵⁰ The Court remains split over the jurisdictional role of navigability under those statutes, and while the Court thus far has addressed the scope of the Clean Water Act largely on statutory grounds, the Commerce Clause implications have lurked in the background.⁵¹

For purposes of public versus private ownership, why do we continue to litigate whether a water body was navigable at statehood, which in most cases involves evidence of navigability dating back one to two centuries?⁵² What is the continuing significance of navigability to Commerce Clause jurisdiction when far more commerce is conducted over the Internet highway than on aquatic highways? Navigability is intuitively far more

47. See *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709 (Ca. 1983); Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970). For articles urging the substantive expansion of the public trust doctrine (as opposed to its geographic scope), see, for example, Jack H. Archer & Terrance W. Stone, *The Interaction of the Public Trust and the "Takings" Doctrines: Protecting Wetlands and Critical Coastal Areas*, 20 VT. L. REV. 81 (1995); Craig, *supra* note 14; Ralph W. Johnson & William G. Galloway, *Protection of Biodiversity under the Public Trust Doctrine*, 8 TUL. ENVTL. L.J. 21 (1994); Ralph W. Johnson, *Water Pollution and the Public Trust Doctrine*, 19 ENVTL. L. 485 (1989).

48. See *Pennsylvania v. Wheeling & Belmont Bridge Co.*, 59 U.S. (18 How.) 421 (1855); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 190 (1824).

49. See *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 426 (1940) (holding that federal Commerce Clause regulation of waterways extends beyond navigation to include purposes such as flood control watershed protection, and power production).

50. 33 U.S.C. § 1251 et seq. (2012).

51. See, e.g., *Rapanos v. United States*, 547 U.S. 715 (2006) (4–1–4 split opinions on interpretation of statutory term "waters of the United States"); *Solid Waste Agency v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001) (split opinions on interpretation of same term).

52. At oral argument in *PPL Montana* several justices posed similar queries, probing whether different navigability tests properly distinguished between their purposes. See Transcript of Oral Argument at 18, *PPL Montana, LLC v. State*, 132 S. Ct. 1215 (2012) (No. 10-218) (Justice Kagan asking how navigability for title test differs from those used for regulatory purposes); *id.* at 31–32 (Justice Scalia asking whether a "whole river" approach makes more sense for Commerce Clause than for title); *id.* at 40 (Justice Breyer asking whether Commerce Clause cases are relevant to title cases). The Justices also asked whether navigability remains relevant to the purposes for which it is used. See *id.* at 32–33 (Justice Alito questioning rationale for rule that states own navigable rivers); *id.* at 33–35 (Justices Alito and Scalia probing what navigability has to do with fishing and regulatory purposes for which states seek control); *id.* at 38–39 (Chief Justice Roberts asking why states need ownership to control navigability); *id.* at 51–53 (Chief Justice Roberts and Justice Scalia probing whether states can exercise necessary regulatory control with or without title to waterways).

relevant to the scope of the federal navigational servitude and federal admiralty jurisdiction. Even in those areas, however, the role of navigability has diminished, perhaps because the law in those areas has been well settled⁵³ but also because of questions about the relationship between those doctrines and Commerce Clause authority. To borrow another phrase from *The Rime of the Ancyent Marinere*, to what extent is navigability an albatross around the neck of U.S. constitutional law?⁵⁴ And does the answer to that question differ for each of the navigability doctrines depending on their distinct purposes and historical evolution?

Changing the focus of the legal tests for any of these doctrines, of course, could have significant implications for settled property rights and expectations,⁵⁵ and for the balance of power between the federal and state governments.⁵⁶ For example, if the scope of the federal navigational servitude expands to encompass waters that serve public values and functions beyond navigability, the federal government's obligation to compensate those with property rights in those waters would be reduced accordingly. Broadening the title test could enhance state authority if it resulted in state ownership of more waterways, but it could also expand federal authority relative to the states if courts recognized an even wider range of public interests in waters under the Commerce Clause. The Supreme Court has altered the scope of each of these doctrines in the past,⁵⁷ in some cases dramatically, to reflect changing conditions.

53. The last major U.S. Supreme Court case regarding the definition of navigability for admiralty jurisdiction was *Ex parte Boyer*, 109 U.S. 629, 631–32 (1884) (approving federal admiralty jurisdiction over artificial waterways used in interstate commerce). The last similar cases for purposes of the federal navigational servitude were *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) and its companion case *Vaughn v. Vermillion Corp.*, 444 U.S. 206 (1979).

54.

Ah wel-a-day! what evil looks
Had I from old and young;
Instead of the Cross the Albatross
About my neck was hung.

Coleridge, *supra* note 1, at 774.

55. *See, e.g.*, *Leovy v. United States*, 177 U.S. 621, 632–33 (1900) (declining to extend navigability for purposes of the federal navigational servitude at expense of private property rights).

56. *See, e.g.*, *Gilman v. City of Philadelphia*, 70 U.S. (3 Wall.) 713 (1865) (addressing the relationship between federal Commerce Clause authority over navigable waters and state power under the dormant Commerce Clause); *Waring v. Clarke*, 46 U.S. (5 How.) 441 (1847) (addressing federal admiralty jurisdiction relative to the jurisdiction of state and local courts); *Pollard v. Hagan*, 44 U.S. (3 How.) 212, 230 (1845) (discussing the public trust doctrine as an allocation of rights between the federal and state governments).

57. *Compare* *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428 (1825) (limiting federal admiralty jurisdiction to waters influenced by the ebb and flow of the tide), *with* *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443 (1851) (extending federal admiralty jurisdiction to all inland waters deemed navigable in fact), *and* *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870)

This Article evaluates the continuing relevance of navigability in federal constitutional law for purposes of title, admiralty jurisdiction, Commerce Clause authority, and the federal navigational servitude. Part II explores the history and evolution of navigability in U.S. constitutional law, and examines each doctrine for evidence of the relative extent to which navigability continues to play a role and the degree to which that role has changed or declined. Part III examines other compelling reasons that suggest that navigability—while retaining relevance in certain contexts—should have less influence on some doctrines to reflect new understanding and shifting values about the importance of aquatic ecosystems and resources. Those differences reflect the very different functions that the concept of navigability serves in U.S. law. For purposes of admiralty jurisdiction, it delineates the exclusive role of federal courts in resolving particular disputes. For purposes of the Commerce Clause, it identifies the potential, but discretionary and often nonexclusive, scope of federal regulatory authority. Under the equal footing doctrine, it helps to define the extent of state sovereignty relative to that of the federal government, and to ensure constitutional equality among the states. Part IV concludes that constitutional definitions of navigability legitimately vary according to purpose, but argues that the geographic limits of public waters, for which unbridled private ownership is not appropriate, should reflect the full range of uses and values that serve important public interests to the fullest extent consistent with the underlying purpose of each doctrine.

II. THE EVOLUTION OF FEDERAL NAVIGABILITY LAW

Courts deciding navigability for title cases often examine the history of land grants and other conveyances in light of surrounding historical circumstances.⁵⁸ Aside from that specific, functional use of history, there

(defining federal authority for Commerce Clause purposes as waters that are used, or are susceptible for use in interstate or foreign commerce), *with* *United States v. Rio Grande Dam & Irrig. Co.*, 174 U.S. 690 (1899) (upholding federal regulatory authority over dam on non-navigable portion of stream where reduced water levels would impair navigability downstream), and *Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941) (upholding federal flood control project on non-navigable tributary to navigable river).

58. *See, e.g.*, *Martin v. Waddell's Lessee*, 41 U.S. (16 Pet.) 367, 407–14 (1842) (evaluating intent of Charles II in granting colonial lands to the Duke of York); *Pollard*, 44 U.S. (3 How.) at 221–25 (construing deeds of cession from Georgia and Virginia to United States, and land purchases from France and Spain); *Mumford v. Wardwell*, 73 U.S. (6 Wall.) 423, 435–36 (1867) (considering title to previously submerged lands in San Francisco in light of history of transfer of lands from Mexico and authority of U.S. military governor with respect to such lands); *Morris v. United States*, 174 U.S. 196, 223–51 (1899) (evaluating claims by heirs of Chief Justice John Marshall and his brother James

are several historical reasons why navigability developed as a core concept in each of the distinct but related federal doctrines for which it is used. First, early American courts, which routinely adopted or modified legal precedent from England,⁵⁹ determined that principles of English law were relevant to property rights in water bodies.⁶⁰ Second, navigability developed as an independent component of U.S. constitutional jurisprudence for several distinct purposes—including Commerce Clause power and federal admiralty jurisdiction—in part because of the same or similar inherited doctrines of English law and in part because water-based transportation was such an important force in American expansion and economic development. Third, navigability became the basis for expectations regarding certain federally recognized property rights. For all of these purposes, the U.S. Supreme Court modified earlier legal doctrines to reflect different geographic, political, and economic realities in the expanding United States, as well as different and evolving notions of economic liberty.

Several scholars have probed the historical underpinnings of navigability doctrines⁶¹ and at times criticized the accuracy with which early American courts interpreted and applied English precedent.⁶² My goal is neither to revisit nor to critique those analyses; it is to explore the historical reasons for the evolution of federal navigability law in order to evaluate the degree to which they continue to support the relevance of navigability today.

A. *Public and Private Rights in Water Bodies*

For two compelling reasons, early American courts relied on English navigability precedent to decide cases regarding riparian ownership rights,⁶³

Marshall according to land grants from Charles I and James II, and historical documents laying out plans for Washington, D.C.).

59. The colonies remained subject to British political authority, and therefore British law, prior to independence. More generally, early American courts naturally inherited English common law as the basis for their jurisprudence. See Hulsebosch, *supra* note 10, at 1063.

60. See Craig, *supra* note 14, at 11–14.

61. See Hulsebosch, *supra* note 10; Lauer, *supra* note 10; MacGrady, *supra* note 3.

62. See, e.g., Hulsebosch, *supra* note 10, at 1081–85 (arguing that American courts and lawyers blurred distinctions and misunderstood relevant English law); MacGrady, *supra* note 3, at 546–47 (arguing that early American courts misconstrued the state of English law and practice on issues of riverbed ownership and admiralty jurisdiction); Note, *supra* note 37, at 1216–17 (accusing early American courts of relying on “dubious interpretations of English authorities”).

63. See, e.g., *Commonwealth v. Alger*, 61 Mass. 53 (1851); *Arnold v. Mundy*, 6 N.J.L. 1 (N.J. 1821).

fisheries,⁶⁴ water to run mills,⁶⁵ and navigation.⁶⁶ The first reason relates to protection of private property interests, while the second ensures access to public resources in water and waterways. Ironically, these two reasons reflect competing English principles of liberty, which pointed in opposite directions regarding rights in waterways.

British subjects in North America (and later U.S. citizens) retained a strong belief in private property rooted in the political philosophy of John Locke.⁶⁷ Locke proposed that the public at large benefitted from the incentives associated with private property, because if landowners reaped profits by combining their labor and property, society as a whole would benefit from the resulting increase in productivity.⁶⁸ Landless individuals saw in the New World the opportunity to earn the benefit of liberty accompanying property ownership that was not available in England. Settlers faced substantial physical risks—and often a period of indentured servitude—traveling to and establishing homes, farms, and cities on a new continent with a hostile environment to obtain private property, which at the time was largely limited in England to the ruling class.⁶⁹ It was not surprising, then, that many American courts inherited the English doctrine that riparian landowners held ownership rights to the beds and banks of non-navigable waters and limited, but still important, rights of access to navigable waters.⁷⁰ Waterfront property was valuable because of those rights and the economic and other opportunities they afforded. An important function of Anglo-American law is to protect expectations and

64. See, e.g., *Hooker v. Cummings*, 20 Johns. 90 (N.Y. Sup. Ct. 1822); *Carson v. Blazer*, 2 Binn. 475 (Pa. 1810).

65. See, e.g., *Tyler v. Wilkinson*, 24 F. Cas. 472 (C.C.D.R.I. 1827); *Palmer v. Mulligan*, 3 Cai. 307 (N.Y. Sup. Ct. 1805).

66. See, e.g., *Gavit's Adm'rs v. Chambers*, 3 Ohio 495 (1828).

67. See NIAL FERGUSON, *CIVILIZATION, THE WEST AND THE REST* 108–12 (2011) (discussing the influence of Locke's 1690 *Second Treatise of Government* on political and economic development in the North American colonies).

68. See Eric T. Freyfogle, *Ethics, Community, and Private Land*, 23 *ECOL. L.Q.* 631, 634 (1996); Terry W. Frazier, *Protecting Ecological Integrity Within the Balancing Function of Property Law*, 28 *ENVTL. L.* 53, 83–85 (1998) (explaining theory that property ownership protects individual liberty). Both Freyfogle and Frazier, however, argued that ownership should apply only to the value added, and not to the land itself. Freyfogle, *supra*, at 637; Frazier, *supra*, at 54, 61–62; see also Eric T. Freyfogle, *Ownership and Ecology*, 43 *CASE W. RES. L. REV.* 1269, 1276, 1288 (1993) (arguing that property rights apply only as against other people, not the land itself and its associated nonhuman resources).

69. See FERGUSON, *supra* note 67, at 110–12.

70. See, e.g., *Middleton v. Pritchard*, 3 Scam. 510 (Ill. 1842) (affirming private ownership of beds of Mississippi River); *Palmer*, 3 Cai. 307 (finding public ownership only in beds of tidally-affected waters). See generally William R. Tillinghast, Note, *Tide-Flowed Lands and Riparian Rights in the United States*, 18 *HARV. L. REV.* 341 (1905) (reviewing early cases and competing doctrines).

values in private property, to protect liberty, and to provide the certainty necessary to support investment.⁷¹

The second compelling reason, an equally important but competing liberty interest, had also evolved in England, although with a somewhat unclear history.⁷² English law guaranteed common access to “public waters” for purposes such as navigation, commerce, and fishing; in the United States, this principle evolved into the public trust doctrine.⁷³ Despite its reincarnation in the late twentieth century to protect shared environmental resources and values,⁷⁴ some scholars view the ancestral public trust doctrine as more of an early, property law-based *antitrust* policy, which discouraged monopolization of common resources by a select few at the discretion of the Crown, which granted privileges based on personal favoritism and other reasons.⁷⁵

Locke’s economic liberty rationale does not necessarily apply to scarce resources that are inappropriate for private dominion and control.⁷⁶ Monopolization of a navigable waterway, for example, might prevent goods produced on private lands from reaching markets or allow a monopolist to extract extortionist rents for travel, thus artificially raising costs to consumers⁷⁷ and reducing the liberty of upstream landowners.

71. See Eric T. Freyfogle, *Community and the Market in Modern American Property Law*, in LAND, PROPERTY, AND THE ENVIRONMENT 382, 382 (John F. Richards ed., 2002); Carol M. Rose, *Given-ness and Gift: Property and the Quest for Environmental Ethics*, 24 ENVTL. L. 1, 3–4 (1994) (describing Jeremy Bentham’s theory that prosperity depends on security of property rights).

72. Some courts and scholars trace the history of this doctrine to Roman Law. See, e.g., *Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 284 (1997); *Shively v. Bowlby*, 152 U.S. 1, 11–14 (1894); *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367, 410 (1842); Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 634–35 (1986); MacGrady, *supra* note 3, at 517–34; Alison Rieser, *Ecological Preservation as a Public Property Right: An Emerging Doctrine in Search of a Theory*, 15 HARV. ENVTL. L. REV. 393, 397–98 (1991); Wilkinson, *supra* note 31, at 428–30.

73. See Lazarus, *supra* note 72; Sax, *supra* note 47; Wilkinson, *supra* note 31.

74. See *Nat’l Audubon Soc’y v. Superior Court.*, 658 P.2d 709 (Cal. 1983); Joseph L. Sax, *Liberating the Public Trust Doctrine from Its Historical Shackles*, 14 U.C. DAVIS L. REV. 185 (1980).

75. See James L. Huffman, *A Fish Out of Water: The Public Trust Doctrine in a Constitutional Democracy*, 19 ENVTL. L. 527, 527 (1989) (describing public trust as an easement in property held in common by the public); Lazarus, *supra* note 72 at 633, 635–36 (explaining English precedent to public trust doctrine as a property rights means of protecting common resources from domination by individual property owners).

76. See Craig Anthony (Tony) Arnold, *The Reconstitution of Property: Property as a Web of Interests*, 26 HARV. ENVTL. L. REV. 281, 310 (2002) (supporting Dunning’s view); Harrison C. Dunning, *The Public Trust: A Fundamental Doctrine of American Property Law*, 19 ENVTL. L. 515, 517, 522–23 (1989) (arguing scarcity is a critical aspect of public trust doctrine, along with the “natural suitability for common use”); Freyfogle, *Ownership and Ecology*, *supra* note 68, at 1295 (arguing that Locke’s theory is justified only where others have equal access to similar resources).

77. Arguably, allowing private parties to control avenues of commerce provides an incentive for private investment in improvements such as canals. The United States has a long established policy of

English law has protected the public right to navigation to varying degrees throughout history, although some English cases focused more on the concept of *public* than on *navigable* waters.⁷⁸ The extent to which English courts adopted those principles in various contexts remains in dispute,⁷⁹ and private rights in waterways abutting private property gained greater protection as English property law evolved.⁸⁰ Nevertheless, by the sixteenth century, English cases were recognizing access rights in “public” or “navigable” rivers, defined in terms of tidal influence or otherwise.⁸¹

Ironically, for reasons similar to those that encouraged refugees from England to seek the opportunity to obtain their own property despite significant risks and hardship,⁸² increased liberty through *public* ownership of common water bodies was perhaps even more important to North American settlers, as noted by Chief Justice Taney in *Martin v. Waddell’s Lessee*:

Indeed, it could not well have been otherwise; for the men who first formed the English settlements, could not have been expected to encounter the many hardships that unavoidably attended their emigration to the new world, and to people the banks of its bays and rivers if the land under the water at their very doors was liable to immediate appropriation by another as private property; and the settler upon the fast land thereby excluded from its enjoyment, and unable to take a shell-fish from its bottom, or fasten there a stake, or even bathe in its waters without becoming a trespasser upon the rights of another.⁸³

meeting such common needs through public investment, thus facilitating open access to markets and other uses of common resources. See CARTER GOODRICH ET AL., CANALS AND AMERICAN ECONOMIC DEVELOPMENT 213–15 (1961) (documenting extensive public expenditures for U.S. canal construction between 1815 and 1860); Paul Stephen Dempsey, *Transportation: A Legal History*, 30 TRANSP. L.J. 235, 245 (2003) (describing early investment by New York State in Erie Canal, dramatically reducing cost of shipping farm produce).

78. See Lauer, *supra* note 10, at 63 (finding recognition of navigation rights under Anglo-Saxon rule); *id.* at 65 (describing prohibitions on encroachments on public waters); *id.* at 66–68 (discussing Bracton’s concepts of public waters as common property).

79. See MacGrady, *supra* note 3, at 545–87; Hulsebosch, *supra* note 10, at 1056–57, 1066–67.

80. See Lauer, *supra* note 10, at 74–78 (describing conflicts over ownership rights recognized by Hale in his 1670 treatise *De Jure Maris*, which was published twenty years before Locke’s *Second Treatise of Government*).

81. See *id.* at 89–106; Hulsebosch, *supra* note 10, at 1066–79.

82. See *supra* note 68 and accompanying text.

83. *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367, 414 (1842); see also ELWOOD MEAD, IRRIGATION INSTITUTIONS: A DISCUSSION OF THE ECONOMIC AND LEGAL QUESTIONS CREATED BY THE GROWTH OF IRRIGATED AGRICULTURE IN THE WEST 264, 365–66 (reprint 1972) (1903), *quoted in* JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES, CASES AND MATERIALS 266 (4th ed.

To balance these visions of liberty, some colonies and states modified those doctrines to reflect different geographic conditions in North America or the different values held by North American settlers. American courts clarified that riparian rights included only a usufruct in the water itself, which was “owned” either by the State or by no one at all, regardless of whether a river or stream was “navigable” for purposes of other property rights.⁸⁴ Legislatures in New England adopted the “Great Ponds” ordinances, which declared public ownership in ponds of certain defined sizes.⁸⁵

The most significant change involved public ownership and control of the large rivers that penetrated North America and played a critical role in expanded settlement and economic development. Some early American courts retained the traditional lines of riparian ownership as reflected in existing English law.⁸⁶ To other courts, the geography of North America suggested a significant expansion of public ownership and control to encompass all waterways deemed “navigable in fact” as opposed to only waters influenced by the ebb and flow of the tide.⁸⁷ Whether or not these early American courts correctly interpreted and applied English law, American judges clearly believed that navigability was the appropriate basis on which to allocate rights in bodies of water.⁸⁸ Given the pivotal role of navigable waterways in early North American growth and development, that belief was hardly irrational.

The Supreme Court similarly inherited and later modified the definition of navigability to allocate public versus private rights in water bodies. In *Martin v. Waddell's Lessee*, the Supreme Court agreed with the New Jersey Supreme Court's holding in *Arnold v. Mundy*⁸⁹ that, in making wholesale land grants in the Colonies to the Duke of York and others, the English Monarchs did not convey proprietary title to lands beneath tidal waters, but rather conveyed those lands to the grantees in their

2006) (“In monarchies streams belong to the crown, and in the early history of irrigation in Italy and other parts of Europe, favorites of the rulers were rewarded with grants of streams. But in a republic they belong to the people, and ought forever to be kept as public property for the benefit of all who use them, and for them alone, such use to be under public supervision and control.”).

84. See Frank J. Trelease, *Government Ownership and Trusteeship of Water*, 45 CAL. L. REV. 638, 640 (1957). There was precedent in English law for treating water rights as usufructs. See Hulsebosch, *supra* note 10, at 1067–68 (discussing Blackstone's treatment of water rights).

85. See MacGrady, *supra* note 3, at 597; Tillinghast, *supra* note 70, at 355.

86. See *supra* note 70 and accompanying text.

87. See, e.g., *Carson v. Blazer*, 2 Binn. 475 (Pa. 1810); see also *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 286 (1997) (citing state cases in Pennsylvania, South Carolina, Alabama, and North Carolina rejecting distinction between tidal and other navigable waters).

88. See Hulsebosch, *supra* note 10, at 1090.

89. *Arnold v. Mundy*, 6 N.J.L. 1, 12–14, 16–17 (N.J. 1821).

governmental capacity.⁹⁰ Thus, title to tidal lands remained subject to the public trust.⁹¹ Chief Justice Taney expressly relied on English law while distinguishing it based on different conditions in the United States⁹²: “The laws and institutions of England, the history of the times, the object of the charter, the contemporaneous construction given to it, and the usages under it, for the century and more which has since elapsed, are all entitled to consideration and weight.”⁹³ Moreover, he rooted his decision in the English law idea that public ownership of some waters was as important to the protection of liberty as was private ownership of other lands.⁹⁴ Chief Justice Taney, however, was equally explicit in clarifying that English law should not presumptively govern

because it has ceased to be a matter of much interest in the United States. . . . A grant [of such lands] . . . must therefore manifestly be tried and determined by different principles from those which apply to grants of the British crown, when the title is held by a single individual, in trust for the whole nation.⁹⁵

In *Martin v. Waddell’s Lessee*, the Supreme Court also addressed two related issues of federalism. First, is title to the beds of navigable waters an issue of federal or state law? Second, which government holds title to lands beneath such waters, and with what authority to convey those lands to others? Regarding the choice of law issue, Chief Justice Taney rejected an argument that state law should apply, because the case involved grants originating in the King of England during the colonial period, and not

90. *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367, 411–12 (1842) (“It is not a deed conveying private property to be interpreted by the rules applicable to cases of that description. It was an instrument upon which was to be founded the institutions of a great political community; and in that light it should be regarded and construed.”).

91. *Id.* at 409 (noting that the King initially held land “in his public and regal character as the representative of the nation, and in trust for them”); *id.* at 416 (holding that any Royal grant intending to sever tidal lands from trust must be express); *id.* at 414–17 (finding no such intent).

92. *Id.* at 410–12.

93. *Id.* at 411.

94. *Id.* at 412 (quoting Lord Hale’s *de Jure Maris* regarding the importance of common fishery rights except where a private individual had expressly obtained “a propriety exclusive of that common liberty”).

95. *Id.* at 410–11; see also *Pollard v. Hagan*, 44 U.S. (3 How.) 212, 229 (1845) (“But [Alabama’s] rights of sovereignty and jurisdiction are not governed by the common law of England as it prevailed in the colonies before the Revolution, but as modified by our own institutions.”); *Barney v. Keokuk*, 94 U.S. (4 Otto) 324, 338 (1876) (reaffirming “the broad differences existing between the extent and topography of the British island and that of the American continent” as it related to navigability for title).

solely state-granted rights.⁹⁶ In later cases, the Court confirmed that federal law governs the issue of whether a particular water body is navigable for title,⁹⁷ even though that holding dictates whether or not a state holds title and associated trust responsibilities with respect to the lands beneath those waters.

On the other hand, Chief Justice Taney was equally clear in *Martin v. Waddell's Lessee* that once navigability for title was determined, state ownership of lands submerged by navigable waters was fundamental to state sovereignty, subject only to powers ceded by the states to the federal government in the Constitution:

For 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.⁹⁸

The Court followed this concept in *Pollard's Lessee v. Hagan* by holding, under the equal footing doctrine of the Constitution, that newly admitted states enjoyed the same ownership of the beds of navigable waters as did the original states.⁹⁹ The federal government held sovereign lands prior to statehood in trust for the future states, and relinquished the lands held pursuant to that trust on statehood.¹⁰⁰ Indeed, the Court articulated its decision in *Pollard's Lessee* as essential to preserving states' rights:

96. *Martin*, 41 U.S. (16 Pet.) at 418. The Court maintained this position when the issue shifted from the interpretation of royal grants to the interpretation of post-independence federal grants, either before or after statehood, holding that federal grants must be construed under federal law, even if the resulting property rights were later governed by state law. *See, e.g.*, *Shively v. Bowlby*, 152 U.S. 1 (1894); *Packer v. Bird*, 137 U.S. 661, 669 (1891).

97. *United States v. Utah*, 283 U.S. 64, 75 (1931).

98. *Martin*, 41 U.S. (16 Pet.) at 410 (emphasis added).

99. *Pollard*, 44 U.S. (3 How.) at 228–29 (“Alabama is, therefore, entitled to the sovereignty and jurisdiction over all the territory within her limits, subject to the common law, to the same extent that Georgia possessed it before she ceded it to the United States. To maintain any other doctrine, is to deny that Alabama has been admitted into the union on an equal footing with the original states, the constitution, laws, and compact, to the contrary notwithstanding.”).

100. *Id.* at 221, 224. The Court later clarified that the federal government’s authority to convey such lands prior to statehood, rather than maintaining them in trust for future states, was limited and subject to a negative presumption. *Brewer-Elliott Oil & Gas Co. v. United States*, 260 U.S. 77, 83–85 (1922) (upholding federal power to convey lands prior to statehood, but only if for legitimate “public purpose”); *see also* *Idaho v. United States*, 533 U.S. 262 (2001); *Utah Div. of State Lands v. United States*, 482 U.S. 193 (1987); *Montana v. United States*, 450 U.S. 544 (1981); *Choctaw Nation v. Oklahoma*, 397 U.S. 620 (1970) (finding pre-statehood conveyance against presumption); *Shively*, 152 U.S. at 48 (authorizing pre-statehood conveyances “whenever it becomes necessary to do so in order to perform international obligations, or to effect the improvement of such lands for the promotion and

To give to the United States the right to transfer to a citizen the title to the shores and the soils under the navigable waters, would be placing in their hands a weapon which might be wielded greatly to the injury of state sovereignty, and deprive the states of the power to exercise a numerous and important class of police powers. But in the hands of the states this power can never be used so as to affect the exercise of any national right of eminent domain or jurisdiction with which the United States have been invested by the Constitution.¹⁰¹

It was not for another half century, in *Packer v. Bird*,¹⁰² that the Supreme Court confirmed that state ownership applied to the beds of all waters deemed navigable in fact for Commerce Clause purposes under the test the Court adopted in *The Daniel Ball*,¹⁰³ and for the same reasons.¹⁰⁴ The Court followed the reasoning of those state courts that had decided that the tidewater limitation on state ownership no longer made sense given the extensive system of inland navigable waters in the United States.¹⁰⁵

The Court has ruled consistently thereafter, most recently in *PPL Montana*, that navigability at statehood remains the relevant legal test for deciding state ownership of submerged lands.¹⁰⁶ And once vested with title, states are free to dictate or even convey subsequent ownership rights to other parties,¹⁰⁷ so long as they do not impair navigational and other

convenience of commerce with foreign nations and among the several States, or to carry out such other public purposes appropriate to the objects for which the United States hold the Territory.”).

101. *Pollard*, 44 U.S. (3 How.) at 230.

102. 137 U.S. 661 (1891).

103. *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870).

104. *Packer*, 137 U.S. at 667 (“The same reasons, therefore, exist in this country for the exclusion of the right to private ownership over the soil under navigable waters when they are susceptible of being used as highways of commerce in the ordinary modes of trade and travel on water, as when their navigability is determined by the tidal test. It is, indeed, the susceptibility to use as highways of commerce which gives sanction to the public right of control over navigation upon them, and consequently to the exclusion of private ownership, either of the waters or the soils under them.”).

105. *Id.* at 668–69. The Court had implied as much in *Barney v. Keokuk*, 94 U.S. (4 Otto) 324, 337–38 (1876), with essentially identical reasoning, but because of the precise issue before the Court in that case, it actually held only that any subsequent decision regarding rights to navigable waters became a matter of state law.

106. See *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215 (2012); *Idaho v. United States*, 533 U.S. 262 (2001); *Utah v. United States*, 403 U.S. 9 (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); *Oklahoma v. Texas*, 258 U.S. 574 (1922).

107. *Shively v. Bowlby*, 152 U.S. 1, 40 (1894); see also *Or. ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363 (1977); *Fox River Paper Co. v. R.R. Comm’n of Wis.*, 274 U.S. 651 (1927).

interests lawfully protected by the federal government.¹⁰⁸ Nevertheless, two significant cases suggest some limitations on the relevance, or at least the apparent dominance, of navigability in the state title context.

First, in *Illinois Central Railroad Co. v. Illinois*,¹⁰⁹ the Court clarified that states could only divest themselves of submerged trust lands in ways that avoided “substantial impairment of the interest of the public in the waters,”¹¹⁰ which include *but are not limited to* navigation.¹¹¹ A number of state courts have now ruled that the public trust uses for which those lands are protected include a much wider range of public values such as fishing, wildlife habitat, ecological values, and even aesthetics,¹¹² although the Court appears to have backed away from any implication that this aspect of *Illinois Central* was grounded in an irreducible requirement of federal law.¹¹³ This creates a potentially ironic mismatch between the breadth of uses and values for which “public waters” are protected, and the use of the singular criterion of navigability to determine the waters for which that protection applies. The irony might reflect the degree to which navigability is used to delineate state sovereignty and the extent to which it historically was used as a surrogate for protection of broader public rights and interests. As *PPL Montana* itself demonstrates, navigability continues to be used to define state sovereignty relative to the federal government and private landowners, but most states that have expanded the uses and values protected by the public trust doctrine have largely abandoned navigability as the primary test governing the doctrine’s scope.¹¹⁴

Second, in *Phillips Petroleum Co. v. Mississippi*, the Court rejected an argument that states only have title to waters that are navigable in fact

108. *Hardin v. Jordan*, 140 U.S. 371, 381–82 (1891); *see also Morris v. United States*, 174 U.S. 196, 236 (1899).

109. 146 U.S. 387 (1892).

110. *Id.* at 435.

111. *Id.* at 452–53.

112. *See, e.g., Lawrence v. Clark Cnty.*, 254 P.3d 606 (Nev. 2011); Nat’l Parks & Conservation Ass’n v. Bd. of State Lands, 869 P.2d 909 (Utah 1993); *Ariz. Ctr. for Law in the Pub. Interest v. Hassell*, 837 P.2d 158, 165 n.10 (Ariz. Ct. App. 1991); *Mont. Coalition for Stream Access, Inc. v. Curran*, 682 P.2d 163 (Mont. 1984); *Nat’l Audubon Soc. v. Sup. Ct.*, 658 P.2d 709 (Cal. 1983); *Kootenai Envtl. Alliance v. Panhandle Yacht Club*, 671 P.2d 1085 (Idaho 1983); *Treuting v. Bridge & Park Comm’n of City of Biloxi*, 199 So. 2d 627 (Miss. 1967).

113. *See Appleby v. City of New York*, 271 U.S. 364, 395 (1926) (finding that *Illinois Central* “was necessarily a statement of Illinois law, but the general principle and the exception have been recognized the country over”). One explanation for the apparent inconsistency is that *Illinois Central* was tried in a federal court prior to *Erie R.R. v. Tompkins*, 304 U.S. 64 (1938). Because there was no Illinois law on the issue, the federal court was free to apply general “common law.” *See Tillinghast, supra* note 70, at 360.

114. *See Craig, supra* note 14, at 17–20.

under the *Daniel Ball* test, holding that states also retain trust ownership over non-navigable waters that are subject to the ebb and flow of the tide.¹¹⁵ The legal basis for the Court's holding was that, in *The Propeller Genesee Chief* and *Barney v. Keokuk*, it intended only to *expand* the reach of state trust ownership to include inland navigable waters, not to *eliminate* trust ownership of tidal but non-navigable waters.¹¹⁶ The Court clarified the basis for its holding by explaining the broader range of public purposes protected by the public trust doctrine:

[C]ases which have discussed the State's public trust interest in these lands have described uses of them not related to navigability, such as bathing, swimming, recreation, fishing, and mineral development. These statements, too, should have made clear that the State's claims were not limited to lands under navigable waterways. Any contrary expectations cannot be considered reasonable.¹¹⁷

This raises the logical question of why, when trust ownership over non-navigable waters can be justified to protect public uses and values beyond navigation, the same is not true for non-navigable inland waters. Again, states that have expanded the scope of values protected by the public trust doctrine have reduced their focus on navigability in defining the geographic scope of the doctrine.¹¹⁸

B. *The Scope of Article III Admiralty Jurisdiction*

Early British admiralty courts adjudicated cases involving activities on the high seas because of sovereign interests in national defense and foreign affairs.¹¹⁹ But the geographic scope of admiralty jurisdiction was limited in two ways. First, at the time the Constitution was adopted, the jurisdiction of British admiralty courts was limited to cases involving activities on the high seas or on coastal waters subject to the ebb and flow of the tide.¹²⁰

115. *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 479–81 (1988).

116. *Id.*

117. *Id.* at 482.

118. *See supra* note 115.

119. *See* John Barker Waite, Note, *Admiralty Jurisdiction and State Waters*, 11 MICH. L. REV. 580, 584–85 (1912–1913).

120. *See* *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428, 429 (1825) (“[T]he Admiralty never pretended to claim, nor could it rightfully exercise any jurisdiction, except in cases where the service was substantially performed, or to be performed, upon the sea, or upon waters within the ebb and flow of the tide. This is the prescribed limit which it was not at liberty to transcend.”). British admiralty jurisdiction had been broader earlier in history but was eroded by statute in England

This limitation contained the Crown's judicial power within its reason for existence relative to courts of common law:¹²¹

Because such matters were connected with the ocean, with foreign intercourse, foreign laws, and foreign people, and it was desirable to have the law as to them uniform, and administered by those possessing some practical acquaintance with such subjects, they being, in short, matters extra-territorial, international, and peculiar in some degree to the great highway of nations.¹²²

Although asserted as a restraint against federal government—as opposed to royal judicial—authority, the U.S. Supreme Court initially adhered strictly to this geographic boundary.¹²³

Even with respect to events occurring on tidal waters, admiralty jurisdiction was prohibited if the activity occurred *infra corpus comitatus*, or within the boundary of an English county.¹²⁴ This limitation appears to have been designed to protect liberty against an overreaching monarchy, in particular to preserve the authority of common law courts and the associated right to a jury trial.¹²⁵ As explained in Justice Woodbury's dissent in *Waring v. Clark*:

The controversy was not in England, and is not here, a mere struggle between salt and fresh water,—sea and lake,—tide and ordinary current,—within a county and without,—as a technical matter only.

But there are imbedded beneath the surface three great questions of principle in connection with these topics, which possess the

such that “[b]y the time of the American Revolution, admiralty power and prestige was at its nadir; virtually all that remained within its jurisdiction were events occurring exclusively on the high seas.” Note, *supra* note 37, at 1216.

121. See *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) at 429 (placing jurisdictional issue in the context of “the great struggles between the Courts of common law and the Admiralty”).

122. *Waring v. Clarke*, 46 U.S. (5 How.) 441, 471–72 (1847) (Woodbury, J., dissenting); see also *id.* at 489 (Woodbury, J., dissenting).

123. *United States v. Coombs*, 37 U.S. (12 Pet.) 72 (1838); *Steamboat Orleans v. Phoebus*, 36 U.S. (11 Pet.) 175 (1837); *Hobart v. Drogan*, 35 U.S. (10 Pet.) 108 (1836); *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428.

124. *Waring*, 46 U.S. (5 How.) at 453.

125. See Milton Conover, *The Abandonment of the “Tidewater” Concept of Admiralty Jurisdiction in the United States*, 38 OR. L. REV. 34, 36 (1958) (noting that the use of nonjury admiralty courts was one of the grievances that led to the Revolutionary War). Some commentators cite competition for court fees between the two judicial systems as a cynical but more accurate explanation. See Wilkinson, *supra* note 37, at 1216 n.17 (citing 2 PARSONS, MARITIME LAW 471 n.1 (1859)).

gravest constitutional character. And they can hardly be regarded as of little consequence here, and assuredly not less than they possessed abroad, where they involve, (1.) the abolition of the trial by jury over large tracts of country, (2.) the substitution there of the civil law and its forms for the common law and statutes of the States, (3.) and the encroachment widely on the jurisdiction of the tribunals of the State over disputes happening there between its own citizens.¹²⁶

The majority in *Waring v. Clark* disagreed, however, and rid admiralty jurisdiction of the *infra corpus comitatus* limitation. Admiralty jurisdiction in the English colonies was broader than in England at the time, reaching “throughout all and every the sea-shores, public streams, ports, fresh-water rivers, creeks and arms, as well of the sea as of the rivers and coasts whatsoever, of our said provinces.”¹²⁷ Moreover, the “ancient jurisdiction in admiralty” in England was broader before being curtailed by Parliament, and Justice Wayne noted the potential irony if this limitation could be changed in England by legislation while remaining fixed as constitutional doctrine in the United States.¹²⁸ He argued that the Framers understood this history and intended broader admiralty jurisdiction in the United States than in England.¹²⁹

Waring reflected the larger constitutional debate regarding judicial power to construe general language in the Constitution, and whether it was limited to a fixed understanding of those words at the time of ratification, or free to construe the text in light of changed circumstances.¹³⁰ In deciding the scope of admiralty jurisdiction the Court interpreted a few simple words in Article III,¹³¹ with little guidance as to their meaning.¹³² Just as it had shed aspects of English law it felt no longer germane to the issue of title to submerged lands, the Court in *Waring* rejected the idea that

126. *Waring*, 46 U.S. (5 How.) at 470 (Woodbury, J., dissenting).

127. *Id.* at 454 (referring to admiralty jurisdiction in new Hampshire and Georgia); *see id.* at 456–67 (discussing broader reach of admiralty in Virginia, New York and Maryland); Conover, *supra* note 125, at 35–36 (identifying expansive admiralty jurisdiction in the Colonies to deal with piracy, smuggling, and buccaneering).

128. *Waring*, 46 U.S. (5 How.) at 455–58.

129. *See id.* at 454–61.

130. *See id.* at 457.

131. “The judicial Power shall extend . . . to all Cases of admiralty and maritime Jurisdiction. . . .” U.S. CONST. art. III, § 2.

132. Hamilton devoted two sentences to admiralty jurisdiction in *The Federalist*, and the provision was “virtually uncontested in Philadelphia and in the state ratifying conventions.” Note, *supra* note 37, at 1214; *see also* Conover, *supra* note 125, at 38–39 (describing paucity of debate over admiralty at Constitutional Convention).

the states should adopt English admiralty law except “as applicable to their situation.”¹³³ Rather, the Court found that pre-existing English law was no longer germane: “We therefore conclude, that the grant of admiralty power to the courts of the United States was not intended to be limited or to be interpreted by what were cases of admiralty jurisdiction in England when the constitution was adopted.”¹³⁴

By severing ties to English legal roots, the Court was free to evaluate policy concerns relevant to governance of a new federal republic. Justice Wayne asserted that the exercise of separate admiralty jurisdiction, and therefore varying principles of admiralty law, by individual states under the Articles of Confederation created “difficulties.”¹³⁵ A uniform, neutral judicial forum for adjudicating admiralty disputes had the same value whether or not the events that caused the dispute occurred on waters outside or within the borders of a state or county. That suggested, of course, that artificial geographic (as opposed to geopolitical) limitations on admiralty jurisdiction were also suspect. Justice Wayne hinted as much¹³⁶ but did not base his ruling on the artificial distinction between navigability on salt water versus on fresh water.

The Supreme Court’s reluctance to depart from admiralty’s geographical limits, as distinct from the geopolitical limits of state or country borders, is apparent from its initial efforts to minimize the apparently artificial tidewater distinction. In *Peyroux v. Howard*,¹³⁷ the Court upheld admiralty jurisdiction at the Port of New Orleans on the Mississippi River, at a point at which tidal influence was not strong enough to turn back the current of the river (and hence to propel ships upstream absent another source of power), but was “so great as to occasion a regular rise and fall of the water.”¹³⁸ The tentative nature of the Court’s effort to shift admiralty inland was confirmed four years later when the Court rejected an exercise of admiralty jurisdiction over a voyage in which one terminus was in tidal waters but where the trip was “substantially” on non-tidal waters.¹³⁹

133. *Waring*, 46 U.S. (5 How.) at 461.

134. *Id.* at 459.

135. *Id.* at 456–57; see Conover, *supra* note 125, at 37 (widely different admiralty courts among the 13 states under Articles of Confederation demonstrated need for national uniformity).

136. See *Waring*, 46 U.S. (5 How.) at 463 (conclusions were “more congenial with our geographical condition”).

137. 32 U.S. (7 Pet.) 324 (1833)

138. *Id.* at 343; see also *Waring*, 46 U.S. (5 How.) at 466 (Catron, J., concurring) (preferring to ground decision on fact that collision occurred “on fresh water slightly influenced by the pressure of tide from the ocean”).

139. *Steamboat Orleans v. Phoebus*, 36 U.S. (11 Pet.) 175, 183 (1837).

Later Supreme Court opinions would virtually ridicule these line drawing efforts,¹⁴⁰ which served only to extend admiralty a few hundred yards upriver. Eventually, in *The Propeller Genesee Chief v. Fitzhugh*, Chief Justice Taney proclaimed that the tidewater limitation on admiralty jurisdiction might have made sense in England or earlier in U.S. history, but that different geographic conditions coupled with changes in technology and commerce rendered that doctrine no longer appropriate.¹⁴¹ *The Propeller Genesee Chief* was an *in rem* proceeding arising from a collision on the Great Lakes, to which Congress had extended admiralty jurisdiction by statute.¹⁴² In upholding the statute, Chief Justice Taney noted that there was no practical difference between the Great Lakes and the seas in terms of the reasons for admiralty jurisdiction.¹⁴³ The Court could have stopped here, particularly given that the decision interpreted a federal statute that applied exclusively to the Great Lakes. But the Court's existing constitutional interpretation required tidal influence. Chief Justice Taney disposed of this distinction as artificial and irrelevant to the purposes served by admiralty courts:

Now there is certainly nothing in the ebb and flow of the tide that makes the waters peculiarly suitable for admiralty jurisdiction, nor any thing in the absence of a tide that renders it unfit. If it is a *public navigable water*, on which commerce is carried on between different States or nations, the reason for the jurisdiction is precisely the same. And if a distinction is made on that account, it is merely arbitrary, without any foundation in reason; and, indeed, would seem to be inconsistent with it.¹⁴⁴

140.

[A] line drawn across the river Mississippi would limit the jurisdiction, although there were ports of entry above it, and the water as deep and navigable, and the commerce as rich, and exposed to the same hazards and incidents, as the commerce below. The distinction would be purely artificial and arbitrary as well as unjust, and would . . . subject one part of a public river to the jurisdiction of a court of the United States, and deny it to another part equally public and but a few yards distant.

Propeller Genesee Chief v. Fitzhugh, 53 U.S. (12 How.) 443, 457 (1851); *see also* *Hine v. Trevor*, 71 U.S. (4 Wall.) 555, 566 (1866) (describing *The Propeller Genesee Chief* as “having removed the imaginary line of tide-water which had been supposed to circumscribe the jurisdiction of the admiralty courts”); *Jackson v. Steamboat Magnolia*, 61 U.S. (20 How.) 296, 302 (1857) (“We could no longer evade the question by a judicial notice of an occult tide without ebb or flow, as in the case of *Peyroux v. Howard*.”); *United States v. Coombs*, 37 U.S. (12 Pet.) 72, 82 (1838) (noting the “great practical difficulties in ascertaining the precise place” from which property is taken in cases of shipwrecks).

141. *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 453–57.

142. *Id.* at 450–51.

143. *Id.* at 453–54.

144. *Id.* at 454 (emphasis added).

Chief Justice Taney reasoned that the *public* character of a navigable waterway—its use by the public for commerce and trade—made it suitable for admiralty jurisdiction. Although the accuracy of his historical and geographical analysis has been critiqued,¹⁴⁵ Taney argued that tidal influence was merely a surrogate for public navigable waters because, in England, only tidal waters were navigable for purposes of significant commercial boating.¹⁴⁶ The expanding United States, by contrast, had thousands of miles of “public navigable water . . . in which there is no tide,”¹⁴⁷ the use of which “has been growing stronger every day with the growing commerce on the lakes and navigable rivers of the western states.”¹⁴⁸

In part, the increasing use of steamboats to transport people and goods in the early to mid-nineteenth century also supported the need to modify English admiralty law in the United States.¹⁴⁹ Commercial traffic on inland waters was no longer constrained by the limits of tidal flow to carry vessels a short way upstream absent the wind power on which they otherwise relied. Based on these related factors, the Court later extended admiralty jurisdiction beyond the Great Lakes to other navigable inland waters,¹⁵⁰ and ultimately to canals and other artificial waterways.¹⁵¹

Chief Justice Taney’s opinion in *The Propeller Genesee Chief* illustrates the degree to which U.S. courts inherited the English law of

145. See MacGrady, *supra* note 3, at 569–75.

146. *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 455–56.

147. *Id.* at 457.

148. *Id.* at 451; see FITE & REESE, *supra* note 37.

149. See *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 455 (noting that tidewater limitation made more sense until invention of the steamboat); see also *The Hine v. Trevor*, 71 U.S. (4 Wall.) 555, 562 (1866) (“But with the vast increase of inland navigation consequent upon the use of steamboats, and the development of wealth on the borders of the rivers, which thus became the great water highways of an immense commerce, the necessity for an admiralty court, and the value of admiralty principles in settling controversies growing out of this system of transportation, began to be felt.”); *Waring v. Clarke*, 46 U.S. (5 How.) 441, 466 (1847) (Catron, J., concurring) (noting that waters only barely influenced by the tide could be navigated by steam-powered vessels). See generally LOUIS C. HUNTER, *STEAMBOATS ON THE WESTERN RIVERS: AN ECONOMIC AND TECHNOLOGICAL HISTORY* 3–60 (1949). Ironically, the collision at issue in *The Propeller Genesee Chief* was between a steamboat and a sailing vessel (a schooner). The steamboat *Genesee Chief* rammed and sunk the schooner *Cuba*, in perhaps an unfortunate metaphor for the replacement of sailing ships with steamers. See Wilkinson, *supra* note 37, at 1224.

150. *Jackson v. Steamboat Magnolia*, 61 U.S. (20 How.) 296 (1857) (Alabama River); *Fretz v. Bull*, 53 U.S. (12 How.) 466 (1851) (Mississippi River). To reach this result, the Court needed to conclude that Congress did not intend, in the Judiciary Act of 1789, to limit admiralty jurisdiction to the inherited principles of English law. *Jackson*, 61 U.S. (20 How.) at 300–01; see Conover, *supra* note 125, at 39.

151. *Ex parte Boyer*, 109 U.S. 629 (1884). Artificial canals were arguably a second technological innovation that propelled the use of inland waterborne commerce. See generally GOODRICH ET AL., *supra* note 77.

navigability while still modifying it to fit new or different circumstances.¹⁵² One of Chief Justice Taney's insights was that the *public* nature of navigable waters rendered them suitable to uniform admiralty law. He focused on the "*public character* of the river"¹⁵³ and more generally on the thousands of miles of "*public navigable water*" in the country that were not tidal.¹⁵⁴ A focus on public waters was frequent in English legal history, although navigability was clearly one aspect of what might render a waterway public, as well as fishing and other common uses.¹⁵⁵

The federalism implications of *The Propeller Genesee Chief* opinion are also ironic given that its author would write the *Dred Scott* decision just six years later.¹⁵⁶ In the same year as *Dred Scott*, the Court extended its admiralty decision beyond the Great Lakes, upholding admiralty jurisdiction in the Alabama River, an intrastate river (except for its terminus in the Gulf of Mexico) in a southern state,¹⁵⁷ over vehement dissents written by two southern Justices in defense of states' rights, and joined by a third.¹⁵⁸ Why would a justice from the border state of Maryland,¹⁵⁹ whose place in history is most closely associated with his efforts to protect states' rights in the context of slavery, write a pre-Civil War opinion that so dramatically expanded the limits of federal judicial power at the expense of state courts? After all, a key historical purpose of that limitation was to preserve the right to a jury trial before a local court against an overreaching central judicial authority (federal courts in the United States; in England, the royal admiralty courts).¹⁶⁰

152. See also Jackson, 61 U.S. (20 How.) at 307 (McLean, J., concurring) ("Antiquity has its charms, as it is rarely found in the common walks of professional life; but it may be doubted whether wisdom is not more frequently found in experience and the gradual progress of human affairs; and this is especially the case in all systems of jurisprudence which are matured by the progress of human knowledge. Whether it be common, chancery, or admiralty law, we should be more instructed by studying its present adaptations to human concerns, than to trace it back to its beginnings").

153. *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 455 (emphasis added).

154. *Id.* at 457 (emphasis added).

155. See Hulsebosch, *supra* note 10, at 1072–74, 1082; Lauer, *supra* note 10, at 65–66, 70, 89–90, 94–95, 105; Leighty, *supra* note 3, at 432.

156. *Scott v. Sanford*, 60 U.S. 393 (1857).

157. *Jackson*, 61 U.S. (20 How.) at 297–301.

158. *Id.* at 307–08 (Daniel, J., dissenting). Justice Daniel was from Virginia; Justice Catron, from Tennessee, joined the dissent of Justice Campbell, who was from Alabama. See TIMOTHY L. HALL, SUPREME COURT JUSTICES: A BIOGRAPHICAL DICTIONARY 99, 107, 127 (2001).

159. HALL, *supra* note 158, at 91.

160. See *supra* notes 120–22 and accompanying text. The irony was that *The Thomas Jefferson* was decided by Justice Story, perhaps most famous for his decision in *Swift v. Tyson*, 41 U.S. (16 Pet.) 1 (1842), which promoted a national law of commerce, and whose admiralty decisions in all other respects sought to expand federal judicial power. See *Wilkinson*, *supra* note 37, at 1214, 1217. For an

This apparent paradox can be explained by the same legal tension discussed above regarding the competing liberty interests in private versus public property in waterways, both of which are rooted deeply in English legal tradition. To the extent that the free use of public waters to transport people and goods in interstate and international commerce promotes economic liberty, Chief Justice Taney argued that access to the protections of an independent judicial forum is an essential safeguard of that right.¹⁶¹ Moreover, he asserted that it was just as essential *as a matter of states' rights* to provide equal access to protections of the admiralty courts to the western states as to the Atlantic coast states.¹⁶² Clearly, he believed that the legal protection afforded by admiralty courts supported commerce and that the scope of admiralty jurisdiction should not favor some states over others. Thus, Chief Justice Taney's opinion in *The Propeller Genesee Chief* was as deeply rooted in the equal footing doctrine, and in background principles of English law, as was Justice McKinley's decision in *Pollard's Lessee v. Hagan*.¹⁶³

In early cases delineating the scope of admiralty jurisdiction, the Court's decisions were unequivocal, based on historical practice inherited from England.¹⁶⁴ Justice Story, however, hinted that Congress might achieve a similar result under the Commerce Clause:

Whether, under the power to regulate commerce between the States, Congress may not extend the remedy by the summary process of the Admiralty, to the case of voyages on the western waters, it is unnecessary for us to consider. If the public inconvenience, from the want of a process of an analogous nature, shall be extensively felt, the attention of the Legislature will doubtless be drawn to the subject.¹⁶⁵

analysis of the political forces that seem to have compelled Justice Story to limit admiralty power in *The Thomas Jefferson* despite his otherwise strongly Federalist leanings, see *id.* at 1218–20.

161. *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 454 (1851). To this extent, admiralty jurisdiction serves a function similar to that of diversity jurisdiction.

162. *Id.*

163. See *supra* notes 97–99 and accompanying text.

164. See *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428, 429 (1825) (“This is the prescribed limit which it was not at liberty to transcend.”); *Hobart v. Drogan*, 35 U.S. (10 Pet.) 108, 119–20 (1836); *Steamboat Orleans v. Phoebus*, 36 U.S. (11 Pet.) 175, 183 (1837); *United States v. Coombs*, 37 U.S. (12 Pet.) 72, 76 (1838); see also *Wilkinson*, *supra* note 37, at 1215 (noting that Justice Story's opinion in *The Thomas Jefferson* cited no cases, but was rooted “in the precedent of history”).

165. *The Thomas Jefferson*, 23 U.S. (10 Wheat.) at 430.

Indeed, a decade later Justice Story would uphold a federal anti-theft statute enforced through admiralty process based on Commerce Clause rather than Article III authority.¹⁶⁶ And in an exercise of cross-branch fertilization that would not be accepted today, Justice Story drafted the 1845 statute extending federal admiralty jurisdiction to the Great Lakes and their connecting waters, and justified that authority under the Commerce Clause.¹⁶⁷ That law provided the basis on which Chief Justice Taney, in *The Propeller Genesee Chief*, would overrule Justice Story's decision in *The Thomas Jefferson*.

In *The Propeller Genesee Chief*, Chief Justice Taney expressly denied that the jurisdictional statute could have been adopted pursuant to the Commerce Clause, because it included no substantive regulation of commerce.¹⁶⁸ Instead, it simply purported to extend federal admiralty court jurisdiction to the Great Lakes and their connecting waters.¹⁶⁹ In upholding the constitutionality of this statute, the Court either had to overrule its earlier interpretation of the phrase "all cases of admiralty and maritime jurisdiction"¹⁷⁰ or hold that the relevance and meaning of the term could *change* with commercial circumstances and technological innovations. The Court chose the latter course, basing its decision on the nature and magnitude of commercial navigation on inland waters in 1851 compared to 1789 or 1825.

These cases reflect a tension between Article III admiralty jurisdiction and Article I Commerce Clause authority to support the changing conditions of an expanding nation. Cases expanding admiralty in the United States relied as much on the concept of "public waters" as opposed to navigability *per se*. As will be shown in the next section, however, admiralty jurisdiction is far more inherently linked to navigability than is Commerce Clause power.¹⁷¹

166. Coombs, 37 U.S. (12 Pet.) 72.

167. See Wilkinson, *supra* note 37, at 1222–26.

168. One author suggests that Justice Taney preferred to expand federal admiralty jurisdiction rather than enhance Commerce Clause authority, for fear that the latter would be used to regulate slavery. See Hulsebosch, *supra* note 10, at 1104–05.

169. *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 451–52 (1851).

170. *Id.* at 460.

171. See Waite, *supra* note 119, at 580 (“[A]ll admiralty jurisdiction refers directly or indirectly to navigation.”) (quoting *United States v. Burlington & Henderson Cnty. Ferry Co.*, 21 F.331, 334 (S.D. Iowa 1884)).

C. Navigability and the Commerce Clause

Navigability also influenced Federal Commerce Clause jurisprudence. Inland waterborne commerce grew steadily through English history and influenced the English law of riparian rights.¹⁷² Nevertheless, that commerce was constrained by technology. Because wind-powered sailing vessels were less viable on inland waterways, large commercial ships could only travel inland as far as they could be propelled by the tides. This changed dramatically with Robert Fulton's commercialization of the steamboat¹⁷³ and its rapid expansion for commercial use on North American inland rivers.¹⁷⁴

In *Gibbons v. Ogden*,¹⁷⁵ the Supreme Court invalidated, as inconsistent with plenary congressional power to regulate commerce, a New York law purporting to grant Fulton and Robert Livingston an exclusive license for navigation on state waters with boats powered by fire or steam.¹⁷⁶ Chief Justice Marshall reasoned that "power over commerce, including navigation, was one of the primary objects for which the people of America adopted their government,"¹⁷⁷ and that the Necessary and Proper Clause of the Constitution¹⁷⁸ conferred on Congress the plenary authority necessary to execute that power.¹⁷⁹ The Court was clearly influenced by the dominance of navigation as the primary means of conducting interstate and international commerce, through both the traditional maritime trade¹⁸⁰ and the growing commerce on inland waterways: "The deep streams which penetrate our country in every direction, pass through the interior of almost every State in the Union, and furnish the means of exercising this

172. See Lauer, *supra* note 10, at 63–64 (modest use in Anglo-Saxon times), *id.* at 72–74 (increasing uses of rivers and streams for navigation around the time of Magna Carta and throughout remaining medieval period), *id.* at 74 (by early seventeenth century "navigation had become the mainstay of England"), *id.* at 94 (late seventeenth and early eighteenth century cases "disclose a continued recognition of the high public interest in navigation of rivers").

173. Fulton is commonly but wrongly credited with inventing the steamboat, but he did put the design into practice. See Mary Bells, *The History of the Steamboat, John Fitch and Robert Fulton*, ABOUT.COM, <http://inventors.about.com/library/inventors/blsteamship.htm> (last visited Mar. 13, 2012); HUNTER, *supra* note 149, at 5–6 (explaining controversy over credit for steamboat development).

174. See *The Montello*, 87 U.S. (20 Wall.) 430, 440–42 (1874); *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 455; *Waring v. Clarke*, 46 U.S. (5 How.) 441, 466 (1847) (Catron, J., concurring).

175. 22 U.S. (9 Wheat.) 1 (1824).

176. *Id.* at 1.

177. *Id.* at 190.

178. U.S. CONST. art. I, § 8, cl. 18.

179. *Gibbons*, 22 U.S. (9 Wheat.) at 187–89.

180. *Id.* at 190 (addressing the importance of controlling maritime traffic through ports for purposes of regulating international commerce).

right [of all states to participate in international and interstate commerce].”¹⁸¹

The immediate issue in *Gibbons* was not an affirmative exercise of federal authority over interstate or foreign commerce, but whether a state law infringed on that plenary power. Cases following *Gibbons* affirmed direct federal power to construct improvements in aid of navigability¹⁸² and to prohibit projects by others that would obstruct navigation.¹⁸³ As was true with the law of navigability for title and the law of admiralty, the Court also faced related questions of federalism. Thus, the Court later upheld concurrent state authority to construct or authorize structures in or over navigable waters, so long as the exercise of that authority did not contravene federal law or regulation.¹⁸⁴ Because these cases all relate directly to activities that would either improve or impede navigability, they hew closely to the rationale of *Gibbons* that navigability is one component of “commerce.”

The focus in *Gibbons* on the value of inland waterways for commerce led to the Court’s later decision to expand the geographic reach of Commerce Clause coverage to all water bodies deemed navigable in fact.¹⁸⁵ Indeed, the Court articulated the classic statement of the

181. *Id.* at 195.

182. *See, e.g., Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941) (upholding federal dam as part of larger program to improve navigability); *Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288 (1936) (upholding federal authority to build dam on Tennessee River to improve navigation, for national defense, and for power production); *South Carolina v. Georgia*, 93 U.S. (3 Otto) 4 (1876) (upholding federal authority to construct projects in aid of navigation on interstate river); *Pennsylvania v. Wheeling & Belmont Bridge Co.*, 59 U.S. (18 How.) 421 (1855) (upholding federal statute authorizing bridge over Ohio River and congressional determination that it did not obstruct commerce).

183. *See United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899) (upholding federal action to enjoin construction of dam that would reduce flows sufficiently to impede navigability of river downstream of dam).

184. *See, e.g., Ashwander*, 297 U.S. at 288 (upholding state approval of dam on navigable water so long as Congress had passed no law to the contrary); *Gilman v. City of Philadelphia*, 70 U.S. (3 Wall.) 713 (1865) (holding that states retain sovereignty over their waters and therefore have authority to regulate bridges and other structures absent conflict with federal law); *Willson v. Black Bird Creek Marsh Co.*, 27 U.S. (2 Pet.) 245 (1829) (upholding state law authorizing dam construction where no conflict with federal authority).

185. The Court reached this result in a Commerce Clause case earlier than it did *explicitly* in a navigability for title case, *see supra* notes 100–03 and accompanying text, but two decades after it had done so for admiralty jurisdiction, *see supra* notes 136–44 and accompanying text. It seems apparent from the breadth of Chief Justice Taney’s opinion in *The Propeller Genesee Chief* that the Court would have reached this result for Commerce Clause purposes at least as early as 1851 had the issue been raised squarely in that case. *See 53 U.S. (12 How.) 443, 451 (1851)* (“And the difficulties which the language and decisions of this court had thrown in the way, of extending it to these waters, have perhaps led to the inquiry whether the law in question could not be supported under the power granted to Congress to regulate commerce.”).

navigability test in federal law in *The Daniel Ball*,¹⁸⁶ a Commerce Clause case.¹⁸⁷

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 commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. And they constitute navigable waters of the United States within the meaning of the acts of Congress, in contradistinction from the navigable waters of the States, when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water.¹⁸⁸

In support of this holding, the Court relied on the same geographic and historic realities that it had relied on in *Gibbons* and *The Propeller Genesee Chief*: U.S. waterways were navigable for hundreds of miles above tidewater and were increasingly relied on for significant amounts of commerce.¹⁸⁹ Moreover, the very fact that *The Daniel Ball* involved a federal statute governing steamboat safety confirms that technological change factored into the Court's shifting navigability jurisprudence. Geographic delineations forged in the era of sailing vessels made little sense in the age of steam. In fact, the steamboat explanation may be a more satisfactory explanation for the inland expansion of the definition of navigable waters than any geographic differences between the United States and England.

Over time, the Court expanded Commerce Clause jurisdiction based on navigability even further. In some cases, the Supreme Court broadened the test of what bodies of water were navigable for Commerce Clause

186. 77 U.S. (10 Wall.) 557 (1870).

187. *The Daniel Ball* is sometimes mistakenly thought of as an admiralty case. See, e.g., David M. Guinn, *An Analysis of the Navigable Waters of the United States*, 18 BAYLOR L. REV. 559, 561 (1966). The case was brought in admiralty because the federal government enforced the federal regulatory statute governing inspection and licensing of steam vessels used for transport by seizing the vessel in question. The constitutional issue before the Court, however, was the scope of federal Commerce Clause authority regarding the transportation of goods on a vessel that remained intrastate but was part of an interstate chain of transport. *Id.* at 559, 564–65.

188. *The Daniel Ball*, 77 U.S. (10 Wall.) at 563.

189. *Id.*

purposes.¹⁹⁰ The Court continued to rely on historical evidence of commercial waterway use.¹⁹¹ But for Commerce Clause purposes the Court held that navigability could also rest on evolving uses and capabilities because the test for navigability is not limited, as it is in title cases, to whether the waterway was navigable at statehood. As stated in *The Daniel Ball*, the Commerce Clause test for navigability is whether waterways “are used, or are susceptible of being used, in their ordinary condition,” as part of a highway of interstate commerce.¹⁹² The nature and magnitude of commerce sufficient to support a finding of navigability could vary widely based on location and economic context.¹⁹³

In other cases, the Court expanded the scope of Commerce Clause authority to encompass waters that were not themselves navigable, but the use, destruction, or impairment of which might impair navigability. Thus, in *United States v. Rio Grande Irrigation Co.*, the Court sustained federal authority to enjoin construction of a dam on a non-navigable reach of the Rio Grande where resulting upstream water withdrawals might impede navigability of the river downstream.¹⁹⁴ This case also addressed related issues of federalism because the Court upheld federal Commerce Clause power vis-à-vis state (then territorial New Mexico)¹⁹⁵ authority to allocate water rights pursuant to state (territorial) law.¹⁹⁶

190. See *Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288 (1936) (upholding federal authority over waterways susceptible to commercial use with improvements); *Econ. Light & Power Co. v. United States*, 256 U.S. 113 (1921) (upholding navigability even absent current use if susceptible of use for commerce in ordinary condition); *The Montello*, 87 U.S. (20 Wall.) 430 (1874) (finding navigability despite obstructions that could be portaged by vessels of any kind that could be used to convey commerce). But see *Leovy v. United States*, 177 U.S. 621 (1900) (use by small oyster boats and fishing craft insufficient; need commerce of permanent and sufficient character); *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899) (occasional floating of logs and rafts not enough; water body “must be generally and commonly useful to some purpose of trade or agriculture”).

191. See *Econ. Light & Power*, 256 U.S. at 117 (relying in part on evidence of use to transport furs from the late 17th to the early 19th century); *The Montello*, 87 U.S. (20 Wall.) at 440 (relying on evidence that Fox River was part of the route of Marquette and Joliet on voyage to discover the Mississippi River, and later became one of the main routes from the St. Lawrence to the Mississippi).

192. *The Daniel Ball*, 77 U.S. (10 Wall.) at 563 (emphasis added); see also *Econ. Light & Power*, 256 U.S. 113; *Ashwander*, 297 U.S. 288.

193. See *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 405–06 (1940) (“It is obvious that the uses to which the streams may be put vary from the carriage of ocean liners to the floating out of logs; that the density of traffic varies equally widely from the busy harbors of the seacoast to the sparsely settled regions of the Western mountains. The tests as to navigability must take these variations into consideration.”).

194. *Rio Grande Dam & Irrigation*, 174 U.S. at 706–08.

195. The Court assumed *arguendo* that territories also enjoyed the same power as states to modify the common law of water rights. See *id.* at 703.

196. *Id.* at 706 (“To hold that Congress, by these acts, meant to confer upon any State the right to appropriate all the waters of the tributary streams which unite into a navigable watercourse, and so

In *United States v. Appalachian Electric Power Co.*,¹⁹⁷ the Court took even greater steps to shed the historical shackles of navigability in Commerce Clause cases. First, the Court held that navigability could be supported by economically justified artificial improvements.¹⁹⁸ This result was by no means apparent from *The Daniel Ball*, which required not only that waters be “susceptible of being used . . . as highways for commerce,” but that they be “susceptible of being used, in their ordinary condition, as highways for commerce.”¹⁹⁹ While this holding expanded the scope of waters subject to Commerce Clause power, it was still linked to navigability as the key value for which water bodies may be regulated and protected. Whether commerce occurs on a waterway that is navigable in its “ordinary condition” or as artificially improved, navigability remains the focus of the analysis.

In the second key holding in *Appalachian Electric Power Co.*, however, the Court upheld federal regulatory authority on *non-navigable* waters over dams that would affect the interest of interstate or international commerce.²⁰⁰ This decision was significantly different from its predecessors because the Supreme Court grounded its decision in part on the idea that navigability *per se* was just one way in which activities on waterways might have a sufficient effect on interstate or international commerce to justify Commerce Clause authority:

In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. By navigation respondent means no more than operation of boats and improvement of the waterway itself. In truth the authority of the United States is the regulation of commerce on its waters. Navigability, in the sense just stated, is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control. As respondent soundly argues, the United States cannot by calling a project of its own “a multiple purpose dam” give to itself additional powers, but equally truly the respondent cannot, by seeking to use a navigable waterway for

destroy the navigability of that watercourse in derogation of the interests of all the people of the United States, is a construction which cannot be tolerated.”).

197. 311 U.S. 377.

198. *Id.* at 408 (“The power of Congress over commerce is not to be hampered because of the necessity for reasonable improvements to make an interstate waterway available for traffic.”).

199. *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (emphasis added).

200. *Appalachian Elec. Power*, 311 U.S. at 398, 400.

power generation alone, avoid the authority of the Government over the stream. That authority is as broad as the needs of commerce.²⁰¹

As such, the Court held that Congress did not exceed Commerce Clause authority when it regulated hydroelectric power production, as opposed to navigation itself.²⁰²

The Court pursued this theme a year later in *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.*, which sustained federal authority to build a dam on a non-navigable tributary where flood control benefits would improve navigability of the Mississippi River downstream.²⁰³ As was true in *Appalachian Electric Power Co.*, the Court transcended navigability to justify federal authority to protect other values and functions of water bodies.²⁰⁴ The science of watershed management provided a new way to control floods, and the Court relied on the resulting impact on issues *beyond navigability per se* but still within Commerce Clause purview, although it still found a curious need to draw a link to navigability in some way:

[T]here is no constitutional reason why Congress or the courts should be blind to the engineering prospects of protecting the nation's arteries of commerce through control of the watersheds. There is no constitutional reason why Congress cannot, under the commerce power, treat the watersheds as a key to flood control on navigable streams and their tributaries. Nor is there a constitutional necessity for viewing each reservoir project in isolation from a comprehensive plan covering the entire basin of a particular river. We need no survey to know that the Mississippi is a navigable river. We need no survey to know that the tributaries are generous contributors to the floods of the Mississippi. And it is common knowledge that Mississippi floods have paralyzed commerce in the affected areas and have impaired navigation itself.²⁰⁵

As noted by then Associate Justice Rehnquist in *Kaiser Aetna v. United States*,²⁰⁶ these cases jettisoned the fiction of navigability when federal

201. *Id.* at 426.

202. *Id.* (“Water power development from dams in navigable streams is from the public’s standpoint a by-product of the general use of the rivers for commerce.”).

203. *Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 523 (1941) (“And it is clear that Congress may exercise its control over the non-navigable stretches of a river in order to preserve or promote commerce on the navigable portions.”); *see id.* at 525–26.

204. *Id.* at 525.

205. *Id.*

206. 444 U.S. 164 (1979).

authority is justified by another impact on interstate or international commerce: “Reference to the navigability of a waterway adds little if anything to the breadth of Congress’ regulatory power over interstate commerce.”²⁰⁷ The Court had come full circle. Despite its reliance on maritime and inland navigation, in *Gibbons* the Supreme Court did not rule that navigation *was* commerce; it held only that navigation was *part of* commerce.²⁰⁸ Thus, navigability was one of many grounds for the exercise of Commerce Clause authority, even with respect to commercial activities conducted on navigable waters.

D. The Federal Navigational Servitude

Navigability is intuitively relevant in defining the geographic scope of a doctrine the Supreme Court has variously labeled a “superior navigation easement,”²⁰⁹ a “dominant public interest in navigation,”²¹⁰ or a “servitude in respect of navigation.”²¹¹ Commentators refer to this doctrine as the “navigational servitude” or the “navigation servitude.”²¹² If this doctrine supports the federal government’s interest in navigation, logically it should not extend beyond “navigable” water bodies. Although the Court might amend the navigability test to reflect changing circumstances, the continuing *relevance* of navigability should never be in doubt. This seemingly irrefutable conclusion, however, is complicated by confusion surrounding the federal navigation servitude’s historical origins, legal underpinnings, scope, and relationship to other constitutional doctrines, in

207. *Id.* at 173.

208. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 197 (1824) (“The power of Congress, then, comprehends navigation, within the limits of every State in the Union; so far as that navigation may be, in any manner, connected with ‘commerce with foreign nations, or among the several States, or with the Indian tribes.’”).

209. *United States v. Grand River Dam Auth.*, 363 U.S. 229, 231 (1960); *United States v. Twin City Power Co.*, 350 U.S. 222, 225 (1956) (quoting *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 736 (1950)).

210. *United States v. Willow River Power Co.*, 324 U.S. 499, 507 (1945); *see also* *Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288, 337 (1936) (referring to the “dominant authority of the Federal Government in the interest of navigation”).

211. *Scranton v. Wheeler*, 179 U.S. 141, 156–57 (1900); *Gibson v. United States*, 166 U.S. 269, 271–72 (1897); *see also* *United States v. Kan. City Life Ins. Co.*, 339 U.S. 799, 808 (1950) (referring both to a “servitude” deriving from federal power to regulate commerce on navigable streams and a “dominant public interest”).

212. *See* Theresa D. Taylor, Note, *Determining the Parameters of the Navigation Servitude Doctrine*, 34 VAND. L. REV. 461 (1981); Martha Goodloe Haber, Note, *The Navigational Servitude and the Fifth Amendment*, 26 WAYNE L. REV. 1505 (1979–1980); Richard W. Bartke, *The Navigation Servitude and Just Compensation—Struggle for a Doctrine*, 48 OR. LAW REV. 1, 3 (1968). For simplicity I will use that language here, but in the end, the label itself may pose the definitional problem.

particular the takings clause of the Fifth Amendment.²¹³ That confusion can only be clarified by evaluating the relationship between the navigational servitude and the Commerce Clause and title doctrines.

The first Supreme Court opinion based expressly on the navigational servitude, *Gibson v. United States*, was not issued until 1897,²¹⁴ although it had antecedents in the Court's Commerce Clause cases.²¹⁵ Facially, the Supreme Court grounds the navigational servitude in the federal government's plenary authority over interstate commerce.²¹⁶ The "servitude" and "easement" terminology, however, suggest a federal proprietary interest in navigable waters, and in some cases the Court has added that, for Commerce Clause purposes, navigable waters "are the public property of the nation."²¹⁷ Further, in *United States v. Chandler-Dunbar Water Power Co.*, the Court described any *private* title to the beds of navigable waters as a "technical title," which is "qualified" and "subordinate to the public rights 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."²¹⁸ In *United States v. Twin City Power Co.*, Justice Douglas (writing for a five-Justice majority) attempted to clarify the inconsistency as follows:

The interest of the United States in the flow of a navigable stream originates in the Commerce Clause. That Clause speaks in terms of power, not of property. But the power is a dominant one which can be asserted to the exclusion of any competing or conflicting one. The power is a privilege which we have called "a dominant servitude," or "a superior navigation easement."²¹⁹

Some commentators, however, argue that the servitude is in fact more properly based in proprietary interests than in Commerce Clause authority,

213. U.S. CONST. amend. V. Because the servitude governs the relationship between property rights and *federal* Commerce Clause authority, the Fourteenth Amendment is not relevant.

214. *Gibson v. United States*, 166 U.S. 269 (1897).

215. *See, e.g.*, *Monongahela Navigation Co. v. United States*, 148 U.S. 312 (1893); *South Carolina v. Georgia*, 93 U.S. (3 Otto) 4 (1876); *United States v. Coombs*, 37 U.S. (12 Pet.) 72 (1838); *Gilman v. City of Philadelphia*, 70 U.S. (3 Wall.) 713 (1865); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824).

216. *See United States v. Va. Elec. & Power Co.*, 365 U.S. 624, 627–28 (1961); *United States v. Grand River Dam Auth.*, 363 U.S. 229, 231 (1960); *United States v. Twin City Power Co.*, 350 U.S. 222, 224 (1956).

217. *Gilman*, 70 U.S. (3 Wall.) at 724–25; *see also United States v. Rand*, 389 U.S. 121, 123 (1967).

218. *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 62–63 (1913).

219. *Twin City Power*, 350 U.S. at 224–25 (citations omitted).

or in both, and therefore that the “interest should be recognized for what it is and be dealt with in the context of the property clause of the Constitution.”²²⁰ Characterizing the navigation servitude as adjunct to Commerce Clause authority or as a proprietary interest, respectively, has significant implications for the relevance of the navigability test to delineate the scope of the doctrine.

Once the Court announced in *Gibbons* that the “power of Congress . . . comprehends navigation, within the limits of every State in the Union, so far as that navigation may be, in any manner, connected with” interstate or foreign commerce,²²¹ the door was opened for several different manifestations of that power. For example, Congress could pass laws determining whether bridges or other structures may permissibly obstruct navigable waters for other legitimate purposes;²²² requiring inspection, licensing and regulation of steamboats on navigable waters;²²³ taking affirmative steps to improve navigability of rivers and other waters, including channelization projects, lighthouses, jetties, etc.;²²⁴ prohibiting or regulating actions by others deemed to impede navigation and commerce;²²⁵ and authorizing construction or regulation of dams and related structures to improve navigation, among other objectives.²²⁶

None of the above examples, however, require a separate doctrine known as the “navigational servitude.” Federal action can be judged based on its connection to interstate commerce for any of the reasons found acceptable by the Supreme Court.²²⁷ A navigability test delineates what federal actions fall within the navigable waters subcategory of Commerce Clause regulation, but it does not limit Commerce Clause authority to that subcategory, even for water that affects interstate commerce in some other

220. Bartke, *supra* note 212, at 2; *see also* Leighty, *supra* note 3, at 430 (agreeing with Bartke).

221. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 197 (1824).

222. *Pennsylvania v. Wheeling & Belmont Bridge Co.*, 59 U.S. (18 How.) 421 (1857).

223. *The Montello*, 87 U.S. (20 Wall.) 430 (1874); *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870).

224. *United States v. Chi., Milwaukee, St. Paul & Pac. R.R.*, 312 U.S. 592 (1941); *Willink v. United States*, 240 U.S. 572 (1916); *Scranton v. Wheeler*, 179 U.S. 141 (1900); *South Carolina v. Georgia*, 93 U.S. (3 Otto) 4, 11–12 (1876).

225. *Sanitary Dist. Chi. v. United States*, 266 U.S. 405 (1925); *Econ. Light & Power Co. v. United States*, 256 U.S. 113 (1921); *Union Bridge Co. v. United States*, 204 U.S. 364 (1907); *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899).

226. *Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941); *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940); *Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288 (1936).

227. *See United States v. Lopez*, 514 U.S. 549, 558 (1995) (acknowledging Commerce Clause authority over channels of interstate commerce, instrumentalities of interstate commerce, and activities with substantial relationship to interstate commerce).

way.²²⁸ After the Supreme Court's decision in *Appalachian Electric Power Co.*,²²⁹ federal actions on non-navigable tributaries or other waters, the use or impairment of which might affect navigation *or other components of interstate commerce*, also met Commerce Clause scrutiny.

In reality, the federal navigational servitude arose not simply as a species of Commerce Clause authority, but to address cases in which exercise of that authority may conflict with private property. In three cases predating *Gibson*, the Supreme Court upheld compensation or prohibited a taking for projects to improve navigable waters.²³⁰ "Congress has supreme control over the regulation of commerce, but if, in exercising that supreme control, it deems it necessary to take private property, then it must proceed subject to the limitations imposed by [the] Fifth Amendment, and can take only on payment of just compensation."²³¹

In *Gibson*, however, the Court declined to require compensation for incidental damages to river access caused by a dike designed to improve navigation, holding that such a property right "is always subject to the servitude in respect of navigation created in favor of the federal government by the constitution."²³² A series of later cases—the consistency of which has been questioned in ways not relevant to the thesis of this Article²³³—upheld federal authority against takings claims with respect to navigational projects, including a pier that blocked a landowner's existing stream access;²³⁴ projects that reduced water power benefits on navigable rivers;²³⁵ dredging that destroyed oyster beds;²³⁶ river widening that increased value of remaining portions of condemned

228. See, e.g., *Sporhase v. Neb. ex rel. Douglas*, 458 U.S. 941 (1982) (upholding Commerce Clause challenge to state statute because water is an instrumentality of interstate commerce).

229. *Appalachian Elec. Power*, 311 U.S. 377; see *supra* notes 193–98 and accompanying text.

230. *Monongahela Navigation Co. v. United States*, 148 U.S. 312 (1893) (overturning compensation award for failure to include value of franchise to collect tolls from private lock and dam condemned by federal government); *Miss. & Rum River Boom Co. v. Patterson*, 98 U.S. (8 Otto.) 403 (1878) (upholding condemnation award on behalf of private company operating with federal government authority due to location value of islands for navigational booms); *Yates v. Milwaukee*, 77 U.S. (10 Wall.) 497 (1870) (invalidating city order to remove private dock where no showing of impairment to navigation).

231. *Monongahela Navigation*, 148 U.S. at 336.

232. *Gibson v. United States*, 166 U.S. 271, 272 (1897).

233. See *supra* note 208.

234. *Scranton v. Wheeler*, 179 U.S. 141 (1900).

235. *United States v. Twin City Power Co.*, 350 U.S. 222 (1956); *United States v. Willow River Power Co.*, 324 U.S. 499 (1945); *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53 (1913). *But see* *United States v. Cress*, 243 U.S. 316 (1917) (compensation awarded when loss of water power is along tributary streams).

236. *Lewis Blue Point Oyster Cultivation Co. v. Briggs*, 229 U.S. 82 (1913).

lands;²³⁷ a project that damaged structures on riparian lands below high water mark;²³⁸ dredging that destroyed the navigability of one water to improve navigation in another, to the detriment of residential landowners;²³⁹ and a project and associated condemnation without compensation for port site value.²⁴⁰

It is difficult to explain these decisions on Commerce Clause grounds alone.²⁴¹ Clearly, the holdings cannot be explained *absent* federal authority to construct navigation projects or to enact the regulatory schemes in question. But no other federal Commerce Clause actions are simply immune from Fifth Amendment takings protections.²⁴² In part, the Court has distinguished situations in which federal action invades fast land, which require compensation, from those in which federal activities impair riparian rights below the high water mark of the navigable waterway.²⁴³ But physical invasion is only one basis for a takings claim, and the fact that it may be more difficult to prove a claim under other branches of the Court's takings analysis²⁴⁴ is different from eliminating the possibility altogether. Similarly, although it may be more difficult to prove a compensable taking for impairment of a location value or other rights short of full fee title, the Court has entertained takings claims in analogous situations, such as impairment of air rights.²⁴⁵ Clearly, from relatively early on in U.S. constitutional history, the Supreme Court has viewed navigability as a particularly important public value, perhaps logically connected to its historic relationship to national defense and foreign affairs.

The geographic scope of the federal navigational servitude, therefore, is particularly important to its relationship to the Fifth Amendment. But

237. *United States v. Rouge River Improvement Co.*, 269 U.S. 411 (1926).

238. *United States v. Chi., Milwaukee, St. Paul & Pac. R.R.*, 312 U.S. 592 (1941).

239. *United States v. Commodore Park, Inc.*, 324 U.S. 386 (1945).

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

241. Professor Bartke made this point more than fifty years ago, arguing that the Property Clause would be more appropriate to this doctrine than the Commerce Clause. Bartke, *supra* note 212.

242. *See* Haber, *supra* note 212.

243. *See, e.g., United States v. Va. Elec. & Power Co.*, 365 U.S. 624, 628 (1961) ("Since the privilege or servitude only encompasses the exercise of this federal power with respect to the stream itself and the lands beneath and within its high-water mark, the Government must compensate for any taking of fast lands which results from the exercise of the power."); *United States v. Kan. City Life Ins. Co.*, 339 U.S. 799, 807-08 (1950) (compensation for damage to land outside but not within bed of river, where higher river level saturated groundwater and thereby destroyed farming capacity of land).

244. *See, e.g., Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 127 (1978) (requiring compensation even absent physical taking where regulations "not reasonably necessary to the effectuation of a substantial public purpose").

245. *See* Haber, *supra* note 212, at 1512 (discussing *United States v. Causby*, 328 U.S. 256 (1946) (damage caused by overflights)); *Griggs v. Allegheny Cnty.*, 369 U.S. 84 (1962) (same).

the doctrine did not even exist when the Supreme Court established the foundation for all of the federal navigability tests in *The Daniel Ball*.²⁴⁶ Thus, given its Commerce Clause roots, from the outset the navigational servitude applied at least to all waters deemed “navigable in fact.”²⁴⁷ After the Court expanded the scope of Commerce Clause regulatory authority in *Appalachian Electric Power Co.*, however, the logical question was whether the same scope would apply to navigational servitude cases as to other Commerce Clause cases based on impacts to navigable waters?

In *United States v. Twin City Power Co.*,²⁴⁸ the Court held that furtherance of other project purposes does not prevent assertion of the servitude so long as “the interests of navigation are served” in some way,²⁴⁹ as was true in upholding federal regulatory authority for multipurpose projects in *Appalachian Electric Power Co.* Similarly, in *United States v. Grand River Dam Authority*,²⁵⁰ the Court rejected a takings claim regarding a comprehensive navigation, flood control, and power project to protect the navigability of the Arkansas River downstream,²⁵¹ as was true for the Red River and Mississippi River in *Oklahoma ex rel Phillips*.²⁵² Thus, although labeled with navigability nomenclature, the doctrine could be used to vindicate the broader range of public uses and values in water bodies subject to Commerce Clause powers.

The Supreme Court tempered this jurisdictional expansion of the navigational servitude in *Kaiser Aetna v. United States*,²⁵³ in which Justice Rehnquist ruled that navigability is not as extensive for the navigational servitude as it is for other Commerce Clause purposes.²⁵⁴ Justice Rehnquist reaffirmed the ruling in *Appalachian Electric Power Co.* that “navigability . . . adds little if anything to the breadth of Congress’ regulatory power over interstate commerce.”²⁵⁵ By contrast, he found that the navigational servitude is more narrowly confined as “an expression of the notion that the determination whether a taking has occurred must take

246. *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870).

247. In some cases, the Court curtailed federal authority to regulate navigation projects as beyond the scope of traditional navigable waters. *See, e.g.*, *United States v. Cress*, 243 U.S. 316 (1917); *Leovy v. United States*, 177 U.S. 621 (1900).

248. *United States v. Twin City Power Co.*, 350 U.S. 222 (1956).

249. *Id.* at 224.

250. *United States v. Grand River Dam Auth.*, 363 U.S. 229 (1960).

251. *Id.* at 231–32.

252. *See supra* notes 203–05 and accompanying text.

253. *Kaiser Aetna v. United States*, 444 U.S. 164 (1979).

254. *Id.* at 170–74.

255. *Id.* at 173.

into consideration the important public interest in the flow of interstate waters that in their natural condition are in fact capable of supporting public navigation.”²⁵⁶ Under this view, federal authority under the servitude is limited to the navigational subset of Commerce Clause powers, presumably under the *Daniel Ball* test,²⁵⁷ whereas under the broader view suggested by *Twin City Power* and *Grand River Dam* it would not necessarily be so constrained.

III. THE ROLE OF NAVIGABILITY IN TWENTY-FIRST CENTURY CONSTITUTIONAL LAW

Part II explained how the Supreme Court, over time, shifted its approach to each of the four main doctrines of constitutional law for which navigability serves a jurisdictional function. Following the lead of state courts, the Court first affirmed that public ownership and control of some waters had deep historical roots, but more important, that public ownership of waterways is essential to protection of economic liberty. The Court began with sovereign dominion over the high seas and waters affected by the tides, but quickly recognized that, in North America, the public interest applied to a vast network of inland waters as well. It followed suit first for purposes of federal admiralty jurisdiction and later for the Commerce Clause and its corollary in the federal navigational servitude. At least with respect to the Commerce Clause, the Court eventually returned to navigability as just one of the many important public purposes served by rivers and other bodies of water.

Perhaps most notable about this history is the degree to which the Supreme Court has been willing to modify its concept and use of navigability based on changing circumstances:

Antiquity has its charms, as it is rarely found in the common walks of professional life; but it may be doubted whether wisdom is not more frequently found in experience and the gradual progress of human affairs; and this is especially the case in all systems of jurisprudence which are matured by the progress of human knowledge. Whether it be common, chancery, or admiralty law, we

256. *Id.* at 175.

257. *See also* *United States v. Kan. City Life Ins. Co.*, 339 U.S. 799, 808 (1950) (“It is not the broad constitutional power to regulate commerce, but rather the servitude derived from that power and narrower in scope, that frees the Government from liability in these cases.”).

should be more instructed by studying its present adaptations to human concerns, than to trace it back to its beginnings.²⁵⁸

Throughout the evolution of the law of navigability, the Court has expressed similar views about the need for courts to modify doctrine, even in ways that shift the balance between what the law recognizes as public or private, to reflect new technologies, new knowledge and understanding, or changed circumstances.²⁵⁹ Likewise, commentators have praised the Court's awareness of the degree to which changing conditions shape the law of navigability. Referring to the Court's landmark decision in *The Propeller Genesee Chief*, Professor Conover wrote:

Thus did a half century of dispute culminate in a realistic decision that liberated American water commerce from an arbitrary restriction. The case is not only a milestone in our constitutional history, but . . . a bright page in our jurisprudence in that it demonstrates the ability of the law to adjust to political and economic growth.²⁶⁰

The question now is the degree to which changing uses and values of waterways should similarly dictate new judicial approaches in the twenty-first century. At least two significant shifts in our use and understanding of waterways should inform this issue, and although neither is entirely "new," sometimes it takes time for the law to catch up to such changes.²⁶¹ First, the waterborne commerce that drove development of the law of navigability in the nineteenth century no longer predominates as the most significant channel of interstate commerce.²⁶² Second, a wide range of other public uses and values now significantly eclipse transportation as the

258. *Jackson v. Steamboat Magnolia*, 61 U.S. (20 How.) 296, 307 (1857) (McLean, J., concurring).

259. *See, e.g., Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 525–26 (1941) (approval of Commerce Clause power based on new understanding of engineering and flood control); *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407–08, 426 (1940) (expansion of Commerce Clause power in light of new circumstances and commercial goals); *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 451–54 (1851) (expanding admiralty jurisdiction in light of geographic realities and new technology); *Pollard v. Hagan*, 44 U.S. (3 How.) 212, 228–29 (1845) (rejecting continued applicability of English law where no longer applicable to American circumstances); *Martin v. Waddell's Lessee*, 41 U.S. (16 Pet.) 367, 410–11 (1842) (same).

260. Conover, *supra* note 125, at 53; *see also* Lauer, *supra* note 10, at 99 (praising similar ability of English courts to modify riparian law in early nineteenth century).

261. *See* Wilkinson, *supra* note 37, at 1217–18 (noting that the dramatic increase in steamboat traffic in western rivers had begun before Justice Story decided *The Steam-Boat Thomas Jefferson*, and that it took the Court a quarter of a century to realize the import of those changes in *The Propeller Genesee Chief*).

262. *See* *United States v. Lopez*, 514 U.S. 549, 558 (1995).

predominant justifications for public ownership or control of waterways. This Part first addresses these two major changes in our understanding and use of waterways, and then evaluates the significance of those changes for the constitutional doctrines explored above.

A. *The Changing Face of U.S. Waters*

1. *The Declining Importance of Inland Waters as a Mode of Transportation*

The early cases in which the Supreme Court invoked the growing importance of transportation and commerce on U.S. inland waterways to support significant shifts in the law of navigability²⁶³ predated the era of “Brandeis briefs” in which the Court routinely began to cite scientific and other data in its opinions.²⁶⁴ Nevertheless, the Court was hardly engaged in fits of romantic speculation. In addition to North America’s geographic advantage in having such an extensive network of natural navigable inland waterways, such as the Ohio, Mississippi, and Missouri Rivers, as well as the Great Lakes and their connecting waters, two significant technological advances helped to support the use and importance of those natural waters: the steamboat and the construction of canals and other artificial improvements to navigation.

As suggested above, commercialization of the steamboat and the dramatic expansion of its use on western rivers was a major stimulus of western exploration and expansion.²⁶⁵ Lewis and Clark navigated the upper Missouri River in primitive dugout canoes at the outset of the nineteenth century,²⁶⁶ but less than twenty years later the 250-ton steamboat *Thomas Jefferson*, on the journey that gave rise to the case bearing its name,²⁶⁷ carried supplies up the same river to support the Army’s Yellowstone expedition.²⁶⁸ In the words of one historian:

263. See, e.g., *The Hine v. Trevor*, 71 U.S. (4 Wall.) 555, 562 (1866); *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 451, 453–54 (1851).

264. See ROSEMARY J. ERICKSON & RITA J. SIMON, *THE USE OF SOCIAL SCIENCE DATA IN SUPREME COURT DECISIONS* (1998); Robert W. Adler, *The Supreme Court and Ecosystems: Environmental Science in Environmental Law*, 27 VT. L. REV. 249, 343–46 (2003).

265. See *supra* notes 145–47, 168–69 and accompanying text.

266. See AMBROSE, *supra* note 21.

267. *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428 (1825). The coincidence is appropriate given President Jefferson’s role in commissioning the Lewis and Clark expedition.

268. See Wilkinson, *supra* note 37, at 1215.

In the development of the greater part of the vast Mississippi basin from a raw frontier society to economic and social maturity the steamboat was the principal technological agent. During the second quarter of the nineteenth century the wheels of commerce in this extensive region were almost literally paddle wheels.²⁶⁹

Among the many reasons for this dominance, overland roads at the time were poor and travel on them slow,²⁷⁰ but steamboats could travel both up and down rivers to an extent not possible for sailing vessels,²⁷¹ and could do so far more quickly than other modes of transportation.²⁷² Moreover, steamboats dramatically reduced the costs of freight transportation.²⁷³

The utility of the steamboat was augmented by the era of canals. Even before the Revolutionary War, George Washington promoted canal transportation as a means of penetrating the interior of the continent, and publicly funded or supported canals helped to drive economic growth and inland expansion throughout much of the nineteenth century.²⁷⁴ Americans built approximately 4,000 miles of canals between 1815 and 1890, and one historian wrote that the resulting reduction in shipping costs²⁷⁵ “was decisive for the opening of substantial trade between the east and west.”²⁷⁶

As a result, river transportation dominated the expanding western economy through the first half of the nineteenth century.²⁷⁷ By the time Chief Justice Taney was writing his pivotal opinion in *The Propeller Genesee Chief* in 1851, however, railroads had already drawn even with canals as highways of commerce, and many canals were soon abandoned.²⁷⁸ Just as waterways initially enjoyed early advantages over the nation’s nascent road system, railroads were less challenged by topography, weather, and other factors, and soon became cheaper, more reliable, and even faster than steamboats in transporting goods and supplies to and from markets.²⁷⁹ By 1860, railroads had already taken over

269. HUNTER, *supra* note 149, at 3, *see also id.* at 21 (the steamboat was “the beginning of a commercial revolution” and caused “the economic emancipation of the western country”).

270. *See id.* at 4.

271. *See id.* at 4–5.

272. *See id.* at 23–25.

273. *See id.* at 25–27.

274. *See* Dempsey, *supra* note 77, at 245–46.

275. For example, the average overland rate of freight shipping between Buffalo and New York in 1817 was over 19 cents per mile, compared to 1.68 cents per mile after completion of the Erie Canal, a drop of more than 91 percent. GOODRICH ET AL., *supra* note 77, at 227–28.

276. *Id.* at 249.

277. *See* FITE & REESE, *supra* note 37, at 63–64, 188–91.

278. *See* Dempsey, *supra* note 77, at 246.

279. *See id.*

as “the most important single form of transportation in the country.”²⁸⁰ By the early twentieth century, many waterways were less amenable to water transportation than they had been in earlier times, when forested watersheds distributed water flows to rivers more evenly throughout the year,²⁸¹ and in the first decade of the new century railroads exceeded waterborne traffic in tons of freight by a factor of ten.²⁸²

To be sure, inland barges and other waterborne transportation remain significant economically and logistically,²⁸³ particularly in certain regions²⁸⁴ and for certain products.²⁸⁵ Although still critically important to the U.S. economy in many ways,²⁸⁶ water-based transportation is now responsible for a relatively small proportion of total commodities carried and, after a long period of decline, has remained level in recent decades.²⁸⁷ Thus, although clearly still highly relevant for Commerce Clause and other constitutional purposes, water transportation is no longer the dominant use of U.S. waters that it was at the time of *The Propeller Genesee Chief* or *The Daniel Ball*. As shown below, transportation is now one of many significant uses for which water bodies are used and valued extensively in the United States.

2. Use and Value of Waters for Ecological, Recreational, and Other Purposes

The inherent ecological value provided by rivers has not changed dramatically in the past two and a half centuries. Our scientific

280. FITE & REESE, *supra* note 37, at 195. See also HUNTER, *supra* note 149, at 481, 484–88.

281. 1 EMORY RICHARD JOHNSON ET AL., HISTORY OF DOMESTIC AND FOREIGN COMMERCE OF THE UNITED STATES 13 (1915).

282. See *id.* at 194 (over a billion tons by rail versus just over 100 million by water).

283. See *supra* note 37 and accompanying text.

284. The main stem of the Mississippi River system dominates modern inland waterborne transportation in the United States, and was responsible for more than 70 percent of all goods shipped on inland waterways in 2001. U.S. ARMY CORPS OF ENGINEERS, *supra* note 38, at iii. The other dominant portions of the system geographically are the Ohio River Basin and the Gulf Intercoastal Waterway. See *id.* at iii–iv.

285. See *id.* at ii (noting high value for petroleum and petroleum products).

286. KIM VACHAL ET AL., U.S. WATERWAYS, A BARGE SECTOR INDUSTRIAL ORGANIZATION ANALYSIS 4 (2005) (some U.S. shippers rely heavily on efficient waterborne freight to remain competitive); U.S. Army Corps of Engineers, *The Story of Water Transportation, Modern Transportation on Ancient Highways Level 2*, USACE EDUCATION, available at <http://education.usace.army.mil/navigation/lessons/2/navhisls2lv2.html> (last visited June 15, 2013) (continued reliance on ports and inland waterways, particularly for international trade and industries that use or produce large, heavy or bulk materials).

287. See VACHAL ET AL., *supra* note 286, at 4 (total freight moved by water declined since 1980 to 16.5% of total U.S. freight in 2001); U.S. ARMY CORPS OF ENGINEERS, *supra* note 38, at 19 (domestic water transportation stagnant over 20 years, despite higher foreign traffic).

understanding and societal appreciation of those values, however, has increased dramatically, as has our use of waterways for common purposes that extend well beyond transportation of people and goods. Those uses and values include water supply, fish and wildlife support habitat, recreation, and flood control and watershed protection. Because these uses and values have been catalogued extensively elsewhere,²⁸⁸ a brief review should suffice to demonstrate that a solitary focus on navigability to define what rivers are “public” is unduly narrow, and the issues discussed below are not intended to comprise a complete list of those uses and values. On the other hand, the breadth of water bodies that exhibit these characteristics suggests that the concept of “public waters” may need to reflect each of these uses in context, that is, that any associated public rights should be proportionate to the public values to be protected.

Most obvious, rivers and other surface water systems provide water supply to a growing U.S. population. According to the most recent U.S. Geological Survey estimates, surface waters supply approximately eighty percent of U.S. withdrawals for domestic water supply, industrial use, irrigation, and power plant cooling.²⁸⁹ Although water conflicts were the source of some litigation in the early nineteenth century, giving rise to the reasonable use doctrine of riparian rights,²⁹⁰ water supply in the water-rich eastern states was abundant relative to demand. That would change as settlers moved to the arid western states, leading eventually to the adoption of the prior appropriation doctrine in the West.²⁹¹ Both doctrines, however, consider the *water* in rivers (as opposed to the beds and banks and other property rights) to be owned by the public subject to usufructory rights by others.²⁹²

In the twenty-first century, water resources are becoming increasingly scarce in both eastern and western states, a condition that is likely to be exacerbated by climate change.²⁹³ That scarcity, in turn, will have increasingly significant national and international economic and political impacts²⁹⁴ that further underscore the highly public nature of rivers and other bodies of surface water for purposes other than transportation. Of course, because even the smallest headwater streams can support public

288. See, e.g., *supra* notes 38–40.

289. U.S. GEOLOGICAL SURVEY, *supra* note 40, at 4.

290. See Lauer, *supra* note 10, at 60–63; Tyler v. Wilkinson, 24 F. Cas. 472 (D.R.I. 1827).

291. See Coffin v. Left Hand Ditch Co., 6 Colo. 443 (Colo. 1882).

292. See Trelease, *supra* note 84.

293. See Robert W. Adler, *Climate Change and the Hegemony of State Water Law*, 29 STAN. ENVTL. L.J. 1, 13–17 (2010).

294. See *id.* at 33–51.

water supply, either directly or by recharging larger streams downstream, this factor suggests that all streams, however small, are “public streams” *for that purpose*. The Supreme Court has recognized the significant value of rivers for purposes of public water supply,²⁹⁵ and acknowledged that “there are benefits from a great river that might escape a lawyer’s view,”²⁹⁶ in the context of Commerce Clause and other constitutional challenges to a state’s right to protect its water from interstate diversions.

Rivers and their associated ecosystems also provide an important habitat for fish and wildlife in ways that similarly have gone unrecognized due to the Court’s focus on navigability in defining public waters. For example, one of the many uses of waterways in early American history was to transport massive quantities of fur trapped from western rivers.²⁹⁷ In its navigability cases, the Supreme Court’s rulings relied on the utility of waterways to transport fur and other commodities from west to east,²⁹⁸ but the fact that rivers and their headwaters provided essential habitat for the fur-bearing mammals that sustained that trade was not similarly noted as a justification for public ownership or regulatory control of those public resources. On the other hand, the Court did recognize fishery values in public trust lands submerged by tidal waters²⁹⁹ and has identified,³⁰⁰ but not expressly protected, those values in navigable inland waters.

The fish, wildlife, and other biodiversity benefits provided by rivers are now much better understood. Freshwater biodiversity in North America has declined significantly as a result of a wide range of factors, but rivers, lakes, and wetlands continue to support a significant number of fish, crayfish, freshwater mussels, and other species.³⁰¹ The global value of freshwater fisheries was estimated at more than \$8 billion per year from 1989–1991.³⁰² The economic value of freshwater aquatic biodiversity is difficult to measure because it is not “traded” in traditional markets, but where water markets in the West have developed to purchase stream flow rights to support habitat values, the prices paid have been significant.³⁰³

295. *Hudson Cnty. Water Co. v. McCarter*, 209 U.S. 349, 356 (1908).

296. *Id.* at 357.

297. See generally ERIC JAY DOLIN, *FUR, FORTUNE, AND EMPIRE: THE EPIC HISTORY OF THE FUR TRADE IN AMERICA* 6 (2010).

298. See *The Montello*, 87 U.S. (20 Wall.) 430, 440 (1874) (relying on navigability for fur trade).

299. See *McCready v. Virginia*, 94 U.S. (4 Otto) 391, 395 (1876); *Smith v. Maryland*, 59 U.S. (18 How.) 71, 74–75 (1855).

300. *Ill. Cent. R.R. v. Illinois*, 146 U.S. 387, 452 (1892).

301. See ABELL ET AL., *supra* note 41, at 25–58; Ciruna & Braun, *supra* note 41, at 23–35.

302. See Postel & Carpenter, *supra* note 40, at 198.

303. See *id.* at 204–06.

As the United States has shifted from a predominantly rural, agrarian population to an urban and industrial society, the demand for outdoor recreation, including recreation in and on waterways, has grown proportionately. For example, 31 million anglers in the United States fished an average of 14 days a year in 1991, with estimated direct expenditures of about \$16 billion on equipment, travel costs, etc., and estimated total economic benefits of approximately \$46 billion.³⁰⁴ Waterfowl hunting also generates significant economic activity in the United States.³⁰⁵ Other freshwater recreational activities include swimming and boating, the full economic value of which can be difficult to estimate, especially when those activities occur on public waters for which no fee is charged.³⁰⁶

Rivers and their associated watersheds—particularly when relatively unimpaired—also provide a wide range of hydrological benefits, including flood control, water pollution control, water supply through surface and groundwater recharge, and support of riparian vegetation and associated fish and wildlife habitat.³⁰⁷ The Supreme Court recognized these hydrological values to some degree in cases such as *United States v. Appalachian Electric Power Co.*,³⁰⁸ but mainly in the context of navigability, the principal constitutional lens through which the Court had historically viewed rivers and other water bodies.

B. Implications for the Law of Navigability

Inland waterways in the United States, while pivotal to transportation and commerce during the nation's first century, boast a much wider range of public uses and values that have substantially transcended navigability alone in the following century and a half. Those uses and values should be considered in light of the reasons for the navigability doctrine addressed in Part II. That analysis showed that, although navigation has been the most frequently invoked use for which “public rivers” have been protected throughout Anglo-American legal history, it is just one of the public uses

304. *See id.* at 198.

305. *See id.*

306. *See id.* at 202.

307. *See* Ciruna & Braun, *supra* note 41, at 12–23. For a much more complete assessment of the many ecological and economic benefits of watersheds, see generally NATIONAL RESEARCH COUNCIL, RIPARIAN AREAS, FUNCTIONS AND STRATEGIES FOR MANAGEMENT (2002); NATIONAL RESEARCH COUNCIL, NEW STRATEGIES FOR AMERICA'S WATERSHEDS (1999).

308. 311 U.S. 377, 426 (1940).

that render waterways either not appropriate for complete private ownership or appropriate for some degree of public ownership and control.

For some constitutional doctrines, navigability remains the most logical public value for the legal doctrines at issue, in particular federal admiralty jurisdiction. For Commerce Clause purposes, on the other hand, the Supreme Court has already acknowledged that a much broader range of uses and values are relevant. The two doctrines that directly implicate proprietary rights in water bodies, navigability for title and the federal navigational servitude, are more challenging in determining the continued relevance of navigability.

1. Admiralty Jurisdiction

On its face, the relevance of navigability to admiralty jurisdiction would appear to be a trivial question, but there is a much more expansive definition of “navigability” today compared to 1851, when the Court first extended admiralty to inland waters.³⁰⁹ A more relevant inquiry, therefore, is whether navigability has become overly inclusive in terms of the functions that admiralty jurisdiction serves relative to other sources of federal authority.

The initial rationale for admiralty jurisdiction on the high seas was “supervision over foreign trade and intercourse with other nations,”³¹⁰ and issues such as policing piracy and buccaneering.³¹¹ Navigability is obviously a given in those kinds of maritime cases, and the federal interest in those cases is manifest from the perspective of national defense and foreign policy. As Hamilton wrote in *The Federalist*, maritime cases “so commonly affect the rights of foreigners that they fall within the considerations relative to the public peace.”³¹²

When the Supreme Court expanded jurisdiction inland to include fresh waters, however, that jurisdiction applied to a wide range of claims that involved no foreign citizens and no issues of national defense or foreign policy.³¹³ The narrowest rationale for that expansion in *The Propeller*

309. *The Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443 (1851).

310. *Waring v. Clarke*, 46 U.S. (5 How.) 441, 489 (1847) (Woodbury, J., dissenting); *see also* *Chisolm v. Georgia*, 2 U.S. (2 Dall.) 419, 475 (1793); Waite, *supra* note 119, at 585.

311. *See* Conover, *supra* note 125, at 35–36.

312. THE FEDERALIST NO. 80 (Alexander Hamilton).

313. *See Waring*, 46 U.S. (5 How.) 441 (damages claim due to collision); *Steamboat Orleans v. Phoebus*, 36 U.S. (11 Pet.) 175 (1837) (boat ownership dispute); *Hobart v. Drogan*, 35 U.S. (10 Pet.) 108 (1836) (salvage claim); *Peyroux v. Howard*, 32 U.S. (7 Pet.) 324 (1833) (compensation claim for boat repairs); *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428 (1825) (unpaid wage claims).

Genesee Chief was that a law passed by Congress expressly subjected the Great Lakes to admiralty jurisdiction, and that the Great Lakes are functionally no different from the high seas for purposes of the clearly national “maritime trade” interests protected through federal admiralty jurisdiction.³¹⁴ More broadly, the Court proclaimed that geographic differences between the United States and England justified an expanded view of admiralty to address the same kinds of cases based on the “public character of the river” in question.³¹⁵

In later cases in which the Court extended federal admiralty jurisdiction to other navigable inland waters based on the more general language of the Constitution and the Judiciary Act of 1789, the rationale was not so limited but also not entirely clear. In accepting jurisdiction the same year over a case involving a collision on the Mississippi River above tidewater, the Court seems to have summarily assumed that the rationale in *The Propeller Genesee Chief* applied to other great inland waterways as well.³¹⁶ In applying the doctrine to the purely intrastate waters of the Alabama River, the Court rooted its decision in the absence of any limiting language in the text of the Constitution, the exercise of inland admiralty jurisdiction in the colonies and early states, and the practical benefits of invoking uniform admiralty over the country’s extensive system of inland waterways.³¹⁷ Implicit in these decisions is the idea that federal admiralty jurisdiction provides a neutral forum to adjudicate cases involving vessels and associated commerce so that navigation in coastal states is not preferred over navigation and commerce in the central and western states.³¹⁸

Notably, this rationale for the inland expansion of federal admiralty jurisdiction predated two other significant developments in federal law, which together may reduce the need for that jurisdiction given expanded federal interest over matters that do not depend on navigability *per se*. The first was the fulfillment of federal question subject matter jurisdiction under the Judiciary Act of 1875, which provided federal courts with jurisdiction over any claim necessary to enforce applicable provisions of

314. *The Propeller Genesee Chief*, 53 U.S. (12 How.) at 453–54.

315. *Id.* at 455–56.

316. *Fretz v. Bull*, 53 U.S. (12 How.) 466, 468 (1851).

317. *Jackson v. Steamboat Magnolia*, 61 U.S. (20 How.) 296, 298–302 (1857).

318. *See* *Wilkinson*, *supra* note 37, at 1221 (noting that Great Lakes states complained of discrimination when denied protection of admiralty courts), *id.* at 1235 (drawing analogy to *Swift v. Tyson* regarding need for federal uniformity to support growing interstate commerce); *Conover*, *supra* note 125, at 37 (discussing need for uniformity due to differences in state admiralty courts).

the Constitution or federal statute.³¹⁹ The second was the dramatic expansion of federal Commerce Clause authority, under which Congress can address any perceived commercial inequities or other problems within the broad scope of that power.³²⁰ In this sense, perhaps Justice Story was correct when he suggested in 1825 that any inland limitations in admiralty jurisdiction could best be filled through legislative power under the Commerce Clause rather than judicial power under the admiralty clause.³²¹

Relegating federal control over inland cases involving vessel traffic to Commerce Clause rather than admiralty power, however, would change the relative roles of the judicial and legislative branches in meeting the goal of federal uniformity. That debate is well beyond the scope of this Article, and better left to experts in substantive admiralty and maritime law. Moreover, such a shift would reduce federal uniformity at least to some degree by allowing *concurrent* state court jurisdiction to enforce applicable federal statutes, whereas federal admiralty jurisdiction is *exclusive*.³²² That shift would cut in both directions in terms of the ability to protect the wider range of public interests in waterways that are subject to the Commerce Clause and other sources of federal authority. On the one hand, those who seek the protection of those laws could do so through potentially more convenient state courts as well as federal courts. On the other hand, enforcement through state as well as federal courts would necessarily eliminate the uniformity inherent in federal admiralty jurisdiction. Any significant inconsistencies could be addressed through the Supreme Court's ultimate appellate authority over issues of federal law.

2. Commerce Clause Authority

At the opposite end of the spectrum, the continuing relevance of navigability for Commerce Clause purposes appears similarly easy to answer. The scope of federal authority under the Commerce Clause far exceeds the limits of traditional navigable waters as delineated in *The*

319. See *Louisville & Nashville R.R. v. Mottley*, 211 U.S. 149 (1908); 28 U.S.C. § 1331 (2012).

320. See *Wickard v. Filburn*, 317 U.S. 111 (1942); *United States v. Darby*, 312 U.S. 100 (1941); *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1 (1937).

321. *The Steam-Boat Thomas Jefferson*, 23 U.S. (10 Wheat.) 428, 429 (1825) ("If the public inconvenience, from the want of a process of an analogous nature, shall be extensively felt, the attention of the Legislature will doubtless be drawn to the subject.")

322. *The Hine v. Trevor*, 71 U.S. (4 Wall.) 555, 568–69 (1866); *The Moses Taylor*, 71 U.S. (4 Wall.) 411, 430 (1866).

Daniel Ball,³²³ and even the broader test of navigability for Commerce Clause cases articulated in *United States v. Appalachian Electric Power Co.*³²⁴ Navigability is simply one subset of interstate or international “commerce” within the scope of Commerce Clause authority, although among the earliest to be recognized by the Supreme Court.³²⁵

It is curious, then, that in a series of cases involving navigable waters, the Court has tied its decisions to navigability rather than the many other factors surrounding interstate or foreign commerce. For example, in deciding the constitutionality of a federal statute prohibiting thefts from shipwrecks, the Court declined to uphold admiralty jurisdiction over goods taken from above the mean high tide line because admiralty cases at the time extended only to waters influenced by the ebb and flow of the tide.³²⁶ It upheld the applicability and constitutionality of the statute on Commerce Clause grounds, however, citing *Gibbons* and relying in large part on the similar connection to commerce on a navigable waterway:

[Commerce Clause power] extends to such acts, done on land, which interfere with, obstruct, or prevent the due exercise of the power to regulate commerce and navigation with foreign nations, and among the states. Any offence which thus interferes with, obstructs, or prevents such commerce and navigation, though done on land, may be punished by [C]ongress, under its general authority to make all laws necessary and proper to execute their delegated constitutional powers.³²⁷

If Congress can penalize theft of goods traded in interstate or foreign commerce, the mode of transportation should be irrelevant, as should the navigability of the waterway.

Similarly, in *The Daniel Ball*, the Court upheld a federal statute regulating, for safety, an instrumentality of interstate commerce (a steamboat) that happened to be used on a navigable waterway. But the Court reserved for later cases a decision on whether the same authority would be justified with respect to similar instrumentalities of commerce on land, such as railroads.³²⁸ As such, the focus on navigability in *The Daniel Ball*—perhaps the most famous “navigability” case in Supreme

323. *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870).

324. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940).

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

326. *United States v. Coombs*, 37 U.S. (12 Pet.) 72, 76–78 (1838).

327. *Id.* at 78.

328. *The Daniel Ball*, 77 U.S. (10 Wall.) at 566.

Court history—seems almost trivial. That the Grand River itself was navigable for commerce was self-evident; the case involved seizure of a steamboat that was actually in commercial use on the river. The real issue was federal authority to regulate an instrumentality of commerce of any kind when transporting goods as part of a “continued highway for commerce, both with other States and with foreign countries.”³²⁹

Likewise, in cases upholding federal authority to build or regulate multi-purpose water projects, the Court relied heavily, but not exclusively, on the fact that those dams and related facilities were either located on navigable waters or would affect navigability downstream.³³⁰ To that extent, continued reliance on navigability as a legal basis for Commerce Clause power remained appropriate. To the extent that a project generates electric power available for sale in interstate markets,³³¹ for Commerce Clause purposes there should be no difference between hydroelectric power and power generated from other sources with no connection to waterways at all. Similarly, if a federal dam has flood control and watershed protection benefits that affect interstate commerce in ways unrelated to navigation,³³² it should matter not whether the dam is built on a navigable or a non-navigable river.

The Court’s fidelity to navigation to uphold Commerce Clause authority over matters related in any way to waterways could be explained in several related ways. First, due to fear of excess federal power,³³³ the Court in its early cases may have wanted to ground its decisions on the clearest and most politically acceptable reason: because commerce on navigable waters was the predominant mode by which interstate foreign commerce then occurred, it was the most logical way to uphold federal power over commerce. Second, because *Gibbons* was one of the Court’s seminal Commerce Clause decisions, it may simply have been the legal pedigree on which ensuing cases relied, regardless of whether its rationale was the only plausible reason for upholding federal authority in later cases. Until the Supreme Court in *Appalachian Electric Power* began to

329. *Id.* at 564.

330. *See supra* notes 193–200 and accompanying text.

331. *See Ashwander v. Tenn. Valley Auth.*, 297 U.S. 288, 326 (1936).

332. *See Okla. ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 520–22 (1941) (noting that floods cause significant financial losses and “respect no state lines,” and “that single states are impotent to cope with them effectively”).

333. *See THE FEDERALIST NO. 45* (James Madison).

cleanse its Commerce Clause jurisprudence of *unnecessary* reliance on the concept,³³⁴ navigability may simply have taken on a legal life of its own.

An alternative and potentially simpler explanation for the Supreme Court's persistent reliance on navigability as a *sina qua non* of Commerce Clause power whenever a body of water was at issue is that Congress, perhaps in light of the Supreme Court's holdings in *Gibbons* and progeny, habitually invoked navigability as the surest hook on which to hang its Commerce Clause hat. When deciding Commerce Clause challenges based on statutes such as the Federal Power Act of 1920,³³⁵ the Flood Control Act of 1936,³³⁶ the Rivers and Harbors Act of 1899³³⁷ (as in *Appalachian Electric Power, Oklahoma ex rel. Phillips*, and *Kaiser Aetna*, respectively), the Court begins its analysis with the statutory assertion of federal authority, and only if necessary decides whether implementation of the statute under those circumstances is constitutional.³³⁸

The line of federal statutes and cases governing water pollution control illustrates this tendency. In the Rivers and Harbors Act, Congress authorized the Secretary of the Army to permit or prohibit activities that would obstruct navigable waters for purposes of commerce and national defense. In this statute, Congress acted to safeguard the *navigability* of navigable rivers, and therefore the geographic target of federal regulation was plainly the "navigable capacity of any waters of the United States."³³⁹ However, before Congress amended the Federal Water Pollution Control Act (FWPCA, later renamed the Clean Water Act (CWA))³⁴⁰ to address water pollution for reasons that significantly transcend navigability,³⁴¹ the Supreme Court affirmed the applicability of the Rivers and Harbors Act to redress industrial water pollution independent of navigability.³⁴² Thus, Congress based the jurisdictional reach of the Rivers and Harbors Act on traditional notions of navigability, but the Army enforced the law for broader but still constitutionally valid purposes.

334. I emphasize "unnecessary" because navigability clearly remains relevant where Commerce Clause power is asserted to promote navigability for interstate or international commerce.

335. 16 U.S.C. § 791 *et seq.* (2012).

336. 33 U.S.C. §§ 701a–701f, 701h (2012).

337. 33 U.S.C. §§ 403, 407, 411 (2012).

338. *See, e.g.,* Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Engrs., 531 U.S. 159 (2001) (unnecessary to reach Commerce Clause challenge where federal action rejected as beyond statutory jurisdiction).

339. 32 U.S.C. § 403 (2012).

340. 33 U.S.C. § 1251 *et seq.* (2012).

341. *See id.* § 1251 (articulating wide range of congressional water quality goals).

342. *United States v. Pa. Indus. Chem. Corp.*, 411 U.S. 655 (1973); *United States v. Standard Oil Co.*, 384 U.S. 224 (1966). *See generally* William H. Rodgers, *Industrial Water Pollution and the Refuse Act*, 119 U. PA. L. REV. 761 (1971).

Congress amended the FWPCA in 1972 to adopt a comprehensive national scheme of water pollution control.³⁴³ Rather than focusing on navigation, Congress sought to protect fish and wildlife, public recreation, human and environmental health, and more broadly “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”³⁴⁴ Borrowing from the Rivers and Harbors Act, Congress first defined a “discharge of a pollutant” to mean “any addition of any pollutant to navigable waters”³⁴⁵ and then redefined “navigable waters” to mean “the waters of the United States, including the territorial seas.”³⁴⁶

What explains these definitional gymnastics? In *The Daniel Ball*, the Supreme Court distinguished between waters deemed “navigable in fact” because they are used or are useful as a highway for commerce, and navigable waters of the United States, which require that they form or be part of “a continued highway over which commerce is or may be carried on with other States or foreign countries.”³⁴⁷ The former test governs title cases, in which no interstate commerce is necessary, while the latter supports Commerce Clause authority. Although Congress used the same “waters of the United States” language as *The Daniel Ball*, it did not likely intend to distinguish between these two categories of waters in the same sense. If Congress based CWA jurisdiction on navigability rather than other effects on interstate commerce, the distinction would be superfluous because waters used exclusively for intrastate commerce would not pass Commerce Clause scrutiny. If Congress asserted Commerce Clause authority based on the broader effects authorized in *Appalachian Electric Power Co.*, such as the economic effects of water pollution,³⁴⁸ navigability would not be relevant at all.

The legislative history of the 1972 amendments indicates that Congress intended the “waters of the United States” to cover water bodies to the maximum extent permissible under the Constitution, and to “regulate at least some waters that would not be deemed ‘navigable’ under the classical understanding of that term.”³⁴⁹ Thus, in *U.S. v. Riverside Bayview Homes*, Justice White explained, “[a]lthough the [Clean Water] Act

343. See generally ROBERT W. ADLER, JESSICA C. LANDMAN & DIANE M. CAMERON, THE CLEAN WATER ACT, 20 YEARS LATER 6–9 (1993).

344. 33 U.S.C. §§ 1251(a), (a)(2)–(3).

345. *Id.* § 1362(12).

346. *Id.* § 1362(7).

347. *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (emphasis added).

348. See ADLER ET AL., *supra* note 343, at 1–2.

349. *United States v. Riverside Bayview Homes*, 474 U.S. 121, 133 (1985) (citing S. Conf. Rep. No. 92-1236, p. 144 (1972); 118 CONG. REC. 33756–33757 (1972) (statement of Rep. Dingell)).

prohibits discharges into ‘navigable waters,’ the Act’s definition of ‘navigable waters’ as ‘the waters of the United States’ makes it clear that the term ‘navigable’ as used in the Act is of limited import.”³⁵⁰

If Congress intended to assert Commerce Clause jurisdiction unlimited by the concept of navigability, why did it use the term “navigable” at all, rather than simply using the phrase “waters of the United States?” This paradox has plagued the Supreme Court³⁵¹ and lower courts,³⁵² and has been the subject of conflicting commentary³⁵³ and proposals in Congress to amend the CWA to broaden the grounds on which Congress asserts constitutional power.³⁵⁴ One plausible explanation is that navigability again had taken on a legal life of its own, or that Congress was simply drawn in by the history of past federal legislation. Another is that in the pivotal permitting requirement of the CWA,³⁵⁵ Congress intended to assert jurisdiction over discharges to navigable waters to the fullest extent constitutionally permissible. Under *Appalachian Electric Power Co.*, that would include non-navigable tributaries of navigable waters³⁵⁶ or hydrologically connected wetlands, the use or degradation of which would adversely affect traditional navigable waters.³⁵⁷ On the other hand, it would exclude from the CWA permit requirements regarding discharges to other “waters” that have insufficient connection to waters deemed “navigable waters of the United States.” That was precisely the explanation provided by Chief Justice Rehnquist in *Solid Waste Agency of Northern Cook County v. United States*:

We cannot agree that Congress’ separate definitional use of the phrase “waters of the United States” constitutes a basis for reading the term “navigable waters” out of the statute. We said in *Riverside*

350. *Riverside Bayview Homes*, 474 U.S. at 133.

351. See, e.g., *Rapanos v. United States*, 547 U.S. 715 (2006); *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159 (2001); *Riverside Bayview Homes*, 474 U.S. 121.

352. Compare *United States v. Deaton*, 332 F.3d 698 (4th Cir. 2003), with *In re Needham*, 354 F.3d 340 (5th Cir. 2003) (presenting competing interpretations of *Solid Waste Agency of N. Cook Cnty.*); compare also *N. Cal. River Watch v. City of Healdsburg*, 457 F.3d 1023, 1025 (9th Cir. 2006), with *United States v. Chevron Pipe Line Co.*, 437 F. Supp. 2d 605, 615 (N.D. Tex. 2006) (presenting competing interpretations of *Rapanos*).

353. See, e.g., *THE SUPREME COURT AND THE CLEAN WATER ACT: FIVE ESSAYS* (L. Kinvin Wroth ed., 2007) (presenting five highly different approaches to interpreting *Rapanos v. United States*).

354. See Clean Water Restoration Act of 2007, H.R. 2421, 110th Cong. (2007).

355. 33 U.S.C. § 1311(a) (2012).

356. See 33 C.F.R. § 328.3.

357. *United States v. Riverside Bayview Homes*, 474 U.S. 121, 133 (1985); see also *Rapanos v. United States*, 547 U.S. 715, 759 (2006) (Kennedy, J., concurring) (authorizing CWA jurisdiction over discharges to waters with a “significant nexus” to navigable waters).

Bayview Homes that the word “navigable” in the statute was of “limited import”. . . . But it is one thing to give a word limited effect and quite another to give it no effect whatever. The term “navigable” has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made.³⁵⁸

That perspective is notable given Justice Rehnquist’s statement in *Kaiser Aetna* that “navigability of a waterway adds little if anything to the breadth of Congress’ regulatory power over interstate commerce.”³⁵⁹ Most recently, in the context of a related issue of administrative law,³⁶⁰ the Supreme Court lamented the fact that Congress has confused the jurisdictional grounds for its exercise of Commerce Clause authority in the CWA.³⁶¹

The key point here is not to resolve the longstanding dispute over what Congress intended in its curious definitions in the CWA. It is that the water pollution statutes provide a good example of how the use of navigability to support Commerce Clause authority is rooted in history, but is not bound by it, and based on a correct reading of *Gibbons v. Ogden*, never was. Navigability is but one of many sources of Commerce Clause power. From a constitutional perspective, the concept of navigability for Commerce Clause purposes is of “limited import,” and is useful only to define that subset of power invoked to protect commerce through waterborne navigation. In drafting statutes such as the Clean Water Act, the lesson here may be for Congress. If its intent is to exercise Commerce Clause legislative power solely to protect the navigability of navigable waters, as was arguably true in the Rivers and Harbors Act, continued reliance on the term “navigable waters” remains appropriate. If it intends to assert Commerce Clause authority on broader grounds, however, continued reliance on navigability only sows seeds of confusion.

358. *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 172 (2001).

359. *Kaiser Aetna v. United States*, 444 U.S. 164, 173 (1979).

360. *Sackett v. EPA*, 132 S. Ct. 136 (2012) (holding EPA compliance order final for purposes of review).

361. *Id.* at 1375 (Alito, J., concurring) (“Real relief requires Congress to do what it should have done in the first place: provide a reasonably clear rule regarding the reach of the Clean Water Act.”).

3. *Public and Private Property in Waterways*

This brings us back to the opening question suggested by the *PPL Montana* evidentiary dilemma. As shown above, the relevance of inland navigability to admiralty jurisdiction is trivial at best and perhaps has outlived its utility in the wake of subsequent constitutional developments. The relevance of navigability has faded into the background of Commerce Clause jurisprudence. What, then, is the continuing relevance of navigability to the related issue of public versus private proprietary rights in inland bodies of water, particularly when the evidentiary viability of “navigability at statehood” as a measure of those rights becomes increasingly difficult as time passes?

Although logical and consistent in some ways, navigability as the solitary test to allocate trust ownership between the federal government and the states remains perplexing. On adoption of the Constitution, the states ceded to the federal government plenary authority over interstate and foreign commerce,³⁶² which the Supreme Court decided early in U.S. history includes navigation.³⁶³ Therefore, in many respects it is counterintuitive that states hold title to lands submerged beneath navigable waterways, while the federal government can only hold title to non-navigable waters, and then only by virtue of riparian proprietorship. Chief Justice Roberts noted this irony during oral arguments in *PPL Montana*.³⁶⁴

One possible explanation for this anomaly is that the federal government asserts independent authority over navigable waters under the Commerce Clause and the corollary doctrine of the federal navigational servitude. But why then should state law control the disposition of trust lands and associated waters supposedly held for purposes over which the federal government retains plenary control?³⁶⁵ In some cases the Supreme Court held that public trust title enhances state regulatory authority to preserve and protect waterways for the originally stated purposes of navigation, commerce and fisheries, or for expanded trust purposes later adopted pursuant to state law.³⁶⁶ But it is not entirely clear why states

362. U.S. CONST. art. I, § 8, cl. 3.

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

364. *See* Transcript of Oral Argument at 28, *PPL Montana v. State*, 132 S. Ct. 1215 (2012) (No. 10-218). Nothing in the *PPL Montana* decision, however, changes this principle.

365. Earlier authors have made similar comments. *See* Leighty, *supra* note 3, at 436 (suggesting that the courts have placed too much focus on title); MacGrady, *supra* note 3, at 604–05 (arguing that bed title is irrelevant to control of navigable waters).

366. *See, e.g.,* *McCready v. Virginia*, 94 U.S. 391 (1876) (upholding state law prohibiting non-citizens from planting or harvesting oysters on state-owned tidal lands); *Smith v. Maryland*, 59 U.S. (18 How.) 71, 74–75 (1855) (holding that state authority to protect shellfish beds derived in part from

could not accomplish similar functions without holding complete title to the beds underlying navigable waters, either under police power authority³⁶⁷ or under a split title concept in which private owners hold title to the *jus privitum* and the state retains the *jus publicum* as recognized in English law.³⁶⁸ Moreover, the states may dispose of title underlying navigable waters so long as they do not substantially impair trust purposes. This increased the degree to which the federal government relied on the federal navigational servitude to protect the very same purposes, free from the takings clause of the Fifth Amendment.

The important point here is not to revisit the debate over whether American courts correctly interpreted the English distinction between tidal waters and inland waters as the basis of navigability as opposed to other factors when allocating public or private proprietary rights or federal versus state ownership and control. Rather, two key points are important with respect to the continuing relevance of navigability in U.S. constitutional law. First, whether correct as a matter of legal inheritance, U.S. courts at both the state and federal levels did view navigability as a key factor in allocating property rights among private landowners and the government, in trust for the public to secure an important form of common liberty. That made perfect sense when navigability was a defining characteristic of American rivers and other waters. On the other hand, given the triad of purposes for which such waters were protected—navigation, commerce, and fisheries—it is not entirely clear why navigability (as opposed to “fishability” or commercial potential more broadly) was the sole factor in allocating public and private rights, or federal versus state power. Second, both state and federal courts felt it appropriate to modify English legal concepts to suit the different and changing conditions of a new country and continent, despite significant resulting changes in the allocation of property rights and interests between both the government and individuals and between the federal and state governments.

Justice Rehnquist’s distinction in *Kaiser Aetna* raises anew the question of why one subset of Commerce Clause power is partially insulated from takings analysis (absent physical invasion or other

ownership of beds of tidal waters, but also from “legislative power”). In *McCready*, it seems more likely that ownership would confer greater authority because, absent the state ownership rationale, exclusion of out-of-state citizens might have violated the Commerce Clause, whereas the regulation in *Smith* would seem squarely within state police power authority even absent ownership.

367. See Frazier, *supra* note 68, at 91; MacGrady, *supra* note 3, at 604–05.

368. See Lazarus, *supra* note 72, at 636; Leighty, *supra* note 3, at 396.

significant impairment of property rights associated with fast land), while other exercises of Commerce Clause authority are not. One possible answer is the extent to which the Court emphasized the sheer importance of control over navigation as a central goal of the Commerce Clause.³⁶⁹ That distinction hardly seems persuasive, however, absent any textual distinction between protection of navigable waters and other valid Commerce Clause goals in the few bare words of the Commerce Clause.³⁷⁰ It is somewhat akin to arguing that the Framers authorized regulation of commerce generally, but really intended regulation of navigable waters even to the extent that Fifth Amendment protections should not apply.

A far more logical explanation for the privileged position of the federal government is that it does have a proprietary interest in rivers and other waters that puts it in a superior position relative to takings claims than for other exercises of Commerce Clause authority. That proprietary interest, in turn, logically derives from the full range of public versus private rights in bodies of water as the Supreme Court and many state courts have now recognized via both the Commerce Clause and state public trust doctrines.

Recall that, in early English and American decisions, ownership rights in “public waters” were divided between a *jus privatum*, which defined the riparian rights of landowners relative to other private individuals, and a *jus publicum*, in which the sovereign retains in trust for the public at large those rights in rivers and other water bodies necessary to protect shared common resources.³⁷¹ The Supreme Court affirmed this public ownership concept to allow states to retain various rights on behalf of the public.³⁷² Through the Commerce Clause, the states surrendered to the federal government a portion of the power to control those waters for the broad purposes of promoting and regulating interstate and foreign commerce.

369. See, e.g., *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 62 (1913) (describing “the great and absolute power of Congress over the improvement of navigable rivers”); *Leovy v. United States*, 177 U.S. 621, 625 (1900) (describing “the paramount jurisdiction of Congress over the navigable waters of the United States”); *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1899) (alluding to “the superior power of the General Government to secure the uninterrupted navigability of all navigable streams within the limits of the United States”); *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 335 (1893) (“[T]he power of Congress over such natural highways as navigable streams is confessedly supreme.”).

370. “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.

371. See *Lazarus*, *supra* note 72, at 636; *Leighty*, *supra* note 3, at 396; *Tillinghast*, *supra* note 70, at 344. *Lazarus* further identified the *jus regium*, the royal right to manage resources for public safety and welfare, *i.e.*, what became known in the United States as the “police power.”

372. See, e.g., *Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 286 (1997); *Shively v. Bowlby*, 152 U.S. 1, 12–13 (1894); *Ill. Cent. R.R. v. Illinois*, 146 U.S. 387, 435–37, 452–53 (1892); *R.R. v. Schurmeir*, 74 U.S. (7 Wall.) 272, 287 (1868).

Thus, in *Martin v. Waddell's Lessee*, Chief Justice Taney explained that the people of the states “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.*”³⁷³ The Court emphasized the same reservation when it held that newly admitted states have the same ownership and control of navigable waters as the original states,³⁷⁴ and when it first articulated the federal navigational servitude:

All navigable waters are under the control of the United States for the purpose of regulating and improving navigation, and although the title to the shore and submerged soil is in the various States, and individual owners under them, it is always subject to the servitude in respect of navigation created in favor of the Federal government by the Constitution.³⁷⁵

By all appearances, in defining the scope of this servitude, navigability took on a rhetorical life of its own, much as it did for Commerce Clause purposes. The servitude arose mainly in the context of conflicts between federal projects to control and improve navigation, when waterborne transportation remained a driving force in the U.S. economy, and when Commerce Clause authority was governed by the definition of navigability in *The Daniel Ball*. Because of those roots, it became known as the “navigational” servitude. If the servitude is grounded in the Commerce Clause, however, it should no more be bound to the navigational subset of Commerce Clause authority than is true for other exercises of that power.³⁷⁶ Bodies of water logically should be covered by the servitude to the full extent that public uses and values in water bodies are properly within the reach of the Commerce Clause, as suggested in *Twin City Power and Grand River Dam*.³⁷⁷

Likewise, navigability appears to have taken on a legal life of its own in defining state proprietary rights in waterways. At least as American courts interpreted English common law at the time of U.S. independence,

373. *Martin v. Waddell's Lessee*, 41 U.S. (16 Pet.) 367, 410 (1842) (emphasis added).

374. *Pollard v. Hagan*, 44 U.S. (3 How.) 212, 229 (1845) (“Then to Alabama belong the navigable waters, and soils under them . . . *subject to the rights surrendered by the Constitution to the United States . . .*”) (emphasis added)).

375. *Gibson v. United States*, 166 U.S. 269, 271–72 (1897); *see also* *United States v. Rio Grande Irrigation Co.*, 174 U.S. 690, 703 (1889) (state water rights remain “limited by the superior power of the General Government to secure the uninterrupted navigability of all navigable streams”).

376. *See supra* Part II.C.

377. *See supra* Part II.D.

the public retained, in its governmental capacity, a proprietary interest in coastal waters and tidal waters³⁷⁸ because they were deemed to be so inherently public that full private domination would be inconsistent with the idea of common liberty in shared public resources. Although some of those tidal waters were also navigable, not all were, as the Supreme Court confirmed in *Phillips Petroleum*.³⁷⁹ Moreover, the purposes to which that public ownership attached were not limited to navigation. They initially included fisheries and other forms of commerce, and later embraced other public uses and values as well.³⁸⁰ Thus, when the Supreme Court expanded the scope of state proprietary control of waters to include inland in addition to tidal waters that were navigable in fact,³⁸¹ it was influenced by the dominant public utility of waterways at the time, which was navigation. As discussed above, navigation has now receded as the most important public use of waters, and has been replaced by equally important values such as aquatic ecosystem services (including fisheries and wildlife habitat and biodiversity protection) and public recreational uses. There is no reason that state proprietary control should not match the legitimate scope of those other valid public interests in their waterways. Indeed, private technical title to the beds and banks of waterways has never implied private ownership either of the water itself³⁸² or of fish and wildlife resources supported by the aquatic ecosystem.³⁸³

This recognition of a broader range of public proprietary interests in bodies of water, and a concomitantly broader geographic scope of those rights as applied either to the federal servitude in public waters or to the state public trust doctrine, suggest potential conflicts with the takings clauses of the Fifth and Fourteenth Amendments, respectively.³⁸⁴ The fact that the Supreme Court and state courts recognized broader public proprietary rights in water bodies in the past, however, did not reflect an expansion of public relative to private rights. Rather, it reflected a judicial recognition of public rights inherent to those public resources to begin with. Given that the sovereign, whether the federal government or the state, holds those resources in trust for the public at large, they can never

378. *Arnold v. Mundy*, 6 N.J.L. 1 (N.J. 1821); *Martin v. Waddell's Lessee*, 41 U.S. (16 Pet.) 367 (1842).

379. *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988).

380. *See supra* notes 71–72 and accompanying text.

381. *Packer v. Bird*, 137 U.S. 661 (1891); *Barney v. Keokuk*, 94 U.S. (4 Otto) 324 (1876).

382. *See Nat'l. Audubon Soc'y v. Super. Ct.*, 658 P.2d 709 (Colo. 1983) (applying public trust principles to upstream water diversions).

383. *Hughes v. Oklahoma*, 441 U.S. 322 (1979).

384. U.S. CONST., amends. V, XIV.

simply be surrendered in ways that interfere substantially with the purposes for which they are held.³⁸⁵ A contrary result would constitute a private taking of public property rather than vice versa.

Moreover, the concept of public “ownership” in the sense of proprietary interests in public aquatic resources does not necessarily infringe existing title to the beds of water bodies, to the extent that such title has been recognized under state law. The entire history of water body ownership, however, supports the expectation that such title is held subject to dominant public interests in public resources, such as the flow of the stream and the wildlife therein. Proper judicial recognition of those public interests no more constitutes a taking of private property than did the U.S. Supreme Court’s recognition in *Packer v. Bird*³⁸⁶ that state ownership included inland navigable waters or the California Supreme Court’s recognition in *National Audubon Society* that state public trust interests extended to withdrawal rights from upstream tributaries.³⁸⁷ On the other hand, respect for existing recognized private property rights suggests that public proprietary interests should be asserted and accepted judicially only to the extent necessary to protect those legitimate public uses and values in waterways, whether grounded in public navigation or in other public uses and values.

Perhaps the problem with the litigation in *PPL Montana* was that it focused so narrowly on ownership of technical title to the beds and the banks of waterways under a doctrine that focused for so long on *navigability* for title. Under an alternative view, Montana might have asserted proprietary rights associated with the public power production potential of publicly owned waters. Whether those rights came in the form of title to the beds of the rivers in question or royalties charged for use of the state-owned water may have been irrelevant to the result. Similarly, if private hydropower production impairs public rights in fisheries or other public uses and values, perhaps the state could assert proprietary interests based on its trust ownership of those resources.

385. Ill. Cent. R.R. v. Illinois, 146 U.S. 387 (1892).

386. *Packer*, 137 U.S. 661.

387. *Nat'l Audubon Soc'y*, 658 P.2d 709.

IV. CONCLUSION

Water, water, every where
And all the boards did shrink;
Water, water, every where,
Ne any drop to drink.³⁸⁸

As suggested by the *Rime of the Ancyent Marinere*, water is fundamental to the health and welfare of all communities, especially when scarce. As such, it is traditionally considered to be a public resource that cannot be “owned” in the same sense as other resources. But so are *waters*, meaning the rivers, lakes, and other surface waters that not only supply water but also confer a wide range of other significant public benefits.

For nearly the entire history of the United States, the Supreme Court—and to a large degree Congress—has seized on navigability as the use and value that defines water bodies as “public” for purposes of several distinct constitutional doctrines, including admiralty jurisdiction, Commerce Clause authority and the federal navigational servitude, and ownership of the beds of water bodies. That focus of constitutional doctrine, however, arose and evolved when the nation’s coastal waters and rivers were its most important highways for commerce, and a driving force in national settlement and economic development. Although maritime and inland waters continue to serve significant transportation functions, they are not nearly as significant as they once were, and indeed have not been since the middle of the nineteenth century. At the same time, the uses of water bodies for a much wider range of public economic values have grown significantly, and the public ecological benefits provided by those waters are much more clearly understood.

U.S. constitutional law has kept pace with these evolving uses and values of waterways only to some degree, and in ways that logically varied according to the purpose of each navigability test. Navigability necessarily will remain a useful doctrine in constitutional law for some purposes, such as defining the limits of admiralty jurisdiction, even while Commerce Clause authority and other sources of federal court jurisdiction have expanded and the need for such jurisdiction has become less acute. The relevance of navigability to Commerce Clause jurisprudence has declined as courts have acknowledged the many other ways in which the use and degradation of water and waterways can affect interstate and international commerce. The two constitutional doctrines that delineate public and

388. Coleridge, *supra* note 1, at 773.

private proprietary interests in the nation's waterways, "navigability for title" and the "federal navigational servitude," remain locked into an early nineteenth century understanding of the reasons for which those waters are "public." Those doctrines should evolve as well. The geographic limits of public waters should reflect the full range of uses and values that serve important public interests, and for which unbridled private ownership is not appropriate, to the fullest extent consistent to the underlying purposes of those doctrines.