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The Public Trust Doctrine in Environmental and Natural Resources Law

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The Public Trust Doctrine in Environmental and Natural Resources Law

THIRD EDITION

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Dedication

Throughout the ages, the public trust has come to life as a result of extraordinary vision and courage on the part of jurists, lawyers, and scholars. We dedicate this book to all of the pioneers, past and present, with particular recognition of the contributions of Justinian,[1] Sir Matthew Hale,[2] Justice Andrew Kirkpatrick,[3] Justice Stephen J. Field,[4] Justice Stanley Mosk,[5] Justice Alan Broussard,[6] Justice Paula Nakayama,[7] Justice Presbitero Valasco, Jr.,[8] Judge Gisela Triana,[9] Chief Justice Ronald Castille,[10] Judge Ann Aiken,[11] and Professor Joseph Sax.[12] And, too, we dedicate it to our own children, all children on Earth, and to future generations—all of whom have a stake in the legal evolution of a doctrine that advances their inalienable rights to a balanced and healthy ecology.

1. For his influential code, the Institutes of Justinian, see J. Inst. (T. Sandars trans., 4th ed. 1867).

2. For his treatise, *De Jure Maris*, reprinted in Stuart Moore, *A History of the Foreshore and the Law Relating Thereto* (3rd ed. 1888).

3. For Arnold v. Mundy, 6 N.J.L. 1 (N. J. 1821).

4. For Illinois Central R.R. Co. v. Illinois, 146 U.S. 387 (1892).

5. For Marks v. Whitney, 6 Cal.3d 251, 491 P.2d 374, 98 Cal.Rptr. 790 (1971).

6. For the "Mono Lake" opinion, National Audubon Soc. v. Superior Court of Alpine Cty., 33 Cal.3d 419, 189 Cal.Rptr. 346, 658 P.2d 709 (1983).

7. For the "Waiahole Ditch" opinion, In re Water Use Permit Applications, 9 P.3d 409 (Haw. 2000).

8. For Metropolitan Manila Development Authority v. Concerned Citizens of Manila Bay, 574 S.C.R.A. 661 (Phil. S. Ct. 2008).

9. For a decision recognizing atmosphere as a trust asset, see Angela Bosner-Lain, et al. v. Texas Commission on Environmental Quality, No. D-1-GN-11-002194 (201st Judicial District Court, Tx., Aug. 2, 2012).

10. For Robinson Township v. Commonwealth, 83 A.3d 901 (Pa. 2013).

11. For Juliana v. United States, 217 F.Supp.3d 1224, 1255 (D. Or. 2016), rev'd and remanded, 947 F.3d 1159 (9th Cir. 2020).

12. For his path-breaking article, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471 (1970).

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Preface to the Third Edition

The public trust doctrine continued to evolve in the five years since the second edition was published. Among the more notable new court opinions was the Pennsylvania Supreme Court's decision in *Pennsylvania Environmental Defense Foundation v. Commonwealth* (p. 90), recognizing the inherent nature of the public trust doctrine in the state's constitution and applying it to funding decisions; the California Court of Appeal's decision in *Environmental Law Foundation v. State Water Resources Control Board* (p. 215), extending the public trust to groundwater extraction; the North Carolina Court of Appeals' decision in *Nies v. Town of Emerald Isle* (p. 312), recognizing the doctrine's application to North Carolina beaches; and *Juliana v. United States* (p. 383), in which a federal district court found a constitutional right under the public trust principle and the Constitution's due process clause to a "climate system capable of sustaining human life," but a divided panel of the Ninth Circuit dismissed the case on redressability grounds.

Even more startling developments occurred beyond the boundaries of the United States. Perhaps the most noteworthy was the Dutch Supreme Court's affirmation in *Netherlands v. Urgenda Foundation* (p. 417), finding a sovereign duty of care to reduce greenhouse gas emissions in compliance with international climate obligations. Other important court decisions were handed down in Pakistan (pp. 459–464), Colombia (p. 471), and more cases in India (n. 6, p. 458–59, p. 540). A potential pathbreaking decision is the Constitutional Court of Colombia's Atrato River opinion (p. 530), extending constitutional protection to biodiversity and indigenous culture.

These and other developments are examined in this edition of the casebook. Its publication comes during a time when the world is in the throes of a global pandemic and intensifying climate disasters, and when communities in the United States and around the globe are making renewed demands for justice. In a time of turmoil and transition, the public trust remains an ancient obligation anchoring the fundamental expectations of democracy, ensuring access to and protection of public resources, and providing a steadying force of government accountability. We hope that students of the public trust doctrine will find the third edition to be of value in their study of this dynamic and consequential area of the law.

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Preface to the Second Edition

Our goal in publishing the first edition of this casebook a couple of years ago was to create a systematic approach to the study of the public trust doctrine (PTD), and we think our book has helped to begin the institutionalization of the doctrine in law study.

In this second edition, we have included several significant developments in what is a rapidly evolving body of law. The most notable new decision is *Robinson Township v. Commonwealth* (p. 82), a decision of the Pennsylvania Supreme Court which has quickly become a foundational decision. We have also included the Wisconsin Supreme Court's opinion in *Rock-Koshkonong Lake District v. Department of Natural Resources* (p. 147), in which the court narrowly interpreted the scope of that state's PTD, arguably misinterpreting that court's seminal decision of *Just v. Marinette County* (p. 141) in the process. A case which may expand the scope of the PTD in California to groundwater is *Environmental Law Foundation v. State Water Resources Control Board* (p. 184), although whether California will join states like Hawaii and Vermont that recognize groundwater as a trust resource awaits whether the environmental claimants can prove a link between groundwater pumping and the surface flows of the navigable Scott River.

There have been a considerable number of developments in the cluster of cases that seek to recognize the atmosphere as a trust resource, and we discuss these developments in some detail in chapter 11 (pp. 365–405). A steady stream of case law also continues to arise out of efforts of members of the public to access trust resources, mostly in the context of waterways experiencing monopoly control (chapter 3, pp. 95–138). We also have updated the text to expand our consideration of the PTD abroad to include considerable case law from Indonesia (p. 352), a constitutional amendment in Norway (p. 359), and statutory developments in Britain and the Nordic countries (p. 360).

There are other changes as well. The above summary reflects only a snapshot of developments in this rapidly expanding area of law. We expect the pace of change to accelerate in the near future, and we pledge to try to keep current with it.

We continue to believe that this course is an ideal upper-level course in environmental law. It offers a common-law-based approach to environmental decision making, a contrast in a field dominated by statutes and administrative regulations. Although there is a role for statutory and regulatory interpretations of the PTD, there is little doubt that the vibrant center of the PTD lies in a judiciary that understands the importance of trust resources to both present and future generations. That in

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turn requires courts that are schooled in the doctrine's history, its evolution in other jurisdictions, and the fundamental anti-monopolistic purposes it has always served and continues to serve, including intergenerational equity.

We hope this effort contributes to the evolution of the PTD in the 21st century by educating the next generation of lawyers who must convince judges of the role the PTD can play in a world that is becoming increasingly crowded, experiencing the diminishment of trust resources, and threatened with climate change which will imperil trust resources first.

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Preface to the First Edition

The public trust doctrine (PTD) is an ancient doctrine of property law that governs sovereign stewardship of natural resources. First surfacing in Roman law through the Justinian Code, it was revived in medieval England largely through the efforts of Sir Mathew Hale and became entrenched in American law in the nineteenth century through the process of statehood. In the twentieth century, the doctrine became a favorite of the law professoriate and the environmental community for its potential to recognize public rights in private property. The doctrine both promotes public access to trust resources and justifies government protection of them. It also equips the public—the beneficiaries of the trust—with the right to challenge government on the management of their ecological assets. This doctrine, remarkable for its endurance through the ages, now brings populist overtones and human rights underpinnings to the modern fields of environmental law and property law.

We offer the first casebook on public trust law. In it, we have endeavored to capture the rich history and considerable diversity of the field. Although the PTD is often characterized as a doctrine of state law, we think the perception is erroneous because the PTD is an inherent attribute of sovereignty and, accordingly, should apply to both the federal and state governments. The origins of the American PTD lie in bilateral federal-state agreements admitting states to the Union, but the doctrine is also recognized in countries as far-flung as India, the Philippines, Kenya, and Brazil. We survey the PTD's application from the local to global level.

The wellspring of the American PTD lies in a distinctive antimonopoly sentiment that, widespread in the nineteenth century, continues to inspire a vibrant body of case law concerning public access to trust resources. That case law—as well as state constitutions and statutes—has expanded the scope of trust assets from lands submerged beneath navigable waters to wetlands, beaches, parklands, wildlife, air, and groundwater. Internationally, the doctrine has advanced concepts of sustainable development and the precautionary principle, and thus is frequently linked to the public's right to life, health, and environmental protection. There are ongoing efforts to use the PTD to combat climate change by applying it to curb carbon emissions.

While the origins of the PTD date to Roman times, the PTD carries enormous importance today, as many statutory systems fail in their basic purpose of protecting public resources from private exploitation. A course in public trust law allows students to break out of the narrow confines of statutory law and immerse themselves in fundamental principles that provide a fulcrum for sustainable environmental management. The course can, and we think should, delve into the most basic questions of

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constitutionalism and the role of the judiciary, legislatures, and courts in allocating natural resources.

At less than 500 pages, we think this book is ideal for an advanced course or seminar in environmental, natural resources, or property law. The casebook is accompanied by a teachers' manual as well. We have designed the text not only as a set of teaching materials, but also as a research platform for further inquiry into public trust law. We have relied heavily on the rich scholarship in public trust law and have tried to supplement it. Students in our classes have produced multiple summaries of state public trust law as well as law review notes and articles analyzing some of the most intriguing questions generated by the doctrine. We encourage you to send us cases and materials and as well as your contributions to the law of the public trust, which we will use in new editions of this text and in a treatise on the subject.

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We also benefitted from grants from the Rocky Mountain Mineral Law Foundation, whose assistance funded our research assistants. We are grateful for the Foundation's support and its continued interest in the public trust doctrine.

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The Public Trust Doctrine in Environmental and Natural Resources Law

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Chapter 1

Introduction

The public trust doctrine (PTD), an ancient doctrine governing the management of natural resources, first surfaced in Roman law, reemerged in medieval England, and then was transported across the Atlantic to the United States in the early nineteenth century. Functioning as a public property doctrine, the PTD imposes limits on governmental action and provides public access rights to trust resources. In the United States, the doctrine's reach expanded from coastal areas affected by the tides to large inland waterways in the nineteenth century; it also evolved from a mechanism promoting navigation and commercial fishing to one protecting recreation and ecological integrity. Some commentators see the potential of the PTD to continue to evolve into an organizing principle for natural resources management in the twenty-first century.

Many environmental law classes focus on statutory law to address environmental issues. But the enduring PTD long predates all modern statutes, having roots in United States law in court opinions from over a century ago. Although the legislature's police power underlies statutes, the PTD emanates from property law. The doctrine posits the government as a trustee of selected natural resources that must be managed for the long-term benefit of the public. A trust is a type of ownership in which one party manages property for the benefit of another party. The trust bifurcates ownership between the *trustee*, who holds legal title, and the *beneficiary* who holds beneficial ownership. The assets in the trust make up the *res* or *corpus* of the trust. The trustee is under a fiduciary obligation to manage the assets for the sole benefit of the beneficiaries.

Trusts are well-established in the private law context. The basic construct, as well as many of the same principles, applies also to the sovereign context. In the case of the public trust, the beneficiaries are the citizens, both present and future generations. As a foundational property law principle, this doctrine aims to ensure that the government safeguards, and makes publicly accessible, natural resources which are necessary for public welfare and survival.

The doctrine has attracted widespread attention from the legal academy and legal practitioners for its potential to force government protection of environmental resources. Professor Harrison Dunning has called the doctrine a "fundamental doctrine of American property law."[1] Professor Gerald Torres has described the PTD as "the

1. Harrison C. Dunning, *A Fundamental Doctrine of American Property Law*, 19 Envtl. L. 515 (1989).

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law's DNA."[2] The public property right to trust resources ranks so fundamental that some scholars and courts characterize it as a natural right or human right. As Professor Joseph Sax suggested over four decades ago in a landmark article, the public trust responsibility underpins democracy itself, demarcating a society of "citizens rather than of serfs."[3]

The PTD requires governmental trustees to manage the resources that are in the corpus of the trust as a long-term steward for the benefit of both present and future generations. The doctrine thus interjects notions of sustainable development and intergenerational equity into the decision-making calculus. And because application of the doctrine encourages active judicial review of resource allocation, it provides a counterweight to a tradition of judicial deference to agency decision making which has come to characterize statutory environmental law.

For all of these reasons, the PTD is conceptually attractive to those concerned about sustainable natural resource use in the twenty-first century, particularly where statutes have failed to achieve their protective aims. However, the doctrine suffers from fragmentation. Each jurisdiction has its own interpretation of the doctrine. Some jurisdictions have quite active versions; some have PTDs that have been seldom used. This variety has hindered widespread use of the doctrine, as neither practitioners nor students nor professors have ready access to analysis of the PTD in their particular jurisdictions or to a systematic comparison of PTD themes across jurisdictions.[4]

As interest in the public trust surges both in the United States and internationally, the PTD becomes ever more a doctrine "in motion," as David Slade has put it.[5] This book assembles court cases, scholarly articles, and other materials to provide coherence to this emerging field. As you read through the materials, you should consider the future evolution of the doctrine as much as its history and current interpretation. In particular, the following structure and themes weave through all of the book's chapters, posing both practical and theoretical questions about the PTD's role in protecting environmental resources.

The Origin and Character of the Trust—As the following materials elaborate, the origins of the trust date to at least ancient Roman law. However, in the United States, the doctrine is often characterized as a state law doctrine. This characterization reflects the fact that most public trust cases arise in state courts. But although the PTD is undoubtedly a state doctrine, is it exclusively that? In other words, do its origins suggest that it applies only to the U.S. states? Surely not, as the PTD surfaces in many countries throughout the world. Reflecting its deep origins, some scholars and courts

2. Gerald Torres & Nate Bellinger, *The Public Trust: The Law's DNA*, 4 Wake Forest J.L. & Pol'y 281 (2014).

3. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471, 484 (1970).

4. Professor Blumm's students have been compiling state-by-state analyses of individual state PTDs. By early 2015, they had evaluated 45 states. *See* Michael C. Blumm (ed.), *The Public Trust Doctrine in 45 States*, *available at* http:// ssrn.com/ abstract=2235329.

5. David C. Slade, *The Public Trust Doctrine in Motion*, 1997–2008 (2008) (p. 549).

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have described the doctrine as an attribute of sovereignty applicable to all sovereigns, not just states in America. In one landmark case, *Geer v. State of Connecticut*, the U.S. Supreme Court referred to the trust over wildlife as an "attribute of government" and traced the doctrine back "through all vicissitudes of governmental authority."[6] Some modern decisions consider the doctrine as inherent in the sovereign structure. For example, in *In re Water Use Permit Applications* (often called the *Waiahole Ditch* case), the Hawai'i Supreme Court stated, "[H]istory and precedent have established the public trust as an inherent attribute of sovereign authority. . . ."[7] In another case, a federal district court described the trust as a limitation on sovereignty that "can only be destroyed by the destruction of the sovereign."[8] Professor Karl Coplan has claimed, "The idea that public trust limits and powers inhere in the very nature of sovereignty is one consistent thread in public trust cases. . . . Public trust principles have been described as an essential attribute of sovereignty across cultures and across millennia,"[9] and one of the editors has likewise noted, "The trust attribute of sovereignty . . . is fundamentally one of limitation, not power, organically comprised as a central principle of governance itself."[10]

The trust has been incorporated into many state constitutions and statutes in the U.S. as well as in the constitutions and statutes of other countries. It is important to recognize, however, that the trust pre-exists such enactments. For example, in *Esplanade Properties v. City of Seattle*, the Ninth Circuit declared, "It is beyond cavil that 'a public trust has always existed in Washington' " and noted that the doctrine is "partially encapsulated in the language of" the state constitution as well as reflected in the state shoreline management act.[11] The Philippines Supreme Court gave the matter poetic force in *Oposa v. Factoran*, when it characterized the right of future generations to "a balanced and healthful ecology," which had been incorporated expressly in the Philippines 1987 Constitution. The Court noted:

> Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self-perpetuation . . . the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, these basic rights need not even be written in the Constitution for they are assumed to exist from the inception of humankind. If they are now explicitly mentioned in the fundamental charter, it is because of the well-founded fear of its framers that unless the right to a balanced and healthful

6. *Geer v. Connecticut*, 161 U.S. 519, 525–28 (1896) (p. 253).

7. *In re Water Use Permit Applications*, 9 P.3d 409, 443–44 (Haw. 2000) (p. 223).

8. *United States v. 1.58 Acres of Land*, 523 F. Supp. 120, 124 (D. Mass. 1981) (p. 496).

9. Karl S. Coplan, *Public Trust Limits on Greenhouse Gas Trading Schemes: A Sustainable Middle Ground?*, 35 Colum. J. Envt'l L. 287, 311 (2010).

10. Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part I): Ecological Realism and the Need for a Paradigm Shift*, 39 Envtl. L. 43, 71 (2009).

11. *Esplanade Properties, LLC. v. Seattle*, 307 F. 3d 978, 985 (9th Cir. 2002) (quoting *Rettkowski v. Dep't of Ecology*, 858 P.2d 232, 239 (Wash. 1993)) (p. 190); *Orion Corp. v. State*, 747 P.2d 1062, 1072 (Wash. 1987)).

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> ecology and to health are mandated as state policies by the Constitution itself … the day would not be too far when all else would be lost not only for the present generation, but also for those to come—generations which stand to inherit nothing but parched earth incapable of sustaining life.[12]

An important question is whether the public trust has constitutional force in those instances where it has not been incorporated explicitly into a constitution of a state or nation. Doctrines of constitutional character take precedence over contrary statutes, whereas judge-made common law alone does not carry such trump force. Although the U.S. PTD is often characterized as common law, some scholars have located implicit constitutional underpinnings as well. For example, Professor Doug Grant viewed the American doctrine as embedded in the constitutional reserved powers doctrine, a concept we explore in chapters 2 and 12.[13]

The Trustees—The PTD characterizes the government as trustee. Each branch plays a role according to its constitutional position in the structure of government. As the primary governing branch of the sovereign, the legislature is the principal trustee of the public's assets. Agencies in the executive branch act as "agents" of the legislature and are encumbered by trust obligations as well (although some jurisdictions require an explicit conferral of trust authority by the legislature to impose trust duties on administrative agencies). Generally, the agencies with authority to regulate the harm in question are the ones subject to a trust duty.[14] Finally, the courts act as enforcers of the trust, just as they do in the private trust world.

State governments are well-established trustees under the PTD. Historically, states took the primary role in managing environmental and natural resources, so most PTD conflicts involved states instead of the federal government. With the enactment of major environmental statutes in the 1970s, however, the federal government assumed primacy in much environmental regulation (although many statutes allow states to develop programs implementing federal statutes). This active federal role brings to the forefront the question of whether the federal legislature and agencies are trustees along with the states. Few cases have considered the issue, but over fifty law professors signed an amicus brief claiming that the federal government is indeed a trustee,[15] a matter we explore in chapter 11.

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12. *Oposa v. Factoran*, 224 S.C.R.A. 792 (S.C. 1993) (Phil.).

13. Douglas L. Grant, *Underpinnings of the Public Trust Doctrine: Lessons from Illinois Central*, 33 Ariz. St. L.J. 849, 879–80 (2001).

14. *See Ctr. for Biological Diversity v. FPL Group, Inc.*, 83 Cal. Rptr. 3d 588, 603, 607 (Cal. Ct. App. 2008) (p. 280) (applying the trust duty to "agencies that are responsible for regulating [the harmful] activities" and noting a right held by the public "to insist that the state, through its appropriate subdivisions and agencies, protect and preserve public trust property.").

15. *See Alec L.* ex rel. *Loorz v. McCarthy*, 561 Fed. Appx. 7 (Mem) (D.C. Cir. 2014), *cert. denied*, 135 S. Ct. 774 (2014). Brief for Law Professors as Amici Curiae in Support of Granting Writ of Certiorari, *Alec L. ex rel. Loorz v. McCarthy*, 561 Fed. Appx. 7 (Mem) (No. 14-405), 2014 U.S. S. Ct. Briefs LEXIS 3897. *See* Michael C. Blumm & Lynn Schaffer, *The Federal Public Trust Doctrine: A Law Professors' Amicus Brief* (November 6, 2014), Lewis & Clark Law School Legal Studies Research Paper No. 2014-18, *available at* SSRN: http:// ssrn.com/ abstract=2518260. *See also Juliana v. United States,*

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If the federal government is not a trustee, what is its role with respect to the public property it controls? Surely the federal government must act to protect the public from whom it gains its power. If we view the trust as an attribute of sovereignty, is there any reason to distinguish the federal and state governments? Professor Coplan has suggested that "[i]f … the public trust is essential to the nature of sovereignty and encompasses rights reserved to the people generally, then the doctrine applies equally to the sovereign federal government as it does to the sovereign state governments."[16]

What would be the ramifications of applying the PTD to the federal government? The case that considered the matter most thoroughly (and found the PTD applicable to the federal government) is *United States v. 1.58 Acres of Land* (p. 496).[17] One of the editors has characterized the federal government as a "co-trustee" of resources along with the states, concluding, "Within the United States, layered sovereign interests in natural resources arise from the constitutional configuration of states and the federal government. Where the federal government has a national interest in the resource, it is a co-trustee along with the states."[18]

How have other countries dealt with this issue? Are federal agencies and legislatures in other nations subject to the PTD? One of the editors co-authored a study examining PTD case law from a dozen other countries and found that several nations applied the public trust to their national government.[19] We take up the PTD abroad in chapter 11.

The Beneficiaries—Courts have repeatedly emphasized that the beneficiaries of the trust are both the present and future generations of citizens. Professor John Davidson has observed that this feature gives a dual quality to the PTD, protecting both *intra-generational* and *inter-generational* interests.[20] Much of the trust literature and case law has focused on present-day disputes between different classes of citizens. In an article excerpted later in this chapter, for example, Professor Joseph Sax called attention to the disparity between a "diffuse majority" and a "concerted minority" in natural resources law, noting that the trust can serve as a tool of "democratization" to protect the rights of citizens.[21] Other scholars, such as Edith Brown Weiss, have focused on the question of intergenerational equity, which stands threatened when the consump-

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217 F.Supp.3d 1224, 1255 (D. Or. 2016) *rev'd and remanded*, 947 F.3d 1159 (9th Cir. 2020) (plaintiffs alleged that federal "defendants violated their duties as trustees by failing to protect the atmosphere, water, seas, seashores, and wildlife"; appeals court determined they lacked standing after the district agreed that the federal government had public trust obligations).

16. Coplan, above note 9, at 313.

17. 523 F. Supp. 120 (D. Mass. 1981) (p. 496).

18. *See* Wood, above note 10, at 85.

19. Michael C. Blumm & Rachel D. Guthrie, *Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxion Vision*, 45 U.C. Davis L. Rev. 741, 763 (2012).

20. *See* John Davidson, *Taking Posterity Seriously: Intergenerational Justice*, Climate Legacy Initiative Research Forum of Vermont Law School (Jan. 28, 2008), https://vlscli.wordpress.com/2008/01/28/taking-posterity-seriously-intergenerational-justice/.

21. Sax, above note 3, at 560–61 (p. 27).

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tive needs of the present citizens deprive future beneficiaries of their natural trust inheritance.[22]

The Assets in the Trust—The materials in this first chapter focus on what is generally thought of as the "traditional public trust," which concerns primarily submerged lands and navigable waterways. But the trust has expanded greatly beyond the navigability confines in many states. As Professor Lazarus reported, the doctrine has been applied to water resources, wildlife, parklands, a battlefield, and other important areas.[23] As this field evolves, a primary question concerns the scope of the *res*: What assets are considered public trust assets? Although some scholars tend to focus narrowly on the historical precedent, increasingly resources beyond streambeds play an equally important societal role, a fact recognized by many courts in jurisdictions beyond the U.S.[24] If the PTD is to maintain relevance in a changing world, courts must continue to recognize an expanding group of trust resources, which the Supreme Court defined over a century ago to mean those "of public concern."[25]

Some statutes and constitutions specify that all natural resources fall within the *res* of the trust. For example, art. XI, section 1 of the Hawai'i Constitution declares that "All public natural resources are held in trust by the State for the benefit of the people."

Is there any good reason—beyond historical—to treat submerged lands in the trust and not, say, the atmosphere and public drinking water supplies? As you read the materials, ask what factors led a court to treat a resource as a public trust asset and examine whether that logic could be extrapolated to other natural resources that have equal importance to society. One of the editors, for example, has argued for an expansion of the scope of the trust to a full "ecological *res*."[26]

Fiduciary Duties—Every trustee has fiduciary duties to ensure management of the asset in accordance with the purposes of the trust. In the private law context, these duties are both procedural and substantive, enforced strictly by courts. Substantive duties ensure protection of the assets of the trust, while procedural duties attempt to ensure that the trustee acts in the sole interest of the beneficiary. The trustee's duty of loyalty, for example, ranks highest in the category of procedural duties.

In the public trust law context, ask yourself what fiduciary duty the courts seem to apply in a given circumstance. Some courts have derived the standard of "substantial impairment" from the landmark *Illinois Central* case (p. 70) as a substantive standard by which to evaluate government action with respect to trust assets. For example, in the *Waiahole Ditch* case, the Hawai'i Supreme Court noted:

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22. Edith Brown Weiss, *The Planetary Trust: Conservation and Intergenerational Equity*, 11 Ecology L.Q. 495 (1984).

23. Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 Iowa L. Rev. 631 (1986).

24. *See* Blumm & Guthrie, above note 19, at 760–807 (explaining the public trust doctrines in India, Pakistan, Philippines, Uganda, Kenya, Nigeria, South Africa, Brazil, Ecuador, and Canada).

25. *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 455 (1892).

26. *See* Wood, above note 10, at 78–84.

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> As commonly understood, the trust protects public waters and submerged lands against irrevocable transfer to private parties … or "substantial impairment," whether for private or public purposes.… In this jurisdiction, our decisions … and the plain meaning and history of the term "protection" [in the State's constitution] establish that the state has a comparable duty to ensure the continued availability and existence of its water resources for present and future generations.[27]

Another intriguing aspect of the public trust fiduciary duty is its relationship to statutory mandates. Can a legislature, for example, allow damage to a public trust asset by statute? Do statutes affecting trust assets supplant the PTD? These issues raise a number of separation of powers issues between the legislature and the courts.

Applications of the Trust — The PTD tends to arise in five different contexts, which are becoming more distinct as this field advances.

1) Government conveyance of public trust assets to private parties. Much early case law for example, focused on privatization issues. An example of a privatization issue is a circumstance in which a state could permissibly convey its tidelands to private parties. Modern cases state appropriation of water rights to private parties might be considered as part of this category as well.

2) Government management of trust assets. Increasingly, modern agencies fail to protect public resources, and citizens look to the PTD to provide more effective action by requiring fiduciary action. For example, an ongoing legal campaign known as atmospheric trust litigation, discussed in chapter 9, seeks to force government action to curtail carbon pollution, since the Clean Air Act has largely failed.

3) The duties of private owners on land previously held in trust (such as tidelands), and then conveyed into private ownership. The PTD conceptually divides trust assets into two (as does a private trust): a *jus privatum*, subject to the private owner's prerogative and a *jus publicum*, subject to the sovereign's prerogative. The upshot is that the owner of the *jus privatum* may not be able to impair public uses by, for example, filling wetlands which remain subject to the *jus publicum.*

4) The PTD as a defense to constitutional takings claims. The PTD functions as a "background principle" of property law, and therefore, where applicable, means that there is no private property upon which to base a Fifth Amendment claim of a taking of private property for public use.

5) Government's right to obtain damages from those destroying or damaging trust assets. Several statutes, for example, provide for natural resource damages, but the duty to collect damages preceded the statutes and exists independently of the statutes as a common law remedy for trustees.

As you consider these materials, ask what principles transfer from one context to another? What contexts are underdeveloped, and why?

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27. *In re Water Use Permit Applications*, 9 P.3d 409, 451 (Haw. 2000) (p. 223).

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Enforcing the Trust—Without effective enforcement of fiduciary obligations, there is no real trust, and the trustee is left with enormous power over the trust assets. Thus, enforcement remains a crucial part of the PTD. In the private law context, trusts are rigorously enforced to protect the trust beneficiaries. In the public law context, however, such enforcement sometimes gives rise to separation of powers issues. Normally a court will defer to the legislative intent expressed in a statute, but courts have occasionally overturned legislation as a violation of the PTD,[28] suggesting the PTD as a constitutional principle. Professor Dunning once wrote of the PTD, "More indicative of the doctrine's fundamental nature, however, is the way the courts, the originators of the doctrine in this country, have in some states concluded that the doctrine is so entrenched as to be immune from legislative abolition. In those states the public trust doctrine has assumed the character of an implied constitutional doctrine. . . ."[29] But courts have been less than clear about the precise underpinnings of public trust authority.

In Arizona, the courts blocked a legislative attempt to relinquish public ownership of navigable riverbeds on both public trust and state constitutional grounds.[30] What is the rationale for such a judicial "veto" of legislative action that violates the trust? Under what circumstances should courts be deferential, and under what circumstances should they insist on the trustee fulfilling its trust obligations? Does it matter whether the legislative action risks irrevocable harm? Consider this statement of the Arizona court: "The beneficiaries of the public trust are not just present generations but those to come. The check and balance of judicial review provides a level of protection against improvident dissipation of an irreplaceable *res*."[31] Is deference more appropriate when there is time and opportunity to prevent irrevocable loss to the trust?

These are some of the intriguing unanswered questions concerning the PTD field. As citizens increasingly turn to the PTD to try to force government action when statutes fail to protect a resource, courts will encounter defenses raised by government trustees involving preemption and displacement of the public trust. Resolution of these issues will depend in large part upon whether one views the trust as an inherent constitutional obligation or a common law obligation, the latter susceptible to being trumped by statute.

The Private/Public Property Rights Link—Although law students spend a significant part of their first-year curriculum studying private property rights, the PTD presents public property rights that are often overlooked. Courts dealing with the PTD endeavor to demarcate the appropriate balance between privatization and public property rights. Depending on the circumstances, the trust might be thought of as imposing an easement (allowing public access along tidelands, for example) or a servitude (preventing an owner from damaging a trust resource).

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28. *See* p. 86.

29. Harrison C. Dunning, *The Public Trust: A Fundamental Doctrine of American Property Law*, 19 Envtl. L. 515, 516 (1989).

30. *Arizona Ctr. for Law in the Pub. Interest v. Hassell*, 837 P.2d 158 (Ariz. Ct. App. 1991) (interpreting the gift clause of the state constitution).

31. *Id.* at 169.

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The PTD right, held originally by the people and exercised through government, runs antecedent to any private property right later acquired. Accordingly, it plays a unique role in the constitutional takings doctrine arising under the Fifth Amendment, which calls for compensation when government "takes" private property for public purposes. Public trust theory holds that the assertion of public trust rights does not deprive the property owner of any rights he or she ever had, because a landowner's title was always encumbered by the "background principle" of public trust. Although the PTD can defeat private takings claims, as one of the editors described in reviewing the doctrine's relationship with private property rights, the PTD is fundamentally an accommodation doctrine.[32] Both public and private property uses often coexist in the same tract. The public's *jus publicum* combines with the private *jus privatum* to make up "title" to the tract. We explore the public/private synthesis in chapter 10.

Flexibility to Respond to Changing Conditions—The PTD is notable for its capacity to change in response to the emerging needs of society. As the New Jersey Supreme Court long ago observed, "[W]e perceive the public trust doctrine not to be 'fixed or static,' but one to 'be molded and extended to meet changing conditions and needs of the public it was created to benefit.'"[33] In a similar vein, the California Supreme Court emphasized, "In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another."[34] But despite many courts' embrace of change, in some jurisdictions the doctrine has remained closely linked to its traditional application to streambeds of navigable waters. What is the function of precedent in molding a doctrine to new circumstances? In an article later in this chapter, Professor Sax noted,

> [I]t is clear that the judicial techniques developed in public trust cases need not be limited either to [the] conventional interests or to questions of disposition of public properties … [but] would be equally applicable and equally appropriate in controversies involving air pollution, the dissemination of pesticides, the location of rights of way for utilities, and strip mining or wetland filling on private lands in a state where governmental permits are required.[35]

As you read through the materials in this book, consider whether and how the doctrine should expand to meet modern exigencies.

The following treatments of the PTD introduce the doctrine and explain its importance.

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32. See Michael C. Blumm, *The Public Trust Doctrine and Private Property: The Accommodation Principle*, 27 Pace Envtl. L. Rev. 649 (2010).

33. *Raleigh Ave. Beach Ass'n v. Atlantis Beach Club, Inc.*, 879 A.2d 112, 121 (N.J. 2005) (quoting *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 365 (N.J. 1984)) (p. 307). * The editors have altered punctuation and formatted articles, opinions, and excerpts to be consistent with the greater text; thus, excerpts may appear different than their original forms.—Eds.

34. *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971) (p. 150)

35. Sax, above note 3, at 556–57, excerpted on p. 27.

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Putting the Public Trust Doctrine to Work

David C. Slade
Coastal States Org. (2d ed. 1997)

The public trust doctrine provides that public trust lands, waters and living resources in a state are held by the state in trust for the benefit of all of the people, and establishes the right of the public to fully enjoy public trust lands, waters and living resources for a wide variety of recognized public uses. The doctrine also sets limitations on the states, the public, and private owners, as well as establishing the responsibilities of the states when managing these public trust assets.

In general, public trust waters are the "navigable waters" in a state, and public trust lands are the lands beneath these waters, up to the ordinary high-water mark. The living resources (*e.g.*, the fish and aquatic plant and animal life) inhabiting these lands and waters are also subject to the public trust doctrine.

* * *

Public trust lands are special in nature. They are generally unsuitable for commercial agriculture or permanent structures. Because of the "public" nature of trust lands, the title to them is not a singular title in the manner of most other real estate titles. Rather, public trust land is vested with two titles: the *jus publicum*, the public's right to use and enjoy trust lands and waters for commerce, navigation, fishing, bathing and other related public purposes, and the *jus privatum*, or the private proprietary rights in the use and possession of trust lands.

Whenever a state exercises its public trust authority, it does so immediately adjacent to some of the most expensive real estate in America—waterfront property. Given the strong property (riparian) interests of private upland owners, coupled with the confusion over riparian "rights" and how the public trust doctrine applies, coastal managers need to be keenly aware that their actions under the doctrine may be met with strong resistance.

A. The Public Trust Doctrine: Why is it Important?

In 1820, a New Jersey man was collecting oysters along the shores when he was challenged as a trespasser by the upland property owner. The dispute reached the New Jersey Supreme Court, where a justice expressed surprise that the taking of:

> [A] few bushels of oysters … should involve in it questions, [so] momentous in their nature, as well as in their magnitude; … affecting the rights of all our citizens, and embracing … the laws of Nations and of England, the relative rights of sovereign and subjects, as well as the municipal regulations of our own country.[36]

If the taking of a few oysters raises such fundamental questions affecting the rights of all citizens, then clearly the building of private docks, industrial wharves, marinas, or the dredging of ship channels, among the countless other activities within the

36. *Arnold v. Mundy*, 6 N.J.L. 1, 79 (1821) (Rossell, J., concurring opinion).

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purview of coastal managers, merit close attention. In each instance, from oysters to ports, the public trust doctrine applies. Whenever a state exercises its authority under the public trust doctrine, the rights of all citizens are involved.

Generally speaking, all navigable waters and the lands beneath these waters are subject to the public trust doctrine. In the United States, there are 79,481 square miles of inland navigable waters, 74,364 square miles of coastal waters, and an estimated 37,500 square miles of ocean waters within the jurisdiction of the coastal states. This totals to approximately 191,000 square miles of navigable waters within the boundaries of the states — roughly equal in size to Maryland, Virginia, North Carolina, South Carolina and Georgia combined — most of which is subject to the public trust doctrine. Further, there are 88,633 miles of tidelands and 10,031 miles of Great Lakes shoreline, for a total of 98,664 miles of trust shoreland. Along this tremendous length of shoreline, over 90 percent of the adjacent uplands are privately owned, raising difficulties for the public to access the trust shorelands below the ordinary high-water mark.

The public trust doctrine is a very important part of the body of law that applies to this tremendous and special area of lands and waters. To effectively manage the countless activities that take place within these 191,000 square miles of navigable waters, including the lands beneath and the living resources inhabiting them, a coastal manager must be familiar with the public trust doctrine.

B. The Public Trust Doctrine: What Is It?

The public trust doctrine provides that public trust lands, waters and living resources in a state are held by the state in trust for the benefit of all of the people, and establishes the right of the public to fully enjoy public trust lands, waters and living resources for a wide variety of recognized public uses. The public trust doctrine is applicable whenever navigable waters or the lands beneath are altered, developed, conveyed, or otherwise managed or preserved. It applies whether the trust lands are publicly or privately owned. The doctrine articulates not only the public rights in these lands and waters. It also sets limitations on the states, the public, and private owners, as well as establishing duties and responsibilities of the states when managing these public trust assets. The public trust doctrine has been recognized and affirmed by the United States Supreme Court, the lower federal courts and state courts from the beginning days of this country to the present.

The "trust" referred to is a real trust in the legal sense of the word. There are trust assets, generally in the form of navigable waters, the lands beneath these waters, the living resources therein, and the public property interests in these trust assets. The trust has a clear and definite beneficiary: the public, which includes "not just present generations but those to come."[37] There are trustees: the state legislatures, which often delegate their trust powers and duties to state coastal commissions, land commissions, or similar state agencies, as well as municipalities. These trustees have a duty to protect the trust. There is a clear purpose for the trust: to preserve and continuously

37. *Arizona Ctr. for Law in the Pub. Interest v. Hassell*, 837 P.2d 158, 169 (Ariz. Ct. App. 1991).

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assure the public's ability to fully use and enjoy public trust lands, waters and resources for certain public uses.[38]

In the United States, each state has the authority and responsibility for applying the public trust doctrine to trust lands and waters "within its borders according to its own views of justice and policy."[39] As a result, there is really no single "public trust doctrine." Rather, there are over fifty different applications of the doctrine, one for each state, Territory or Commonwealth, as well as the federal government. Nonetheless, a common core of principles remains, forming the foundation for how the Doctrine is applied in each state, Commonwealth or Territory.

C. Origins of the Public Trust Doctrine

It is often stated that the public trust doctrine dates back to the sixth century Institutes of Justinian and the accompanying Digest, which collectively formed Roman civil law, codified under the reign of the Roman Emperor Justinian between 529 and 534 A.D. The sixth century Institutes of Justinian, however, were based, often verbatim,[40] upon the second century Institutes and Journal of Gaius,[41] an eminent Roman jurist, who codified the natural law of Greek philosophers. The sixth century Romans who wrote the Institutes must have regarded the Institutes of Justinian as the re-codification of ancient law.

Ancient in their own right, as well as a recodification of even more ancient law, the Institutes of Justinian remain a touchstone of today's public trust doctrine. The public's right to full use of the seashore emanates from a commonly quoted section of Book II of the Institutes that described the public nature of rivers, ports, and the seashore:

> By the law of nature these things are common to all mankind—the air, running water, the sea, and consequently the shores of the sea. No one, therefore, is forbidden to approach the seashore, provided that he respects habitations, monuments, and the buildings, which are not, like the sea, subject only to the law of nations.[42]

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38. *Idaho Forest Indus., Inc. v. Hayden Lake Watershed Improvement Dist.*, 733 P.2d 733, 738 (Idaho 1987) ("The public trust doctrine is based upon common law equitable principles. That is, the administration of land subject to the public trust is governed by the same principles applicable to the administration of trusts in general.") (citing Bogert & Bogert, Law of Trusts, §6 (1973)); *Slocum v. Borough of Belmar*, 569 A.2d 312, 316–17, (N.J. Super. Ct. Law. Div. 1989) (The Borough of Belmar, as a municipality chartered by the state, is trustee over the public trust resources within its jurisdiction. As trustee, it has a duty of "loyalty," "disclosure," and "to keep clear and adequate records of accounts.... When the trustee fails to keep proper accounts, all doubts are resolved against him.").

39. *Shively v. Bowlby*, 152 U.S. 1, 26 (1894).

40. "Over one-half of the Institutes of Justinian is borrowed bodily from the text of Gaius." Charles Phineas Sherman, Roman Law in the Modern World 121, 122 (3rd. ed. 2012). For a recent examination of the origins of the Roman public trust doctrine that traces its roots to centuries before the Institutes, *see* J.B. Ruhl & Thomas McGinn, *The Roman Public Trust Doctrine: What Was It, and Does It Support an Atmospheric Trust?*, 47 Ecology L.Q. __ (forthcoming 2020), (concluding that the American public trust doctrine has much stronger connections to Roman law than recent critics of the Roman roots narrative have suggested).

41. J. Inst., Proemium, 4, 5, 6 (T. Sandars trans., 4th ed. 1867).

42. *Id.* 2.1.1.

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Specific public rights in the use of the seashore were delineated in the Institutes and the Digest, such as:

> "Any person is at liberty to place on it a cottage, to which he may retreat, or to dry his nets there, and haul them from the sea."[43]
>
> "The right of fishing in the sea from the shore belongs to all men."[44]
>
> "Everyone has a right to build on the shore, or, by piles, upon the sea, and retain the ownership of the construction so long as it lasts, but when it falls into ruins, the soil reverts to its former status as *res communis*."[45]
>
> "The public use of the banks of a river is part of the law of nations, just as is that of the river itself. All persons, therefore, are as much at liberty to bring their vessels to the bank, to fasten ropes to the trees growing there, and to place any part of their cargo there, as to navigate the river itself. But the banks of a river are the property of those whose land they adjoin; and consequently, the trees growing on them are also the property of the same persons."[46]

Roman civil law eventually influenced the jurisprudence of all Western European nations. Most important to American jurisprudence, Roman civil law was adopted in substance (with modifications) by English common law after the Magna Carta. English common law in turn recognized the special nature of the tidelands and waters, giving them protection in the king's name for all English subjects. From England to the American colonies, through the American Revolution to the thirteen original states, tempered by the United States Constitution and the evolution of modern society, the public trust doctrine survives in the United States as "one of the most important and far-reaching doctrines of American property law."[47]

D. The Special Nature of Public Trust Lands

Public trust lands, generally speaking, are those lands below navigable waters, with the upper boundary being the ordinary high-water mark. Tidelands, shorelands of navigable lakes and rivers, as well as the land beneath the oceans, lakes and rivers, are usually considered public trust lands.

The Romans recognized the special status of the seashore: "The shores are not understood to be property of any man, but are compared to the sea itself, and to the sand or ground which is under the sea."[48] English common law viewed these shorelands as useless for cultivation or other improvement and considered their

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43. *Id.* 2.1.5.

44. Dig. 1.8.4 (W.A. Hunter, A Systematic and Historical Exposition of Roman Law in the Order of a Code (J. Ashton Cross trans., 4th ed. 1903)).

45. *Id.*

46. J. Inst. 2.1.4 (T. Sandars trans., 4th ed. 1867).

47. 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. 511 (1975).

48. J. Inst. 2.1.5 (T. Sandars trans., 4th ed. 1867).

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natural and primary uses — navigation, commerce and fishing — to be public in nature.

Under American law, the public nature of shorelands is well recognized. Tidelands, as well as the shorelands of navigable freshwaters, are generally unsuitable for commercial agriculture. The action of the wind, waves, tide and salt make any type of commercial farming impossible. Navigable waters have long been recognized as the equivalent of highways, being vast corridors for water-borne commerce.[49] In the early days of the country, the immediate shores of these waters were needed in order to conduct that commerce. Sailors tied their boats to trees for the night. Fishermen hoisted their skiffs far up the beach for the night, and dried or repaired their nets on the beach. In short, the uses [of this land were public in nature]. The public trust doctrine "is founded upon the necessity of preserving to the public the use of navigable waters free from private interruption and encroachment."[50]

The public character of trust lands has been noted by the United States Supreme Court as well as several state supreme courts. For example, the United States Supreme Court noted that tidelands are "unfit for cultivation, the growth of grasses or other uses to which upland is applied."[51] State courts have similar descriptions of trust shorelands. "Throughout history, the shores of the sea have been recognized as a special form of property of unusual value; and therefore subject to different rules from those which apply to inland property."[52] "Beaches are a unique resource and are irreplaceable."[53] "Oceanfront property is uniquely suitable for boating and other recreational activities. Because it is unique and highly in demand, there is growing concern about the reduced 'availability to the public of its priceless beach areas.' "[54] For these reasons, the title to public trust land is:

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49. *Packer v. Bird*, 137 U.S. 661, 667 (1891) ("It is, indeed, the susceptibility to use as highways of commerce which gives sanction to the public right of control over navigation upon [navigable waterways.]").

50. *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 436 (1892). *See also* Phillips Petroleum Co. v. Mississippi, 484 U.S. 469, 488 (1988) (O'Connor, J., dissenting).

51. *City & Cty. of San Francisco v. LeRoy,* 138 U.S. 656, 672 (1890). *See also United States v. 1.58 Acres of Land*, 523 F. Supp. 120, 122–23 (1981) ("For centuries, land below the low-water mark has been recognized as having a peculiar nature, subject to varying degrees of public demand for rights of navigation, passage, portage, commerce, fishing, recreation, conservation and aesthetics. Historically, no developed western civilization has recognized absolute rights of private ownership in such land as a means of allocating this scarce and precious resource among the competing public demands. Though private ownership was permitted in the Dark Ages, neither Roman Law nor the English common law as it developed after the signing of the Magna Carta would permit it."); *Kaiser Aetna v. United States*, 444 U.S. 164, 183 (1979) (The "geographical, chemical and environmental" qualities makes lands beneath tidal waters unique) (Blackmun, J., dissenting); *Shively v. Bowlby*, 152 U.S. 1, 57 (1894) ("Lands under tide waters are incapable of cultivation or improvement in the manner of lands above high-water mark.").

52. *Boston Waterfront Dev. Corp. v. Commonwealth*, 378 Mass. 629, 631 (1979).

53. *Matthews v. Bay Head Improvement Ass'n.*, 471 A.2d. 355, 364 (N.J. 1984).

54. *Lusardi v. Curtis Point Prop. Owners Ass'n.*, 430 A.2d 881 (N.J. 1981) (quoting *Van Ness v. Borough of Deal*, 78 N.J. 174, 180 (1978)).

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> [A] title different in character from that which the state holds in lands intended for sale. It is different from the title the United States holds in the public lands which are open to pre-emption and sale. It is a title held in trust for the people of the state that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.[55]

Although trust lands have long been considered suitable for public purposes, this does not mean that a state is powerless to convey any interest in trust land to private ownership. To the contrary, states do have this power, and several of them have conveyed tremendous amounts of acreage of trust lands into private ownership. But because of the special nature of trust lands for public uses, conveyance from the state to private ownership does not by itself terminate the public's right to continue to use those lands for certain purposes. In order to convey trust lands, while preserving the public's rights to use them, the law resorts to a legal fiction of splitting the title to trust lands in two: a proprietary title, the *jus privatum*, and the public's equitable title, held by the state in trust, the *jus publicum*.

E. The Jus Privatum *and* Jus Publicum *in Public Trust Lands*

Because of their special and public nature, the title to public trust lands is not a singular title in the manner of most other real estate titles. Rather, public trust land is vested with two titles, one dominant and the other subservient, a concept necessary to understand in order to apply the public trust doctrine. The dominant title is the *jus publicum*, simply described as the bundle of trust rights of the public to fully use and enjoy trust lands and waters for commerce, navigation, fishing, bathing and other related public purposes. The subservient title is the *jus privatum*, or the private proprietary rights in the use and possession of trust lands. The distinction between the two titles is often cited by the courts when they define a state's authority to convey public trust land to private ownership, and when describing the rights of the public remaining in public trust land that has been so conveyed.

In most states, the upland owner's boundary is the "ordinary high-water mark." In these "high water" states, the state is the "fee simple absolute" owner of public trust land, owning both interests—the private (*jus privatum*) and public (*jus publicum*) titles.[56] The state has the proprietary rights of a private landowner, which include the

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55. *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 452 (1892); *Coxe v. State*, 144 N.Y. 396, 405–06 (1895) ("The title of the state to the seacoast and shores of tidal rivers is different from the fee simple which an individual holds to an estate in lands. It is not a proprietary, but a sovereign right, and it has been frequently said that a trust is engrafted upon this title for the benefit of the public of which the state is powerless to divest itself."); *Boston Waterfront Dev. Corp. v. Commonwealth*, 393 N.E.2d 356, 358 (Mass. 1979) (explaining that different legal rules apply to public trust lands beneath navigable waters as compared to state-held title in other land); *State v. Cent. Vermont Ry.*, Inc., 571 A.2d 1128 (Vt. 1989) ("The character of this title is distinctive as compared to state-held title in other lands … and different legal rules therefore apply.").

56. *Orion Corp. v. State,* 747 P.2d 1062, 1072 (Wash. 1987) ("State ownership of [trust] property has two aspects, the private property interest, which reflects the State's title to the property, and the

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right to possess and convey the property, under its *jus privatum* interests. At the same time, the state holds the separate *jus publicum* title, the "trust" title, derived from its basic sovereign obligation to act in the best interests of its citizens. From this obligation derives the state's power to govern, manage and protect the public's trust rights in lands and water subject to the public trust doctrine.[57]

In several states, the upland owner's boundary is the "ordinary low-water mark" or some other line seaward of the ordinary high-water mark. In these "low water" states, the upland owner holds the *jus privatum* title in the tidelands, while the state retains the *jus publicum* title. Thus, even though the upland owner "owns" the beach or submerged lands, that ownership is still subject to several paramount rights of the public to use those trust lands for public trust purposes. Both the *jus publicum* and the *jus privatum* are property interests. Although both procedural and substantive limitations exist, a state can convey the *jus privatum* interest into private ownership. On the other hand, a state cannot convey the *jus publicum* interest into private ownership, nor can it abdicate its trust responsibilities. In certain limited situations, a state can terminate the *jus publicum* in small parcels of trust lands.

F. Takings, Expectations, Taxes and the Public Trust Doctrine

A central strength of using the public trust doctrine as a management tool for coastal resources is that the state holds a continuing property interest, the *jus publicum*, in the trust lands, waters and living resources, regardless of whether the *jus privatum* is held by the state or private owner. This allows the state to manage these resources as a property owner without having to exercise either its regulatory police powers or its powers of eminent domain. At the same time, whenever a state exercises its public trust authority, it does so immediately adjacent to some of the most expensive real estate in America — waterfront property. Waterfront (riparian) property owners justifiably can harbor strong opinions about their riparian property interests, especially if they also own the *jus privatum* rights in the adjacent public trust land.

Usually a private *jus privatum* owner of public trust land pays property taxes on the trust lands, lending a certain credence to the private owner's perception that she has sole possession and control of the property, exclusive of the public. Adding to

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public authority interest, which reflects the State's sovereignty and dominion."), *cert. denied* 108 S.Ct. 1996 (1988); *Caminiti v. Boyle*, 732 P.2d 989, 992 (Wash. 1987) ("it is clear that the state's ownership of tidelands and shore lands is not limited to the ordinary incidents of legal title, but is comprised of two distinct aspects."); *United States v. 1.58 Acres of Land*, 523 F. Supp 120, 124 (D. Mass. 1981) ("When the federal government takes such property by eminent domain … [it] obtains the fullest fee that may be had in land of this peculiar nature; the jus privatum and the jus publicum.").

57. *Lane v. Harbor Comm'n*, 40 A. 1058 (Conn. 1898) ("The State has the jus publicum, or right of governing its shores and navigable waters for the protection of public rights."); *State v. Cent. Vermont Ry.*, 571 A.2d 1128 (Vt. 1989) (comparing the 1874 and 1827 Acts, court concluded that legislature meant to convey only the "legal title" while recognizing that the beneficial title to the public trust lands at issue was vested in the public).

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the confusion, boundary descriptions in deeds and property titles of waterfront property often are silent as to any *jus publicum* retained by the state, giving the landowner the further expectation that she has exclusive rights of possession and use of the land. Boundary descriptions may simply state that the property extends "to the water" or even to the "low-water mark," or some similar phrase. Waterfront property owners commonly regard their property as extending to where the water level is, or to the low-water mark, unaware that the state has a reserved *jus publicum* interest up to the "ordinary high-water mark"—a boundary line that presents difficult factual determination problems. It is also very common for a commercial upland owner, such as a resort or marina owner, to have a strong economic interest in the use of adjacent publicly owned trust lands and waters.

Given the strong property interests of private upland owners, coupled with the confusion over riparian "rights" as well as the distinction of the *jus publicum* and *jus privatum* in trust lands and how the public trust doctrine applies, coastal managers need to be keenly aware that their actions under the doctrine may be met with strong resistance. Claims of private property "takings" and charges of governmental interference in private property rights can, and should, be expected.

When acting under the authority of the public trust doctrine, however, the state and state agencies are in a strong position to defend against "takings" claims. Public trust land has been held by the state in trust for the benefit of the public since statehood. Therefore, public trust land that has been conveyed to private ownership has always been burdened by the public's trust rights. Given this, a state's management of the public's trust assets should be less vulnerable to, although not totally immune from, takings challenges. Because the owner received the trust land already burdened by the public's trust rights, a private owner's argument that she had unfettered investment-backed expectations is far more tenuous.

Notes

1. This edition of the book (the original was published in 1990) was followed by David C. Slade, The Public Trust in Motion: The Evolution of the Doctrine, 1997–2008 (2008), a volume filled with anecdotes about how the public trust doctrine has helped to resolve a number of disputes over resources along the land-water margin. An excerpt from that book concludes this casebook in chapter 12 (p. 549).

2. The figure Mr. Slade cited about the vast extent of the public trust doctrine—191,000 square miles, about the equivalent of the size of Maryland, Virginia, North and South Carolina, and Georgia combined—is surely an underestimate, since the estimate includes only traditionally navigable coastal and inland waters. Many state public trust doctrines include waters (and indeed, lands) beyond traditionally navigable waters, as this text makes clear.

3. Slade emphasized the relevance of the PTD as a principle to guide management of coastal resources. How would you advise a coastal commission or agency of its duties and powers under the trust?

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4. Of what legal relevance is the fact that the public trust doctrine is of such a vintage origin? Does its history add to the legitimacy of the doctrine? To its effect on private property rights? For an attempt to de-legitimize the doctrine's ancient historical pedigree, see James L. Huffman, *Speaking of Inconvenient Truths: A History of the Public Trust Doctrine*, 18 Duke Envtl. L. & Pol'y F. 1 (2007), an article containing no original historical research, alleging that the Roman and English versions of the doctrine were more limited than its supporters claim. Professor Huffman is particularly skeptical of the role played by Sir Matthew Hale in the evolution of the public trust doctrine, claiming that his treatise described the doctrine as he wished it were, not as it existed in medieval England. *Id.* at 8. Hale is discussed in the following excerpt by Professor Dunning, and in Michael C. Blumm & Courtney Engle, *Proprietary and Sovereign Public Trust Obligations: From Justinian and Hale to Lamprey and Oswego Lake,* 43 Vt. L. Rev. 1, 8–11 (2018). Early public trust doctrine cases like *Arnold v. Mundy* (p. 57) and *Shively v. Bowlby* (p. 81) relied on Hale's treatise. For a vigorous rebuttals to Professor Huffman's article, see Hope M. Babcock, *The Public Trust Doctrine: What a Tall Tale They Tell*, 61 S.C. L. Rev. 393 (2009); Michael C. Blumm & J.B. Ruhl, *Background Principles, Takings, and Libertarian Property: A Reply to Professor Huffman*, 37 Ecology L.Q. 805 (2010).

5. Note that the banks of waterways subject to the public trust doctrine are largely private. This poses significant access problems that will be discussed in chapter 3.

6. Federal public lands represent a unique category of public ownership, one that raises important questions about the applicability of trust principles. Note that a primary concern in managing traditional public trust lands has been prevention of private monopoly, but throughout the nineteenth and early twentieth centuries the privatization of federal public lands was overriding federal policy. See generally George C. Coggins et al., Federal Public Land and Resources Law 58–108 (7th ed. 2014). We consider the question of whether the public trust doctrine applies to retained federal lands in chapter 8.

7. The following excerpt, part of a comprehensive treatise on water law, contains perhaps the most thorough recent explanation of the origins of the doctrine in England.

Waters and Water Rights

Harrison C. Dunning
Lexis Nexis/Matthew Bender 3rd ed., Amy K. Kelly, ed. (2013)

§ 29.01 Introduction.

The public right to use water in place is one with ancient roots. *Arnold v. Mundy*, the foundational public trust doctrine decision in the United States, relied upon a "great principle of the common law," albeit one that was in England "in ancient times … gradually encroached upon and broken down," only to be restored by Magna Carta. That principle is rooted in the English law on the ownership of land under water.

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§ 29.02 The English Common Law.

(a) Ownership of Land Under Water.

The original source of most land titles in England is a grant from the Crown. And so, titles to land on the seashore go back to such grants, nearly all of them as far back as the reign of King John, which ended in 1216. These early grants were commonly in Latin and often lacked the precision and the niceties later developed within the law of conveyancing. The common law develops in response to problems that have arisen; at this early date in England the initial grants of coastal land presented no great problems, so it is not surprising that the grants were imprecise and incomplete, particularly in their lack of description of the seaward boundary of the coastal grants. As might be expected, the grantee of land along the coast came to look upon the property as extending right into the sea. This suited the grantee's interest and convenience. Either the Crown acquiesced in that view or, as seems at least as plausible, there were matters more interesting to the Crown, or more pressing, than the use of the barren seacoasts. Private use and occupancy of the tidelands was not challenged until the latter part of the sixteenth century; until then it had not occurred to the Crown to be specific about seacoast boundaries in its conveyances either.

In 1568–69, Thomas Digges, a mathematician, engineer, astronomer, and lawyer, wrote a short treatise asserting that the tidelands had not been included in grants of the seacoasts by the Crown. The Crown brought only a few actions based upon this thesis over a considerable period of time. But Digges' thesis appeared again in 1670 in the very influential treatise *De Jure Maris* by Sir Matthew Hale. The impact of this treatise was such that the burden of proof was placed upon the subject to show that private ownership extended to the low-water mark. In the absence of proof of a specific grant of the tidelands, placement of the burden of proof could be decisive.

That was the state of English law at the time England colonized the eastern coastline of North America. The presumption of ownership in the Crown, or in a state or the people as successor to the Crown, and against private ownership, is a part of the heritage that the United States received from England.

(b) Public Use of Water.

Although the references to water problems in early English legal literature are sparse because of the plentiful supply of water in relation to the human need, public rights to water uses have been recognized from the earliest times. Bracton clearly recognized both a common right and a right in the Crown to the fresh waters of the great rivers. The Ancient Indictments and the Coram Rege Rolls at the end of the fourteenth century prove that the large rivers were subject to a public right of navigation and that the Crown prosecuted those responsible for interference with that right. Interference with the flow or navigability of these streams was a purpresture encroaching upon the prerogatives of the Crown and also was a public nuisance to the extent that it interfered with the common right of passage. In either situation, the Crown could prosecute those responsible. Clause 33 of Magna Carta commands the King to remove kydells, or weirs, from the Thames and the Medway and through-

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out all England except the seacoasts, so as to clear the streams for the free passage of both people and fish.

The right of fishery was originally an exclusively royal right based on the King's dominion over the territorial seas, their inland reaches, the beds of these seas, and the tidal reaches of the rivers. The public succeeded to this right on the theory that the King held the rights in tidal waters in trust for the use of the people. The public right of fishery remained distinct from the right of navigation and did not include fresh-water rivers whose beds and banks were in private riparian ownership.

The beds and banks of fresh-water rivers were thought to be usable by the public, according to Bracton, but probably very little use of this soil was made by the public in his time. Four centuries later, by the time of Sir Matthew Hale in the seventeenth century, the legal presumption was that the riparian owners along fresh-water rivers had the exclusive right to use the beds and banks. But that presumption was subject to a public right to use the bed and banks for purposes incidental to navigation where the public had acquired that right by prescription or custom. Where the public had need, the beds and banks of navigable rivers were used by the public, as a matter of right, for anchoring, for mooring, and for towing vessels along the banks. The right to those uses was thus established.

The one clear right of the public in the use of water was for travel. In medieval England, the general public exerted few other demands for water use, and water was so sufficiently plentiful that there were but few conflicts in its use. Where there was conflict with the public right of navigation, the right of navigation prevailed. In short, medieval common law recognized the only substantial public demand for water use that was exerted.

The maturing of the common law concerning inland waterways is rather like the maturing cycle in the life of an anadromous fish. The salmon grows and takes on substance in the open sea, then moves to coastal waters and finally to inland waterways that are navigable to it. The common law of inland waterways has been dependent upon doctrines that came from the law concerning coastal waters, and coastal waters, in turn, owe their debt to the law of the sea itself. This extension of legal doctrines inland may be accounted for in part by the fact that there was so little indigenous growth in the common law concerning inland water use and rights throughout the Middle Ages and even through the earlier stages of the industrial revolution. Because the laws regarding ownership and use of the sea influenced the law of other navigable waters, it is desirable to include a brief discussion of the law of the sea.

Our law concerning the sea has its origins in a time when the Mediterranean Sea was *the* sea, and when, for lack of any serious challenge, it was a Roman sea. Thus, in Justinian's statement that the seas are common to all, the word "all" is to be taken in a Pickwickian sense; he meant "all Romans." Imperial Rome depended upon overseas supplies of food, notably grain from Egypt, and Rome controlled trade, shipping, and the sea.

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After the decline of Rome, the infant nations bordering on the Atlantic Ocean could not use the sea beyond strictly local fishing ventures because the art of shipbuilding during the Dark Ages had not developed ships capable of ocean voyages. In the Middle Ages these countries improved the art of shipbuilding, and it was the demand for fish that stimulated that improvement.

The Roman concept of the one-nation sea could not survive the proliferation of national power and complicated commercial interests that had developed [in northern Europe in the sixteenth and seventeenth centuries]. During the eighteenth century the United States added to the complexity of world trade in which all European countries were participating. It came to be in the interest of those nations who could best compete for trade to advocate free trade, freedom of the seas, and the abolition of restrictive national monopolies. Therefore, British theory was brought into conformity with her own trade practices.

Justinian's dictum that the high seas are common to all is true today, but the meaning has been expanded to include non-Romans. The law has conformed to the human need; the seas are free for navigation by water and air, and for fishing and other public purposes for which there is any substantial demand.

§ 29.03 The Civil Law.

In addition to the English common law, *Arnold v. Mundy* [the first American public trust doctrine case] rested its pronouncements on the public right to use water in place on the civil law, although *Arnold* did not include an analysis of civilian sources as it did for the common law. Civilian sources have, however, been relied upon to support the public use right by state courts in those parts of the country once under Spanish rule.

Las Siete Partidas,[58] a treatise regarded as a major source of civilian norms in Spain, included a law that explicitly adopts general principles even broader than those widely recognized today in the United States:

> Rivers, harbors, and public highways belong to all persons in common, so that parties from foreign countries can make use of them, just as those who live or dwell in the country where they are situated. And although the banks of rivers are, so far as their ownership is concerned, the property of those whose lands include them, nevertheless, every man has a right to use them, by mooring his vessels to the trees, by repairing his ships and his sails upon them, and by landing his merchandise there; and fishermen have the right to deposit their fish and sell them, and dry their nets there, and to use said banks for every other purpose like these which appertain to the calling and the trade by which they live.

58. The Castilian Statutory Code was compiled between the years 1256 and 1265, during the reign of King Alfonso X of Castile. *See* Laura Manzano Baena, Conflicting Words: The Peace Treaty of Münster (1648) and the Political Culture of the Dutch Republic and the Spanish Monarchy 68 n.5 (2011).

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Las Siete Partidas is itself a compilation drawn from the Roman law. While there is great dispute about the correct interpretation of Roman law with regard to the public right to use water in place and the related question of the property rights regime for land under navigable waters, the Institutes of Justinian do contain the following celebrated statement: "By natural law the air, flowing water, the sea, and therefore the shores of the sea are common to all."

* * *

§ 30.02 The Public Trust Doctrine.

(a) Association with State Sovereign Ownership.

Historically, the public trust doctrine in natural resources law has been associated closely with the state sovereign ownership doctrine, [which] holds as a matter of federal law that when states achieve sovereignty within the union, one consequence is immediate state ownership of certain lands and waters previously owned by the British Crown or the federal government. These natural resources are viewed as being held by the state in a fiduciary capacity, for the benefit of members of the general public, and indeed, the "public trust doctrine" could be regarded as simply the law on the fiduciary aspect of state sovereign ownership.

Reasons exist, however, for maintaining a distinction between the doctrine of state sovereign ownership and that of the public trust. For one thing, the federal courts, as a matter of federal law, have been heavily involved in developing the state sovereign ownership doctrine, whereas the public trust doctrine has been developed almost entirely in the law of the various states. Also important is the fact that in some jurisdictions the public trust doctrine has outgrown its original direct association with state sovereign ownership. In Ohio and California, for example, the public trust doctrine has been used with regard to water resources that apparently have never been subject to sovereign ownership. In New Jersey the doctrine has been applied to land owned by a subdivision of the state in a non-sovereign capacity, notably the "dry sand" portions of beaches. And in Massachusetts it arguably has been used for state-owned parklands. But an attempt to apply the public trust doctrine to retroactive extension of copyright protection was summarily rejected by a federal trial court.

(b) Development a Matter of State Law.

Although it is a principle of federal law that title to sovereign lands and waters generally resides in the states at the inception of their statehood, what happens thereafter so far as the public trust doctrine is concerned is up to the law of each state. Some states, generally ones with a seacoast, have a highly developed body of law on the public trust doctrine; others have practically nothing. Most states have restated and, often, reinforced the state fiduciary obligation. A few have disregarded it. Although arguments have been made that federal law somehow constrains these state law choices, in practice to date the states have been free to shape their public trust doctrine law as they wish.

The state law basis for the public trust doctrine was emphasized by the Supreme Court in 1926 in *Appleby v. City of New York.* In *Appleby*, pursuant to state statutes,

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New York City had granted two parcels, including land below the high-water mark of the Hudson River, to Appleby and another person in the 1850s. Subsequently, the city built piers into the river at the ends of streets crossing or adjacent to the granted parcels, leased space for vessels at its piers, and dredged the area to enhance navigation. The city filed a condemnation action with regard to the privately-owned land, but it was discontinued after twenty years.

Appleby sued on the theory there had been state impairment of the obligation of a contract in violation of the federal constitution. No one questioned that, by virtue of state sovereign ownership and transactions between the city and both prerevolutionary governors and the State of New York, the city had held title to the land in question prior to the 1850s. But a key question was the proper construction and effect of the land grants, and the Court said that "the extent of the power of the State and city to part with property under navigable waters to private persons … is a state question."[59]

* * *

(c) The Fiduciary Obligation of the State.

At the core of the public trust doctrine is the fiduciary obligation of the state to hold state sovereign resources for the benefit of the general public. Indeed, it is the public interest in public use of navigable water that serves to justify the doctrine of state sovereign ownership in the first place. State sovereign ownership and the public trust doctrine are "founded upon the necessity of preserving to the public the use of navigable waters from private interruption and encroachment." This point was made forcefully in 1821 in *Arnold v. Mundy,* the foundation case for the public trust doctrine in the United States, as follows:

> [B]y the law of nature, which is the only true foundation of all the social rights … by the civil law, which formerly governed almost the whole civilized world … by the common law of England … the navigable rivers in which the tide ebbs and flows, the ports, the bays, the coasts of the sea, including both the water and the land under the water, for the purposes of passing and repassing, navigation, fishing, fowling, sustenance, and all other uses of the water and its products (a few things excepted), are common to all the citizens, and … each has a right to use them according to his necessities, subject only to the laws which regulate that use; … the property, indeed, strictly speaking, is vested in the sovereign, but it is vested in him, not for his own use, but for the use of the citizen; that is, for his direct and immediate enjoyment.

[6 N.J.L. at 76–77.]

The state generally has great discretion to determine the direction that management of state sovereign resources for public benefit should take. To enhance commercial

59. Eds.—There is substantial reason to doubt the accuracy of the *Appleby* Court's characterization of *Illinois Central* as a product of state law, however. See Michael Benjamin Smith, *The Federal Public Trust Doctrine of Illinois Central: The Misunderstood Legacy of Appleby v. City of New York*, https://ssrn.com/abstract=3593221.

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navigation, for example, the state may provide for the development of the shallow waters of a bay into a harbor. The project may include establishment of a bulkhead line, construction of wharves and building of warehouses on state sovereign lands. Such development, however, is subject to limits to ensure that the rights of the public are not prejudiced unduly. The most important of the limitations is the principle recognized in most states that grantees of state sovereign lands ordinarily take title subject to the same public right that bound the state.

Where the state has not approved impairment of state sovereign resources, private encroachment upon public use of the resources is treated as a public nuisance and is subject to abatement.

Notes

1. *Arnold v. Mundy* is excerpted below (p. 57). The decision was largely responsible for linking the public trust doctrine to the Magna Carta, a matter discussed in some detail by Professor Dunning.

2. The pertinent language of Justinian is: "Things common to mankind by the law of nature, are the air, running water, the sea, and consequently the shores of the sea; no man therefore is prohibited from approaching any part of the seashore, whilst he abstains from damaging farms, monuments, edifices, [] which are not in common as the sea is." J. Inst. 2.1.1. (Thomas Cooper trans. 1841). The Institutes of Justinian also anticipated the need to draw a line between public and private rights: "All that tract of land, over which the greatest winter flood extends itself, is the sea-shore." J. Inst. 2.1.3. (Thomas Cooper trans. 1841). The Institutes elaborated on the public uses that may be made of the seashore as follows:

> The use of the sea-shore, as well as of the sea, is also public by the law of nations; and therefore any person may erect a cottage upon it, to which he may resort to dry his nets, and hawl them from the water; for the shores are not understood to be property in any man, but are compared to the sea itself, and to the sand or ground which is under the sea.

J. Inst. 2.1.4. (Thomas Cooper trans. 1841).

3. For an investigation of the British origins of the public trust doctrine, see Connor Bartlett McDermott, *Monopolizers of the Soil: The Commons as a Source of Public Trust Responsibilities*, __ Natural Resources J. __ (2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3540669 (explaining that the usufructuary rights granted commoners by the Magna Carta and the Forest Charter were violated by the enclosure movement, prompting widespread unrest in the early seventeenth century, eventually leading to the English Civil War of the 1640s, which influenced Mathew Hale's treatise De Jura Maris, which in turn played a prominent role in the origins of the American public trust doctrine).

4. Professor Dunning mentioned purprestures, which are encroachments on navigable waterways or public highways. At common law, purprestures were controlled by public nuisance doctrine, guarding against substantial and unreasonable interfer-

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ences with public rights. The common law employed nuisance doctrine, not trespass, against docks impeding vessels on waterways or overhangs from buildings that blocked highway traffic because nuisance allowed for more nuanced decisions and promoted multiple uses of public waters and highways. *See* Thomas W. Merrill & Henry E. Smith, Property: Principles and Policies 307 (2nd ed. 2012). Permanent, fixed, stationary encroachments — as opposed to temporary obstructions — which "unreasonably and unnecessarily interferes with public travel, or which endangers the safety of travelers constitutes a public nuisance per se." 40 Am. Jur. 2d, *Highways, Streets, and Bridges* § 313 (2014).

5. Notice Professor Dunning's linkage of the public trust doctrine with the concept of state sovereign ownership of certain natural resources, a subject explored in some detail in chapter 6, on the wildlife trust doctrine. Since the public trust doctrine has been traditionally thought of as a doctrine inherited from the English sovereign, the interpretation and application of the doctrine have varied widely from state to state.

The public trust doctrine, an ancient precept dating as far back as Roman law and inherited from English common law, historically provided a surprising counterpoise to Anglo-American law's preference for private property. First recognized by the New Jersey Supreme Court in 1821 in *Arnold v. Mundy* (p. 57) as a kind of anti-monopolization doctrine, giving the public fishing rights in tidal waters and later adopted by the U.S. Supreme Court in 1842 in *Martin v. Waddell's Lessee* (p. 64), the doctrine grew by the late nineteenth century to include inland waters that were navigable. Then, a half-century later, in 1892, in a landmark decision in *Illinois Central Railroad v. Illinois* (p. 70), the U.S. Supreme Court interpreted the doctrine to impose a limit on sovereign alienation of public rights, effectively announcing a preference for public ownership of lands submerged by navigable waters. Four years later, the Court announced that wildlife was also owned by the sovereign in trust for the public in *Geer v. Connecticut* (p. 253).

In the late twentieth century, the public trust doctrine became a vehicle for environmental protection. How that came to be was partly due to one of the most consequential law review articles in the history of environmental law. That remarkable article, written by Professor Joseph Sax, then of the University of Michigan, follows.

The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention

Joseph L. Sax
68 Mich. L. Rev. 471 (1970)

Public concern about environmental quality is beginning to be felt in the courtroom. Private citizens, no longer willing to accede to the efforts of administrative agencies to protect the public interest, have begun to take the initiative themselves. One dramatic result is a proliferation of lawsuits in which citizens, demanding judicial recognition of their rights as members of the public, sue the very govern-

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mental agencies which are supposed to be protecting the public interest. While this Article was being written, several dozen such suits were initiated to enforce air and water pollution laws in states where public agencies have been created for that purpose; to challenge decisions of the Forest Service about the use of public land under its control; to question the Secretary of the Interior's regulation of federal offshore oil leases; and, in a myriad of cases against state and local officials, to examine airport extensions, highway locations, the destruction of parklands, dredging and filling, oil dumping, and innumerable other governmental decisions dealing with resource use and management.

* * *

Of all the concepts known to American law, only the public trust doctrine seems to have the breadth and substantive content which might make it useful as a tool of general application for citizens seeking to develop a comprehensive legal approach to resource management problems. If that doctrine is to provide a satisfactory tool, it must meet three criteria. It must contain some concept of a legal right in the general public; it must be enforceable against the government; and it must be capable of an interpretation consistent with contemporary concerns for environmental quality.

I. The Nature of The Public Trust Doctrine

A. The Historical Background

* * *

As carried over to American law, this history has produced great confusion. Our system has adopted a dual approach to public property which reflects both the Roman and the English notion that certain public uses ought to be specially protected. Thus, for example, it has been understood that the seashore between high and low tide may not be routinely granted to private owners as was the general public domain under the Homestead Act and similar laws. It has rather been a general rule that land titles from the federal government run down only to the high-water mark, with title seaward of that point remaining in the states, which, upon their admission to the Union, took such shorelands in "trusteeship" for the public.

Whether and to what extent that trusteeship constrains the states in their dealings with such lands has, however, been a subject of much controversy. If the trusteeship puts such lands wholly beyond the police power of the state, making them inalienable and unchangeable in use, then the public right is quite an extraordinary one, restraining government in ways that neither Roman nor English law seems to have contemplated. Conversely, if the trust in American law implies nothing more than that state authority must be exercised consistent with the general police power, then the trust imposes no restraint on government beyond that which is implicit in all judicial review of state action—the challenged conduct, to be valid, must be exercised for a public purpose and must not merely be a gift of public property for a strictly private purpose.

The question, then, is whether the public trust concept has some meaning between the two poles; whether there is, in the name of the public trust, any judicially enforceable right which restrains governmental activities dealing with particular interests

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such as shorelands or parklands, and which is more stringent than are the restraints applicable to governmental dealings generally.

Three types of restrictions on governmental authority are often thought to be imposed by the public trust: first, the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public; second, the property may not be sold, even for a fair cash equivalent; and third, the property must be maintained for particular types of uses. The last claim is expressed in two ways. Either it is urged that the resource must be held available for certain traditional uses, such as navigation, recreation, or fishery, or it is said that the uses which are made of the property must be in some sense related to the natural uses peculiar to that resource. As an example of the latter view, San Francisco Bay might be said to have a trust imposed upon it so that it may be used for only water-related commercial or amenity uses. A dock or marina might be an appropriate use, but it would be inappropriate to fill the bay for trash disposal or for a housing project.

* * *

C. An Outline of Public Trust Doctrine

One who searches through the reported cases will find many general statements which seem to imply that a government may never alienate trust property by conveying it to a private owner and that it may not effect changes in the use to which that property has been devoted. In one relatively old case, for example, the Supreme Court of Ohio said that:

> The state as trustee for the public cannot by acquiescence abandon the trust property or enable a diversion of it to private ends different from the object for which the trust was created. If it is once fully realized that the state is merely the custodian of the legal title, charged with the specific duty of protecting the trust estate and regulating its use, a clearer view can be had. An individual may abandon his private property, but a public trustee cannot abandon public property.

Similarly, the Supreme Court of Florida said:

> The trust in which the title to the lands under navigable waters is held is governmental in its nature and cannot be wholly alienated by the States. For the purpose of enhancing the rights and interests of the whole people, the States may by appropriate means, grant to individuals limited privileges in the lands under navigable waters, but not so as to divert them or the waters thereon from their proper uses for the public welfare.…

* * *

In the old Massachusetts case of *Commonwealth v. Alger*, the court examined the validity of state grants to private persons of tidelands below the high-water mark. The court recognized that such grants were lawful even though they permitted grantees to fill or to build in the submerged lands and thereby to terminate the public's free right of passage across those areas. A question was raised, however, as to the limits of the

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principle which had been expressed in an earlier Massachusetts case, that "the riparian proprietor has an absolute right under the colony law, so to build to low-water mark and exclude all mankind." It was apparently argued in *Alger* that the implication of that rule, if sustained, would permit a holder of such riparian rights to thwart all navigation or, through his economic power, to bend navigation to his will. The court made clear that no such meaning could, or should, be read into the language of the earlier case:

> No qualification … to the general rule was expressed … not even the condition not to hinder the passage of boats and vessels.… This judgment must be construed according to the subject matter, which was, the right to flats then in controversy, belonging to land adjoining the Charles River … where the river was broad, and where the channel or deep part of the river was quite wide, and afforded abundant room for any boats or vessels to pass along the river and to other men's houses and lands. Had the court been giving an opinion in regard to flats differently situated, there is no reason to doubt that they would have qualified it by stating the proper conditions and limitations.

* * *

D. The Lodestar in American Public Trust Law: Illinois Central Railroad Company v. Illinois

The most celebrated public trust case in American law is the decision of the United States Supreme Court in *Illinois Central Railroad Company v. Illinois*. In 1869 the Illinois legislature made an extensive grant of submerged lands, in fee simple, to the Illinois Central Railroad. That grant included all the land underlying Lake Michigan for one mile out from the shoreline and extending one mile in length along the central business district of Chicago—more than one thousand acres of incalculable value, comprising virtually the whole commercial waterfront of the city. By 1873 the legislature had repented of its excessive generosity, and it repealed the 1869 grant; it then brought an action to have the original grant declared invalid.

… What a state may not do, the Court said, is to divest itself of authority to govern the whole of an area in which it has responsibility to exercise its police power; to grant almost the entire waterfront of a major city to a private company is, in effect, to abdicate legislative authority over navigation.

But the mere granting of property to a private owner does not ipso facto prevent the exercise of the police power, for states routinely exercise a great deal of regulatory authority over privately owned land. The Court's decision makes sense only because the Court determined that the states have special regulatory obligations over shorelands, obligations which are inconsistent with large-scale private ownership. The Court stated that the title under which Illinois held the navigable waters of Lake Michigan is

> different in character from that which the state holds in lands intended for sale.… It is a title held in trust for the people of the state that they may enjoy the navigation of the waters, carry on commerce over them, and have

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> liberty of fishing therein freed from the obstruction or interferences of private parties.

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

The Court in *Illinois Central* did not specify its reasons for adopting the position which it took, but the attitude implicit in the decision is fairly obvious. In general, governments operate in order to provide widely available public services, such as schools, police protection, libraries, and parks. While there may be good reasons to use governmental resources to benefit some group smaller than the whole citizenry, there is usually some relatively obvious reason for the subsidy, such as a need to assist the farmer or the urban poor. In addition, there is ordinarily some plainly rational basis for the reallocative structure of any such program—whether it be taxing the more affluent to support the poor or using the tax base of a large community to sustain programs in a smaller unit of government. Although courts are disinclined to examine these issues through a rigorous economic analysis, it seems fair to say that the foregoing observations are consistent with a general view of the function of government. Accordingly, the court's suspicions are naturally aroused when they are faced with a program which seems quite at odds with such a view of government.

In *Illinois Central*, for example, everything seems to have been backwards. There appears to have been no good reason for taxing the general public in order to support a substantial private enterprise in obtaining control of the waterfront. There was no reason to believe that private ownership would have provided incentives for needed developments, as might have been the case with land grants in remote areas of the country; and if the resource was to be maintained for traditional uses, it was unlikely that private management would have produced more efficient or attractive services to the public. Indeed, the public benefits that could have been achieved by private ownership are not easy to identify.

Although the facts of *Illinois Central* were highly unusual and the grant in that case was particularly egregious—the case remains an important precedent. The model for judicial skepticism that it built poses a set of relevant standards for current, less dramatic instances of dubious governmental conduct. For instance, a court should look skeptically at programs which infringe broad public uses in favor of narrower ones. Similarly, there should be a special burden of justification on government when such results are brought into question. But *Illinois Central* also raises more far-reaching issues. For example, what are the implications for the workings of the democratic process when such programs, although ultimately found to be unjustifiable, are nonetheless promulgated through democratic institutions? Furthermore, what does the existence of those seeming imperfections in the democratic process imply about the role of the courts, which, *Illinois Central* notwithstanding, are generally reluctant to hold invalid the acts of co-equal branches of government?

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II. The Contemporary Doctrine of the Public Trust: An Instrument for Democratization

A. The Massachusetts Approach

The *Illinois Central* problem has had its most significant modern exegesis in Massachusetts. In that state, the Supreme Judicial Court has shown a clear recognition of the potential for abuse which exists whenever power over public lands is given to a body which is not directly responsive to the electorate. To counteract the influence which private interest groups may have with administrative agencies and to encourage policy decisions to be made openly at the legislative level, the Massachusetts court has developed a rule that a change in the use of public lands is impermissible without a clear showing of legislative approval.

1. Gould v. Greylock Reservation Commission

In *Gould v. Greylock Reservation Commission*, the Supreme Judicial Court of Massachusetts took the first major step in developing the doctrine applicable to changes in the use of lands dedicated to the public interest. Because *Gould* is such an important case in the development of the public trust doctrine, and because the implications of the case are so far-reaching, it is important to have a clear understanding of both the facts of the case and the court's decision.

Mount Greylock, about which the controversy centered, is the highest summit of an isolated range which is surrounded by lands of considerably lower elevation. In 1888 a group of citizens, interested in preserving the mountain as an unspoiled natural forest, promoted the creation of an association for the purpose of laying out a public park on it. The state ultimately acquired about 9,000 acres, and the legislature enacted a statute creating the Greylock Reservation Commission and giving it certain of the powers of a park commission. By 1953 the reservation contained a campground, a few ski trails, a small lodge, a memorial tower, some TV and radio facilities, and a parking area and garage. In that year, the legislature enacted a statute creating an Authority to construct and operate on Mount Greylock an aerial tramway and certain other facilities, and it authorized the original Commission to lease to the Authority "any portion of the Mount Greylock Reservation."

For some time, the Authority was unable to obtain the financing necessary to go forward with its desire to build a ski development, but eventually it made an arrangement for the underwriting of revenue bonds. Under that arrangement the underwriters, organized as a joint venture corporation called American Resort Services, were to lease 4,000 acres of the reservation from the Commission. On that land, the management corporation was to build and manage an elaborate ski development, for which it was to receive forty per cent of the net operations revenue of the enterprise. The underwriters required these complex and extensive arrangements so that the enterprise would be attractive for potential purchasers of bonds.

After the arrangements had been made, but before the project went forward, five citizens of the county in which the reservation is located brought an action against both the Greylock Reservation Commission and the Tramway Authority. The plaintiffs brought the suit as beneficiaries of the public trust under which the reservation

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was said to be held, and they asked that the court declare invalid both the lease of the 4,000 acres of reservation land and the agreement between the Authority and the management corporation. They asked the court to examine the statutes authorizing the project, and to interpret them narrowly to prevent both the extensive development contemplated and the transfer of supervisory powers into the hands of a profit-making corporation. The case seemed an exceedingly difficult one for the plaintiffs, both because the statutes creating the Authority were phrased in extremely general terms, and because legislative grants of power to administrative agencies are usually read quite broadly. Certainly, in light of the statute, it could not be said that the legislature desired Mount Greylock to be preserved in its natural state, nor could the legislature be said to have prohibited leasing agreements with a management agency. Nonetheless, the court held both the lease and the management agreement invalid on the ground that they were in excess of the statutory grant of authority.

Gould cannot be considered merely a conventional exercise in legislative interpretation. It is, rather, a judicial response to a situation in which public powers were being used to achieve a most peculiar purpose. Thus, the critical passage in the decision is that in which the court stated:

> The profit-sharing feature and some aspects of the project itself strongly suggest a commercial enterprise. In addition to the absence of any clear or express statutory authorization of as broad a delegation of responsibility by the Authority as is given by the management agreement, we find no express grant to the Authority of power to permit use of public lands and of the Authority's borrowed funds for what seems, in part at least, a commercial venture for private profit.

In coming to this recognition, the court took note of the unusual developments which led to the project. What had begun as authorization to a public agency to construct a tramway had developed into a proposal for an elaborate ski area. Since ski resorts are popular and profitable private enterprises, it seems slightly odd in itself that a state would undertake such a development. Furthermore, the public authority had gradually turned over most of its supervisory powers to a private consortium and had been compelled by economic circumstances to agree to a bargain which heavily favored the private investment house.

It hardly seems surprising, then, that the court questioned why a state should subordinate a public park, serving a useful purpose as relatively undeveloped land, to the demands of private investors for building such a commercial facility. The court, faced with such a situation, could hardly have been expected to have treated the case as if it involved nothing but formal legal issues concerning the state's authority to change the use of a certain tract of land.

Yet the court was unwilling to invalidate an act of the legislature on the sole ground that it involved a modification of the use of public trust land. Instead, the court devised a legal rule which imposed a presumption that the state does not ordinarily intend to

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divert trust properties in such a manner as to lessen public uses. Such a rule would not require a court to perform the odious and judicially dangerous act of telling a legislature that it is not acting in the public interest, but rather would utilize the court's interpretive powers in accordance with an assumption that the legislature is acting to maintain broad public uses. Under the Massachusetts court's rule, that assumption is to guide interpretations, and is to be altered only if the legislature clearly indicates that it has a different view of the public interest than that which the court would attribute to it.

Although such a rule may seem to be an elaborate example of judicial indirection, it is in fact directly responsive to the central problem of public trust controversies. There must be some means by which a court can keep a check on legislative grants of public lands while ensuring that historical uses may be modified to accommodate contemporary public needs and that the power to make such modifications resides in a branch of government which is responsive to public demands. Similarly, while there ought to be available some mechanism by which corrupt legislative acts can be remedied, it will be the rare case in which the impropriety is so patent that, as in the *Illinois Central* case, a court would find it to be outside the broad boundaries of legitimacy. It is to these concerns that the Massachusetts court so artfully addressed itself.

* * *

As a result of *Gould* and the cases which followed it, the situation is considerably better in Massachusetts. That state's supreme judicial court has penetrated one of the very difficult problems of American government — inequality of access to, and influence over, administrative agencies. It has struck directly at low-visibility decision-making, which is the most pervasive manifestation of the problem. By a simple but ingenious flick of the doctrinal wrist, the court has forced agencies to bear the burden of obtaining specific, overt approval of efforts to invade the public trust.

* * *

… [P]ublic trust law is not so much a substantive set of standards for dealing with the public domain as it is a technique by which courts may mend perceived imperfections in the legislative and administrative process. The public trust approach which has been developed in Massachusetts and [applied in other states] … demonstrate[s] that the public trust concept is, more than anything else, a medium for democratization.

* * *

While the general principle of the early cases — that the public trust may not be conveyed to private parties — has never been brought into question, the original application of that principle has been modified by later cases. Although the early cases had held such grants wholly invalid, the court subsequently decided to validate the grants, but to find that they were impressed with the public trust which required the owners to use their land in a manner consistent with the right of the public. As the court stated in the landmark case of *People v. California Fish Company*, the grantee of such lands will not obtain the absolute ownership, but will take "the title to the soil … subject to the public right of navigation…."

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III. Conclusion

A. The Scope of the Public Trust

It is clear that the historical scope of public trust law … includes, with some variation among the states, that aspect of the public domain below the low-water mark on the margin of the sea and the great lakes, the waters over those lands, and the waters within rivers and streams of any consequence. Sometimes the coverage of the trust depends on a judicial definition of navigability, but that is a rather vague concept which may be so broad as to include all waters which are suitable for public recreation. Traditional public trust law also embraces parklands, especially if they have been donated to the public for specific purposes; and, as a minimum, it operates to require that such lands not be used for nonpark purposes. But except for a few cases like *Gould v. Greylock Reservation Commission,* it is uncommon to find decisions that constrain public authorities in the specific uses to which they may put parklands, unless the lands are reallocated to a very different use, such as a highway.

… [I]t is clear that the judicial techniques developed in public trust cases need not be limited either to these few conventional interests or to questions of disposition of public properties. Public trust problems are found whenever governmental regulation comes into question, and they occur in a wide range of situations in which diffuse public interests need protection against tightly organized groups with clear and immediate goals. Thus, it seems that the delicate mixture of procedural and substantive protections which the courts have applied in conventional public trust cases would be equally applicable and equally appropriate in controversies involving air pollution, the dissemination of pesticides, the location of rights of way for utilities, and strip mining or wetland filling on private lands in a state where governmental permits are required.

Certainly, the principle of the public trust is broader than its traditional application indicates. It may eventually be necessary to confront the question whether certain restrictions, imposed either by courts or by other governmental agencies, constitute a taking of private property; but a great deal of needed protection for the public can be provided long before that question is reached. Thus, for example, a private action seeking more effective governmental action on pesticide use or more extensive enforcement of air pollution laws would rarely be likely to reach constitutional limits. In any event, the courts can limit their intervention to regulation which stops short of a compensable taking.

Finally, it must be emphasized that the discussion contained in this Article applies with equal force to controversies over subjects other than natural resources. While resource controversies are often particularly dramatic examples of diffuse public interests and contain all their problems of equality in the political and administrative process, those problems frequently arise in issues affecting the poor and consumer groups. Only time will reveal the appropriate limits of the public trust doctrine as a useful judicial instrument.

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B. The Role of the Courts in Developing Public Trust Law

The principal purpose of this Article has been to explore the role of the courts in shaping public policy with respect to a wide spectrum of resource interests which have the quality of diffuse public uses. The attempt has not been to propose or to identify the particular allocative balance which is appropriate for a wise public policy as to any particular resource problem, but rather to examine an important and poorly understood institutional medium for better obtaining that wisdom which leads to intelligent public policy. Thus, as is usually the wont of lawyers, the author has attended essentially to problems of process rather than to problems of substance.

* * *

Understandably, courts are reluctant to intervene in the processes of any given agency. Accordingly, they are inclined to achieve democratization through indirect means—either by requiring the intervention of other agencies which will serve to represent under-represented interests or by calling upon the legislature to make an express and open policy decision on the matter in question. The phenomenon of indirect intervention reveals a great deal about the role of the judiciary. The closer a court can come to thrusting decision making upon a truly representative body—such as by requiring a legislature to determine an issue openly and explicitly—the less a court will involve itself in the merits of a controversy. This relationship suggests that democratization is essentially the function which the courts perceive themselves as performing, and that even those courts which are the most active and interventionist in the public trust area are not interested in displacing legislative bodies as the final authorities in setting resource policies.

That self-perception is an appropriate one, for in theory there is no reason that the judiciary should be the ultimate guardian of the public weal. In the ideal world, legislatures are the most representative and responsive public agencies; and to the extent that judicial intervention moves legislatures toward that ideal, the citizenry is well served. Certainly, even the most representative legislature may act in highly unsatisfactory ways when dealing with minority rights, for then it confronts the problem of majority tyranny. But that problem is not the one which arises in public resource litigation. Indeed, it is the opposite problem that frequently arises in public trust cases—that is, a diffuse majority is made subject to the will of a concerted minority. For self-interested and powerful minorities often have an undue influence on the public resource decisions of legislative and administrative bodies and cause those bodies to ignore broadly based public interests. Thus, the function which the courts must perform, and have been performing, is to promote equality of political power for a disorganized and diffuse majority by remanding appropriate cases to the legislature after public opinion has been aroused. In that sense, the public interests with which this Article deals differ from the interests constitutionally protected by the Bill of Rights—the rights of permanent minorities. That realization, in turn, lends even greater support for the rejection of claims that public trust problems should be considered as constitutional issues which are ultimately to be resolved by courts even if there is a clear legislative determination.

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Not all the situations which have been examined in this Article fit directly into the majority-minority analysis suggested above, but, if properly understood, they do meet the principle of that analysis. For example, in a dispute between advocates of parks and those who would take parkland for highways, it often cannot be said that one group constitutes a majority and the other a minority. It can, however, be said that one interest is at least adequately represented in its access to, and dealings with, legislative or administrative agencies while the other interest tends to face problems of diffuseness and thus tends to be underrepresented in the political process. In such cases, all that is asked of courts is that they try to even the political and administrative postures of the adversaries; if that equalization can be done judicially, the courts may properly withdraw and leave the ultimate decision to a democratized democratic process.

* * *

Having determined that the fundamental function of courts in the public trust area is one of democratization, the next subject for analysis is the means by which courts are to identify the problems which require judicial action.

* * *

The next critical step is to seek out the indicia which suggest that a particular case, on its own merits, possibly or probably has not been properly handled at the administrative or legislative level. That is the most difficult part of the process, and to cope with it the courts have developed four basic guidelines.

First, has public property been disposed of at less than market value under circumstances which indicate that there is no very obvious reason for the grant of a subsidy?

* * *

Second, has the government granted to some private interest the authority to make resource-use decisions which may subordinate broad public resource uses to that private interest? In the extreme case, that question raises the problem of *Illinois Central,* and a court might appropriately interpose a flat legal prohibition on the ground that the state has divested itself of its general regulatory power over a matter of great public importance. More often, the situation is one in which a court seeks to deal with the ramifications of a private property system in relation to resources which have the element of commonality. A resource like San Francisco Bay, for example, is of such a physical character that the exercise of ordinary private property rights may have very large direct effects on the whole public which has had the use of that bay. In such circumstances, courts are inclined to scrutinize with great care claims that private property rights should be found to be superior to the claim of continued public regulatory authority. Indeed, it is unlikely that such rights will be allowed unless they are consistent with a general public plan for regulation of the resource. This issue has arisen in litigation in the San Francisco Bay cases and in several Florida cases.

… Third, has there been an attempt to reallocate diffuse public uses either to private uses or to public uses which have less breadth? This is the most complex of the judicial benchmarks. In one respect, it merely reflects judicial concern that any act infringing diffuse public uses is likely to have been made in the absence of adequate

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representation for the diffuse group, and accordingly the courts are willing to send such decisions back for reaffirmation or more explicit authorization. That procedure is exemplified by the developments in Massachusetts.

In addition, although there is little specific supporting evidence, there seems to be implicit in the cases a feeling that there is something rather questionable about the use of governmental authority to restrict, rather than to spread, public benefits. At the extreme, that attitude is reflected in the judicial rule that government may not act for a purely private purpose. While cases involving such holdings are rare, there are many situations in which benefits are sufficiently narrow that it is difficult to determine what public purpose is meant to be achieved by a particular governmental act. That difficulty is emphasized when the price of providing any such narrow benefit is the withdrawal of a beneficial use which is available to a wide segment of the population.

* * *

This judicial device serves to call attention to the inadequacies in conventional public techniques for evaluating resource decisions involving diffuse public uses. Rarely do the decision-making agencies attempt to make a careful benefit-cost analysis which would provide useful information about the effects of such decisions. What is lost, for example, when a local public beach is closed and the area filled for garbage disposal, highway development, or residential development? Governmental bodies have made little effort to answer such questions; yet they do make decisions that one sort of allocation or another advances the public interest. The courts properly evince reluctance to approve decisions based upon ignorance; and when that factor is joined with the courts' strong feeling that diffuse public uses are both poorly represented and, by their nature, difficult to measure, judicial wariness is inevitably enhanced.

… [Fourth], in determining whether a case has been properly handled at the administrative or legislative level is to question whether the resource is being used for its natural purpose—whether, for example, a lake is being used "as a lake." This is perhaps the most specific of the guidelines the courts use … This result is in part a product of the physical fact of commonality, as with a lake, and in part a result of the extraordinary diversity of many natural systems, as with an estuarial area which may contain fishery resources, opportunities for swimming and boating, scenic views, and wildlife. To fill such an area and to build an apartment house on it would eliminate all those uses, which are enjoyed by a wide variety of people, in favor of a use that would benefit a small class of residents. Courts must be persuaded that any such transition promotes a significant public purpose.

* * *

IV. Postscript

* * *

If lawyers and their clients are willing to ask for less than the impossible, the judiciary can be expected to play an increasingly important and fruitful role in safeguarding the public trust.

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Notes

1. The Sax article has proved to be so influential that it is regarded as the foundation of the modern public trust doctrine, having been cited no fewer than 856 times by 2011. Fred R. Shapiro & Michelle Pearse, *The Most Cited Law Review Articles of All Time*, 110 Mich. L. Rev. 1483, 1489 (2012). The word "seminal" captures the impact of Professor Sax's article on the public trust doctrine. Professor Rick Frank considered the article to be the most heavily cited law review article in four decades of environmental law, having a catalytic effect on court cases like the California Supreme Court's decision in *Marks v. Whitney*, 491 P.2d 374 (Cal. 1971) (p. 150); the New Jersey Supreme Court's decision in *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 294 A.2d 47 (N.J. 1972) (p. 297); and *Just v. Marinette County*, 201 N.W.2d 761 (Wis. 1972) (p. 162). Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future*, 45 U.C. Davis L. Rev. 665, 667–68 (2012). Sax's article has also proved a beacon for courts of other countries such as India in developing public trust jurisprudence. *See, e.g.*, pp. 452–53.

2. According to Professor Sax, some natural resources have public rights attached to them, restricting governments from privatizing all property rights associated with them. These public rights represent a kind of sovereign easement or servitude, imposing limits on private ownership, at least restricting the uses to which these resources may be put and, in some cases, resisting privatization altogether. The implementation of these limits is often through the courts, which recognize trust obligations on the part of governments to protect and preserve these public rights. The resources to which the public trust doctrine attached were historically largely water-based, particularly tidal and navigable waters, which were crucial for public navigation, travel, and fishing. But note that Sax also cited to the Massachusetts Supreme Judicial Court's ruling in *Gould v. Greylock* (p. 345) that subjected parklands to public trust scrutiny, so the doctrine apparently is capable of evolving to apply to dry land, a kind of amphibious evolution.

3. At the outset of the article, Sax cited *Commonwealth v. Alger*, 61 Mass. 53 (1851), a decision of the Massachusetts Supreme Judicial Court in which Chief Justice Lemuel Shaw stated:

> We think it is a settled principle, growing out of the nature of well-ordered civil society, that every holder of property, however absolute and unqualified may be his title, holds it under the implied liability that his use of it may be so regulated, that it shall not be injurious to the equal enjoyment of others having an equal right to the enjoyment of their property, nor injurious to the rights of the community. All property in this commonwealth, as well that in the interior as that bordering on tide waters, is derived directly or indirectly from the government, and held subject to those general regulations, which are necessary to the common good and general welfare. Rights of property, like all other social and conventional rights, are subject to such reasonable limitations in their enjoyment, as shall prevent them from being injurious, and to such reasonable restraints and regulations established by

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> law, as the legislature, under the governing and controlling power vested in them by the constitution, may think necessary and expedient.

Id. at 84–85. Chief Justice Shaw's discussion of public and private rights in property anticipated the modern recognition of the distinction between *jus publicum* and *jus privatum* in public trust case law.

4. In *Gould v. Greylock*, 215 N.E.2d 114 (Mass. 1966) (p. 345), examined by Professor Sax, the Massachusetts court employed the public trust doctrine to interpret a statutory grant of authority to the commission. The role of the public trust doctrine in construing statutes and regulations is an often overlooked aspect of the doctrine. *See* Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 Notre Dame L. Rev. 699 (2006); William D. Araiza, *The Public Trust Doctrine as Interpretive Canon*, 45 U.C. Davis L. Rev. 693 (2012).

5. Notice also that the Saxian vision of the public trust doctrine has a large democratization-reinforcing component to it. This perception is no doubt a fallout of *Illinois Central* (p. 70), a case exhumed by Sax, in which the U.S. Supreme Court ruled that the Illinois legislature could not pass a statute conveying the whole of Chicago Harbor to the railroad, in what appeared to be the product of corruption. The ability of narrowly-focused minorities, such as the railroad lobby in the nineteenth century, to control diffuse majorities in legislatures and administrative bodies prompted a new theory of government around the time that Sax wrote his article. Termed "public choice" analysis, or a capture theory of government, the idea was popularized in influential works like James Buchanan & Gordon Tullock, The Calculus of Consent (1962); Mancur Olson, The Logic of Collective Action (1965); and Phillip Foss, Politics and Grass (1960). In terms of majority vs. minority rights, Sax usefully compares the differences between the role of the public trust doctrine and the role of the Bill of Rights. What is the difference?

6. Note the remedy that Professor Sax suggests when a court finds that the legislature violated the PTD: "[T]he function which the courts must perform, and have been performing, is to promote equality of political power for a disorganized and diffuse majority by remanding appropriate cases to the legislature after public opinion has been aroused." This "legislative remand" allows the court to send the matter back to the legislature for further consideration, theoretically a democracy-forcing measure. By placing the decision back in the hands of the legislature, do courts avoid usurping legislative prerogatives? Increasingly, government defendants raise a "political question" defense, charging that environmental decisions belong to the legislature, not to the courts. Do courts side-step this problem through a legislative remand? Can the remedy in a PTD case strike the right balance in a system demanding separation of powers? Note that in statutory environmental cases courts use the "agency remand," sending the matter back to the agency to correct the procedural deficiencies of its decision.

7. Also observe that Sax acknowledged that the public trust doctrine in Roman law allowed for some privatization of public trust resources. Without referencing Sax's explanation, Professor Huffman attempted to mount an historical attack on the legitimacy

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of the public trust doctrine. James L. Huffman, *Speaking of Inconvenient Truths: A History of the Public Trust Doctrine*, 18 Duke L. & Pol'y F. 1 (2007), relying heavily on Glenn J. McGready, *The Navigability Concept in Civil and Common Law: Historical Development, Current Importance, and Some Doctrines That Don't Hold Water*, 3 Fla. St. U. L. Rev. 511 (1975). However, recent scholarship shows that a version of the public trust doctrine existed in Roman law hundreds of years before the compilation of the Justinian Code in the sixth century. *See* J.B. Ruhl & Thomas McGinn, *The Roman Public Trust Doctrine: What Was It, and Does It Support an Atmospheric Trust?*, 47 Ecology L.Q. 117 (2020). Whether or not the public trust doctrine was a creation of the imagination of Sir Matthew Hale's treatise in the 1660s, as alleged in Huffman's polemic, it was introduced in American law in the early 1800s and has been a prominent, if misunderstood, feature of American law ever since.

8. Sax explained that in Anglo-American law riparian landowners have the right to extend their wharves out into waterways ("wharfing out"), another example of the public trust doctrine allowing small privatizations of public resources. In a sense, the doctrine requires a kind of balancing between public and private uses. Professor Carol Rose compared this balancing to the riparian rights doctrine in water law, which allows private landowners to consume small amounts of the water of a stream so long as the public's right in the flow of the stream is maintained. *See* Carol M. Rose, *Joseph Sax and the Idea of the Public Trust*, 25 Ecology L.Q. 351 (1998).

9. The article's citation to the California Supreme Court's 1913 decision *People v. California Fish Co.*, 138 P. 79 (Cal. 1913), is noteworthy as an early judicial recognition that a private owner's "title to the soil" in a riverbed was not absolute. Instead, the public had rights—a kind of public easement—that forbade the landowner from excluding the public. Thus, the California Supreme Court construed state's conveyances purporting to grant tidelands and swamp lands to private parties without mentioning navigation or fishery rights to convey only "naked title" to the lands, subject to the public rights of navigation and fishery that the state continued to hold in trust. *Id.* at 88. The grantee's *jus privatum* was subject to the public's paramount rights unless public authorities, as part of navigation improvement like a seawall, permanently exclude the lands from navigation, as in the case of San Francisco Bay. *Id.* at 87. This early recognition of the public easement characteristic of public trust lands would become a more persistent feature of public trust law in the late twentieth and early twenty-first centuries.

10. In a kind of postscript to the excerpted article, Professor Sax revisited the public trust doctrine a decade later, in Joseph L. Sax, *Liberating the Public Trust from Its Historical Shackles*, 14 U.C. Davis L. Rev. 185 (1980). There he noted that the "essence of property law is respect for reasonable expectations . . . ," and emphasized that expectations are not always reflected in title ownership but are held by the public as well as private owners. *Id.* at 186–87. Sax observed that "one of the most basic and persistent concerns of the legal system" is a commitment to "evolutionary rather than revolutionary change, for the rate of change and the capacity it provides for transition are precisely what separate continuity and adaptation from crisis and col-

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lapse." *Id.* at 188. He argued that the chief purpose of the PTD was to prevent "the destabilizing disappointment of expectations held in common but without formal recognition such as title." *Id.*

This proscription against destabilizing public ecological expectations could arguably prevent developments adversely affecting trust resources like wetland fills, dams, or water diversions. Could it have its greatest effect in the climate context at a time when leading scientists warn that Earth is nearing a tipping point that could alter civilization as we have known it? In a federal climate case advancing the PTD, Dr. James Hansen, head of NASA's Goddard Institute for Space Studies, submitted an amicus brief (in his private capacity) declaring "the urgent need to get beyond fossil fuels before Earth is altered in fundamental respects—including its ability to sustain civilization…." Brief for Dr. James Hansen as Amicus Curiae Supporting Plaintiffs, *Alec L. v. Lisa Jackson*, 2011 WL 8583134 (N.D. Cal. 2011) (No. 4:11-cv-02203 EMC), at 14, *available at* http://www.ourchildrenstrust.org/sites/default/files/Hansen%20Amicus%20.pdf. Could the PTD force action to reduce carbon pollution where government has thus far failed to respond adequately to the climate threat? The question is taken up in chapter 9.

11. Sax's article began an outpouring of scholarship on the public trust doctrine, some of it of a critical nature, including James L. Huffman, *A Fish Out of Water: The Public Trust Doctrine in a Constitutional Democracy*, 19 Envtl. L. 527 (1989) (contending that the public trust doctrine undermines the democratic choices of public officials); Richard Delgado, *Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform*, 44 Vand. L. Rev. 1209 (1991) (maintaining that Sax's article quieted more radical approaches to environmental protection suggested by ecofeminism, Native American philosophy, and critical race theory); Michael C. Blumm & Zach Schwartz, *The Public Trust Doctrine Fifty Years after Sax and Some Thoughts on its Future* (draft, 2020), https://ssrn.com/abstract=3567536. *See also* Erin Ryan, *Public Trust and Distrust: The Theoretical Implications of the Public Trust Doctrine for Natural Resource Management*, 31 Envtl. L. 477 (2001) (surveying the public trust scholarship).

In 1986, Professor Richard Lazarus undertook an extensive survey of the PTD and concluded that its role was no longer necessary in an era dominated by statutes and administrative regulations, which assure greater accountability. Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 Iowa L. Rev. 631 (1986), a perspective challenged by one of the editors in Michael C. Blumm, *Two Wrongs? Correcting Professor Lazarus's Misunderstanding of the Public Trust Doctrine,* 46 Envtl. L. 481 (2016). And note that Lazarus' observation was made before many environmental regulatory failures became evident. Some administrations undermine environmental protection. *See, e.g.,* Patrick Parenteau, *Anything Industry Wants: Environmental Policy Under Bush II*, 14 Duke Envtl. L. & Pol'y F. 363 (2004) ("From day one, the Bush Administration has set about the task of systematically and unilaterally dismantling over thirty years of environmental and natural resources law."). Is the PTD truly superfluous, or is it needed

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now more than ever to infuse environmental agencies with fiduciary obligation? Consider this observation made by one of the editors:

> The ecological crisis of today is largely a result of government's failure to protect natural resources on behalf of its citizens. Under the system of environmental statutory laws enacted in the United States over the past three decades, agencies at every jurisdictional level have gained nearly unlimited authority to manage natural resources and allow their destruction by private interests through permit systems. Although environmental statutes were designed to protect natural resources, most agencies have used permit provisions to allow continual destruction of natural resources. Though permits often contain mitigation conditions, the overall cumulative effect of agency-permitted damage pursuant to statutory authority is staggering. Nearly every natural resource — including the atmosphere, water, air, wetlands, wildlife, fisheries, soils, marine systems, grasslands, and forests — is seriously degraded, and many are at the brink of collapse. Without a fundamental paradigm shift in the way government manages the environment, government will continue to impoverish natural capital until society will no longer be able to sustain itself. . . . [T]he public trust doctrine [serves] as the most compelling beacon for a fundamental and rapid paradigm shift towards sustainability.

Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part I): Ecological Realism and the Need for a Paradigm Shift*, 39 Envtl. L. 43, 44–45 (2009).

Another provocative article was penned by Professor Charles Wilkinson as part of a symposium, *The Public Trust and the Waters of the American West: Yesterday, Today, and Tomorrow*, 19 Envtl. L. 425–735 (1989). Wilkinson explored the origins of the public trust doctrine and found them in surprising sources. His conclusion was that there is a minimum public trust doctrine — a floor — which federal law imposes on the states, but the states have the authority to expand the doctrine as they see fit. The states then set the ceiling of the scope of the public trust doctrine.

The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine

Charles F. Wilkinson
19 Envtl. L. 425 (1989)

The public trust doctrine is complicated — there are fifty-one public trust doctrines in this country alone; timely — the judicial, legislative and scholarly work on the doctrine is proceeding apace; and arcane — the roots of the public trust doctrine go back literally for millennia. But those factors do not explain why the public trust doctrine is one of the most controversial developments in modern American law, and perhaps the single most controversial development in natural resources law.

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

The public trust doctrine comes in many different forms. To understand the trust, however, it is important to begin with its core, what I refer to as the traditional doctrine. By the traditional doctrine, I mean the trust principles that the United States Supreme Court has applied to those watercourses that are navigable for the purposes of title—those watercourses whose shorelines, beds, and banks pass by implication to states at the time of statehood. Those natural resources were the subject of such leading nineteenth century cases as *Shively v. Bowlby* and *Illinois Central Railroad v. Illinois*. Different courts have since extended the public trust doctrine to many other kinds of resources, but first I want to focus on these particular resources and the traditional doctrine that governs them.

* * *

II. The Public Interest in Major Watercourses

A great many countries have legal rules that, in one fashion or another, give special treatment to major bodies of water. Typically, these rules articulate public concern for the resources and, typically, these disparate concepts have ancient roots. Public values in water can be traced back, for example, to the Roman Institutes of Justinian and the Magna Carta—often cited as historical antecedents for the public trust—and to medieval Spain and France. But these ideas extended far beyond Europe. In the Orient, recognition of public uses of water existed well before the birth of Christ. African nations held similar traditions: "from time immemorial the people of Nigeria have enjoyed the right to fish the sea, with its creeks and arms and navigable rivers within the tides." In Moslem countries, "the fundamentals of Islamic water law purport to ensure to all members of the Moslem community the availability of water." Spanish and Mexican laws and institutions in the New World evinced a powerful tradition that large portions of the water supply must be dedicated to the community good.

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

There has been a lot said about the sacredness of our land which is our body; and the values of our culture which is our soul; but water is the blood of our tribes, and

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if its life-giving flow is stopped, or it is polluted, all else will die and the many thousands of years of our communal existence will come to an end.

The English, whose common law is the most direct source of our public trust doctrine, saw ownership differently than did American Indian people and generally favored private ownership of natural resources. But the British made an exception for navigable waterways. The common law distinguished between the *privatum*, which the Crown could transfer to individuals in fee ownership, and the *jus publicum*, which the Crown held in trust for the public. The most important areas of these public rights were the coasts and those stretches of rivers affected by the ebb and flow of the tide.

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

Public values in water certainly existed in America at the time of its founding. Indeed, it is hard to overstate the importance of the major watercourses during the formative years of the United States. To the early settlers, the rivers furnished paths of exploration and avenues for the fur trade and log floats. Due to the density of the forests and the difficulty of road construction, the watercourses provided transportation routes, and their shores afforded logical areas for settlement. Fishing was significant, both for commercial and subsistence purposes. The Revolutionary War and the War of 1812 demonstrated the military necessity of controlling the natural highways. The new nation realized that water had more abstract value as well.

* * *

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

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

Congressional regulation of commerce on navigable watercourses was a primary area of emphasis during the early years of the Republic. Thomas Jefferson, who envisioned uniting the continent through the watercourses, initiated the Lewis and Clark expeditions in 1803 to "explore the river Missouri, from its mouth to its source, and, crossing the highlands by the shortest portage, to seek the best water communication thence to the Pacific Ocean. . . ." Politically, water improvements were popular and commonly appeared in the party platforms of the day.

In an even larger sense, water was a unifying factor for the Nation. Rivers and lakes facilitated trade, allowed immigration to new areas, and established communication lines among the states. The need for one central governing body to oversee water traffic was a key impetus for Congress' primacy under the Commerce Clause

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of the Constitution. Chief Justice Marshall explained the significance of the clause and of navigation to the nation as a whole in *Gibbons v. Ogden* by saying that "[t]he power over commerce, including navigation, was one of the primary objects for which the people of America adopted their government, and must have been contemplated in forming it." *Gibbons v. Ogden*, one of the first Supreme Court Commerce Clause decisions, involved a monopoly of the steamboats in New York State; the conflict between steamboat monopolies and free watercourses was of great concern nationally. Marshall, upholding a federal license granted outside of the New York scheme and justifying the need for federal regulation of the waterways, wrote that "deep streams … pass through the interior of almost every State in the Union, and furnish the means of exercising this right to regulate commerce. If Congress has the power to regulate it, that power must be exercised whenever the subject exists."

Thus, the ribbons of waterways tied the early nation together—economically, politically, and symbolically.

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

III. Navigable Watercourses: State Prerogatives

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

* * *

The bargaining over the land transfers from the United States to the new states never failed to be heated. Ohio was the first public land state in 1803. Congress finally agreed to grant Ohio, along with other more minor grants, one section (section 16)

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out of every township; a section is one square mile and each township contains thirty-six sections. In all, Ohio received about four percent of all land within its borders. Over time, Congress became more generous with new states. Later states received two sections in each township. The latest states in the Lower Forty-Eight made even more favorable bargains. Utah, Arizona, and New Mexico each received four sections per township for school lands, and a total of fourteen to sixteen percent of all land within the state. In all cases, states received additional express grants in the statehood acts for various designated purposes. Finally, the United States agreed to transfer to Alaska 103 million acres of the 365 million acres in the state.

* * *

The United States never expressly granted to the new states, either in the statehood acts or in the later land grant statutes, the lands under navigable watercourses. Given the tremendous amount of attention that was trained on land grants at statehood and in subsequent years, it would have been easy for the courts to find that there was no intent to transfer such important property interests out of federal ownership. The standard maxim of construction, *inclusio unius est exclusio alterius* (the inclusion of one is the exclusion of another), seems tailor-made for this situation. With so much express statutory action on the subject, how could there be room for an implied grant? Real property transactions are done by treaty, statute, deed, or patent. To leave a land transfer of such magnitude and complexity to implication is aberrational in the extreme.

Nonetheless, the Supreme Court concluded that lands under navigable watercourses did pass by implication to new states at the time of statehood. The leading cases were *Martin v. Waddell* in 1842 and *Pollard's Lessee v. Hagan* in 1845. The Court reached its holding as a matter of constitutional law. The statehood clause, art. 4, section 3, clause 1, provides that "New States may be admitted by the Congress into this Union. . . ." The Court, looking to the constitutional phrase "*this* Union," has developed the equal footing doctrine, requiring that new states enter the Union on a basis of full political equality with all other states. The mid-century Court reasoned that the western states were entitled to own title to lands under navigable watercourses as a matter of equal footing: since the original states retained those lands, the Court reasoned, so too must the western states in order to achieve equality.

* * *

IV. Navigable Watercourses: State Obligations and Federal Prerogatives

Given the national importance of watercourses navigable for title and the circumstances under which they were transferred to the states, it is understandable that the judiciary might structure some limits on the states in their administration of lands under navigable watercourses. Three such limitations have emerged. First, under the Commerce Clause, Congress has authority to regulate these watercourses. Of course, today the Court has found federal regulatory power over commerce to be nearly unlimited, but the issue of federal supremacy over commerce was hotly disputed during the Marshall years and the issue was decided in the context of navigable watercourses. Second, the navigation servitude applies to navigable watercourses. This allows the

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United States to condemn land, including state land, up to the high-water mark without being required to pay just compensation. This limit on the states' land title is also based on the Constitution: "The Commerce Clause confers a unique position upon the Government in connection with navigable waters.... 'For this purpose they are the public property of the nation, and subject to all the requisite legislation by Congress.'... This power to regulate navigation confers upon the United States a 'dominant servitude....'"

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

* * *

V. The Source and Scope of the Traditional Trust

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

The doctrine, as first announced by Justice Field, might be viewed as stemming either from federal law or from the internal law of Illinois. *Illinois Central*, however, seems plainly to have been premised on federal law. The briefs relied upon both federal cases and authority from many different states, of which Illinois was just one. The parties were plainly arguing principles of general applicability, not just Illinois law. The *Illinois Central* opinion itself leaves little doubt that the Court conceived of a general trust that applied to all states. Throughout the opinion, the Court refers to "a state" and employs other phrases of general applicability. In describing the trust, the Court made it clear that the trust derives from federal law and is binding on all states:

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

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

The Court has never explicitly stated the specific source of "the settled law of this country" that mandates the trust in the "several States." There are at least four possibilities. First, the public trust doctrine could be viewed as a matter of federal

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common law. This source of law, however, is not in favor and is unlikely to be employed in light of the more specific available sources discussed below. Second, the *Illinois Central* Court employed language similar to that commonly used in the guaranty clause cases. The guaranty clause also has fallen into disuse and, again, it is unlikely that a modern court would look to it as a basis for the public trust doctrine.

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

A persuasive case can be made that the trust is based on congressional preemption, manifested by implication either through a comprehensive legislative scheme or, more specifically, through the statehood acts. Congress' tradition of mandating that navigable watercourses be kept open to the public runs deep, from the Northwest Ordinance's guarantee in 1787 that such rivers and lakes must be "forever free" through the comprehensive matrix of legislation that Congress has since enacted on the subject of navigation. Importantly, the "forever free" language from the Northwest Ordinance, one of this country's most luminous enactments, was expressly included in the statehood acts of all the states in the old Northwest Territory and in the charters of several other states as well. The Supreme Court has recognized Congress' determination to keep the major waterways open in numerous opinions. As Justice Swayne explained in *Gilman v. Philadelphia*, "Commerce includes navigation.… This necessarily includes the power to keep major watercourses open and free from any obstruction to their navigation.…"

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

Nevertheless, in the context of the law involving watercourses navigable for title, with its special traditions and heavy overlay of constitutional doctrine, locating the public trust doctrine in the Constitution itself is perhaps more persuasive. The navigation servitude, a limit on state authority on exactly the same watercourses, is an implied component of the Commerce Clause. The navigation servitude and the public trust doctrine are parallel doctrines, both affording complementary protections to major watercourses—the Court has recently, and correctly, described the public trust as a "servitude." Similarly, the Court has found that the extraordinary implied

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land transfer to the states upon admission is guaranteed to the states under the Constitution by the equal footing doctrine. It follows that the trust, a "servitude" or "easement" on the underlying land title, is also imposed by the same source, the Constitution. For more than 150 years, the Supreme Court has consistently given a constitutional cast to state and federal prerogatives and obligations with regard to waters navigable for title, due ultimately to the key role of these watercourses in the country's commerce and society and in the formation of the national government. Thus, although the other federal alternatives mentioned above have characteristics that cut in their favor, the fairest and most principled conclusion is that the public trust doctrine is rooted in the Commerce Clause and became binding on new states at statehood.

The second unresolved question is whether the substantive standards for administering the trust are defined by state or federal law. There are three possibilities. First, there is language in both old and new cases suggesting that the content of the traditional trust is purely a matter of state law. Thus, for example, the Supreme Court in the 1926 opinion in *Appleby v. City of New York* stated that "the conclusion reached in *Illinois Central* was necessarily a statement of Illinois law…." United States Supreme Court decisions during the 1980s have not addressed the issue directly but have made repeated references to state prerogatives over lands navigable for title.

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

My conclusion, however, is that there is a third approach that provides a middle ground that is more sensitive to the many different factors at work here. Both the implied transfer and the overlying trust in favor of public access are now settled parts of our jurisprudence. There are powerful state interests — powerful enough to induce the implied transfer in the first place — and strong national interests — strong enough to impress an implicit trust on these highly valued natural resources. It does not make sense that a state could abdicate a federally and constitutionally imposed trust completely. As Justice Field put it in *Illinois Central*, if there were no trust at all, such a situation "would place every harbor in the country at the mercy of a majority of the legislature of the State in which the harbor is situated." At the same time, there is plainly broad state discretion; *Illinois Central* recognized the propriety both of state transfers consistent with navigation and of nonnavigation-related transfers that did not substantially impair the trust. Later cases have approved a variety of state transactions of trust lands. Probably the most satisfactory formulation is the standard, set out in *Illinois Central* and reaffirmed in *Shively v. Bowlby*, that the states have extensive leeway but that the purposes of the trust cannot be "substantially impair[ed]." Professor Sax has explained the basic legal rule this way:

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

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

* * *

VI. Beyond the Traditional Doctrine

Court decisions and legislation in most states have supplemented the traditional federal doctrine, and most of the remaining states are likely to follow eventually. The developments have been many, but the major developments are these. First, some states have extended the coverage of the trust beyond those watercourses navigable for title to all, or nearly all, waters of the state. A leading example is Montana, where the courts and legislature have applied the public trust to all waters usable for recreational purposes. Second, cases have extended the trust beyond the traditional purposes of commerce, navigation, and fishing, with the most common "new"purposes being various forms of recreation. Third, various cases have extended the reach beyond watercourses per se. Thus, decisions and state constitutions extend the trust to dry sand beaches, wildlife, and state parks. One recent decision in New Jersey even extended the trust to drinking water in a dispute over the distribution of proceeds from a water supply company.

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

* * *

VII. Conclusion

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

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belief that our rivers and canyons are more than commodities, that they have a trace of the sacred; a belief that words like "trust" ought to be taken seriously.

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

Notes

1. Professor Wilkinson points out that there are at least fifty-one different public trust doctrines in the United States. Actually, there are many more than that worldwide, given the international endorsement of the doctrine, as explored in chapter 11.

2. According to Wilkinson, there is a "core" to the public trust doctrine established through federal law. What is this core? Of what significance is there to such a federally established core?

3. Wilkinson suggested that historically the public trust doctrine focused on maintaining public rights in major bodies of water. Why would the doctrine have concentrated on major waterways in the nineteenth century? *See* Kris J. Mitchener & Ian W. McLean, *The Productivity of the U.S. States Since 1880*, 8 J. of Econ. Growth 73–114 (Mar. 2003); Emory R. Johnson, Inland Waterways: Their Annals of the American Academy of Political and Social Science (1893) (explaining the importance of navigable waters before the advent of railroads in a country with bad roadways). What resources today assume the same importance to society?

4. Wilkinson also cited the constitutional law staple of *Gibbons v. Ogden*, 22 U.S. 1 (1824), Chief Justice John Marshall's historic decision which endorsed a broad view of the scope of the Constitution's Commerce Clause. The effect of that decision was to break up a transportation monopoly. *See* Samuel R. Olken, *Chief Justice John Marshall and the Course of American Constitutional History*, 33 J. Marshall L. Rev. 743 (2000). The public trust doctrine is similarly anti-monopolistic, as the article ending this chapter indicates.

5. Wilkinson suggested several possible sources of the public trust doctrine in American law. For Wilkinson, the individual statehood acts are central to the origins of the public trust doctrine. Why? For details, see Eric Biber, *The Price of Admission: Causes, Effects, and Patterns of Conditions Imposed on States Entering the Union*, 46 Am. J. Legal Hist. 119 (2004).

6. Wilkinson mentioned the navigation servitude, a somewhat mysterious federal doctrine protecting navigation projects from constitutional takings claims by adversely affected landowners. *See* Harrison C. Dunning, *Sources of the Public Right*, *in* 2

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Waters and Water Rights, § 30.05 (Amy K. Kelley ed., 3rd ed. 2013). Could this servitude be thought of as an outgrowth of a federal public trust interest? Does it protect public needs and interact with private property rights in much the same way as the public trust?

7. Do declarations of state or public ownership of various resources like water or wildlife, which are commonplace in state law, reflect the existence of the public trust doctrine? Why or why not?

8. Wilkinson explained the land grants made by the federal government to states as part of their statehood acts. These grants were made for specific purposes such as supporting schools in the state. They are uniformly deemed to be held in "trust," but their management has traditionally been distinguished from the PTD. Most state lands managers believe their mission is to maximize the revenue from the lands for purposes of raising money for education. Accordingly, the lands are often leased for purposes that undermine ecological values. For an overview and analysis, see Peter W. Culp, Diane Conradi & Cynthia C. Tuell, Trust Lands in the American West: A Legal Overview and Policy Assessment (2005); Jon A. Souder & Sally K. Fairfax, State Trust Lands: History, Management, and Sustainable Use (1996).

9. For comparative analyses of the states' public trust doctrines, largely focused on water allocation, see Robin Kundis Craig's two articles: *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 Penn St. L. Rev. 1 (2007); and *A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 Ecology L.Q. 53 (2010). Professor Craig's western study contains a 105-page appendix surveying the public trust doctrines of nineteen western states, and her eastern study includes an 87-page appendix surveying the doctrine in thirty-one eastern states. *See id.* One of the editors and his students have compiled analyses of all but five of the fifty states. *See The Public Trust Doctrine in Forty-Five States* (Michael C. Blumm ed., 2014 ed.), *available at* http://ssrn.com/abstract=2235329. We consider the public trust in water in chapter 5.

10. The following article explores the antimonopoly basis of the public trust doctrine, a persistent and continuing theme in its jurisprudence.

The Public Trust as an Antimonopoly Doctrine

Michael C. Blumm & Aurora Paulsen Moses
44 B.C. Envtl. Affairs L. Rev. 1 (2017)

The public trust doctrine originated—and has persisted in American law—as antimonopoly protection. From the time of its recognition by American courts in the early nineteenth century, the doctrine has protected the public against private monopolization of natural resources, beginning with tidal waters and wild animals. Ensuing public trust case law has extended the scope of trust protection to other important natural resources, including non-tidal and non-navigable, and land-based resources like parks. Courts are now considering the trust doctrine's application to the atmosphere.

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The roots of the PTD [(public trust doctrine)] lie in seventeenth-century English political thought, particularly the writings of John Locke. According to Locke, a person should only be able to acquire property that he could productively use, "whatever is beyond this, is more than his share, and belongs to others." This Lockean sentiment migrated to American political thought, most prominently through Thomas Jefferson's advocacy of a republic of small landholders and widespread distribution of resources. Preserving public rights to access natural resources, including navigable waters, served Jacksonian America's aversion to concentrated wealth and special privilege for elites. Later in the nineteenth century, monopolization became a widespread concern, as corporations amassed economic and political power and threatened to assert exclusive use of natural resources. The rise of concentrated power in the years following the Civil War led to reform movements like state efforts to regulate railroads and the federal enactment of the Interstate Commerce Commission and Sherman Antitrust Acts, which sought to protect the public from the adverse effects of monopolization.

Promoting widespread public access to navigable waters—the essential arteries of commerce—developed as part of a large effort in nineteenth century America to resist monopoly power. Antimonopoly sentiment produced limits on land acquisition in federal homestead and preemption law and was at the center of the founding of western water law, which rejected common law riparian rights because they gave monopoly rights to shoreline landowners. Public rights to hunt on private, unenclosed lands were also commonplace, reflecting nineteenth century America's preference for public subsistence hunting over land speculators' rights to exclude, at least until they invested in fences.

Nineteenth-century case law established the duty of state to prevent monopoly control of certain natural resources. In 1842, the United States Supreme Court's first PTD case disallowed a landowner's attempted monopoly control of oyster's in the Raritan River. A half-century later, in 1892, the Court again invoked the PTD to prevent monopolization of Chicago Harbor, invalidating a state grant of lands beneath navigable waters to a railroad. The Court soon added another foundation decision in 1896, establishing public ownership of wildlife by upholding a state hunting law that prohibited the transportation of harvested wild birds out of the state. As with lands under navigable or tidal waters, the Court concluded that wild animals were owned by states in "trust for the benefit of all people, not … for the benefit of private individuals as distinguished from the public good."

By the dawn of the twentieth century, American law had evolved to recognize sovereign responsibilities to protect public right in both navigable waters and their underlying beds as well as wildlife. During the twentieth century, courts increasingly acknowledged the relative scarcity of natural resources and the vulnerability of these resources to private monopolization, and in turn responded by extending public trust protection to other resources, including non-navigable-in-fact waters and upland parks. Courts also recognized that private monopolization would jeopardize fundamental public uses of natural resources beyond navigation, commerce, and fishing—

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the original triad of protected activities. Consequently, many courts recognized that the PTD protects recreation access, and others have decided that the doctrine provides environmental protect for trust resources to benefit future generations.

* * *

The American PTD is rooted in long-held antimonopoly sentiment. From its inception in U.S. law in the early nineteenth century, the doctrine has protected the public against state attempts to created private monopolies over natural resources, beginning with ocean harvesting in tidal waters and soon extending inland to navigable waters and wildlife. In the U.S. Supreme Court's seminal decision of *Illinois Central Railroad v. Illinois,* the Court held that the PTD prevented the state from sanctioning private monopolization of Chicago Harbor, thus preserving the harbor and lakefront for present and future public use. Ensuing case law invoked the PTD to combat private threats to other important natural resources, including non-tidal and traditionally non-navigable waters, as well as wildlife and upland resources like beaches and parklands. Courts are now being asked to consider antimonopoly protection for additional public resources, including groundwater and the atmosphere.

The PTD found footing in American jurisprudence nearly two centuries ago. Although commentators have written extensively about the doctrine's development and significance, the antimonopoly roots of the PTD have not been closely examined. Public trust advocates seeking to enforce or expand the scope of the doctrine should ground the PTD in its deep antimonopoly origins, which help to clarify the basis of the widespread sentiment that certain natural resources have public values too significant to be subject to exclusive private control.

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