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A Short History of the Public Trust Doctrine and its Intersection with Private Water Law

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A SHORT HISTORY OF THE PUBLIC TRUST DOCTRINE AND ITS INTERSECTION WITH PRIVATE WATER LAW

*Erin Ryan**

This Article provides a short history of the development of public trust principles from early Roman and British law through modern U.S. law, and then analyzes the tension between the public commons approach underlying the public trust regulation of waterways and the privatization premises of American laws that regulate private use of the water within them. It begins by introducing the public trust doctrine as a creature of common law, constitutional law, and perhaps as an underlying feature of sovereign authority more generally, tracing its history from the Justinian statement of the *jus publicum* through the British Magna Carta, and on to early American affirmations in both state and federal supreme courts. Over the centuries, the doctrine has evolved from an affirmation of sovereign authority over resources to a recognition of sovereign responsibility to protect them for present and future generations.

The Article then reviews the acceptance of public trust principles in modern U.S. law, their ratification in many state constitutions, and the questions that remain open about the extent to which the doctrine applies at the federal level—including its role as a background principle in constitutional takings analyses, and the extent to which it constrains even federal sovereign authority. Finally, it explores the intersection of the doctrine with state water allocation law, reviewing the broad mechanics of the riparian and appropriative rights doctrines that establish theoretical conflict with public trust principles. Conflict is especially pronounced between the public commons model that underlies the public trust and the privatization model embedded in the western doctrine of prior appropriations, as demonstrated by distinct approaches to reconciling them in California, Idaho, and Nevada. It closes with reflections on alternative legal frameworks for protecting environmental rights worldwide, including ancient Ottoman law and the Rights of Nature movement.

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INTRODUCTION

This article explores the development of public trust principles from early Roman and British law through modern U.S. law as a public commons approach to natural resource management, primarily with regard to waterways. It then analyzes the tension between the common pool approach underlying the public trust regulation of waterways and the contrasting theoretical premises of American laws that regulate private use of water within them—especially the privatization model embedded in the western doctrine of prior appropriations, which assigns perpetual rights to withdraw from the watercourse on a first-in-time basis.

The public trust doctrine, the protagonist of much modern environmental advocacy in the United States, creates a set of public rights and responsibilities with regard to certain natural resource commons, obligating the state to manage them in trust for the public.¹ It is thought to be among the oldest doctrines of the common law, with roots extending as far back as ancient Rome and early Britain, where it primarily protected public values of navigation, fisheries, and commerce associated with waterways.² Over these hundreds and even thousands of years, the common law came to recognize that some resources, such as navigable waters, are so critical that they cannot be owned by anyone in particular—instead, they must belong to everyone together.³ To prevent private expropriation or monopolization of these critical public commons, the government—be it the Emperor, the King, or later, the elected executive and legislative branches—was entrusted to manage them on behalf of the public.⁴

¹ See generally Erin Ryan, *The Public Trust Doctrine, Private Water Allocation, and Mono Lake: The Historic Saga of National Audubon Society v. Superior Court*, 45 ENVTL. L. 561 (2015) [hereinafter Ryan, *The Historic Saga*]. See also ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY* (Cambridge Univ. Press, forthcoming 2021); Erin Ryan, *From Mono Lake to the Atmospheric Trust: Navigating the Public and Private Interests in Public Trust Resource Commons*, 10 GEO. WASH. J. ENERGY & ENVTL. L. 39 (2019) [hereinafter Ryan, *From Mono Lake to the Atmospheric Trust*]; Erin Ryan, Mary Wood, Richard Frank, James Huffman, & Irma Russell, *Juliana v. United States: Debating the Fundamentals of the Fundamental Right to a Sustainable Climate*, 46 FLA. ST. L. REV. ONLINE 1 (2018), <https://www.fsulawreview.com/article/juliana-v-united-states-debating-the-fundamentals-of-the-fundamental-right-to-a-sustainable-climate/> [hereinafter Ryan, et al., *Debating the Fundamentals of the Fundamental Right*]; Erin Ryan, *Public Trust & Distrust: Theoretical Implications of the Public Trust Doctrine for Natural Resource Management*, 31 ENVTL. L. 477 (2001) [hereinafter Ryan, *Public Trust and Distrust*].

² See J. INST. PROEMIUM, 2.1.1. (T. Sandars trans., 4th ed. 1869); see also *infra* Part I(A).

³ See *infra* Part I(A).

⁴ See, e.g., Joseph Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970) (setting forth the seminal academic statement of the

In the last century, the doctrine has gradually transformed from an affirmation of sovereign authority over these resources to a recognition of sovereign responsibility to protect them for present and future generations.⁵ Especially in recent decades, it has evolved substantially through U.S. common, constitutional, and statutory law to address a broader variety of natural resources and a broader scope of public values associated with them, including ecological, recreational, and scenic values.⁶ Today, the doctrine is frequently invoked in natural resource management conflicts, some involving constitutional takings claims, and some of which push the boundaries of previously recognized environmental rights, such as the atmospheric trust movement's appeal to public trust principles in support of legal claims for meaningful climate governance.⁷ Although it has not been matched in the courts, a vigorous scholarly debate asserts its rightful application not only to state sovereign authority, but also federal authority.⁸

Nevertheless, the doctrine remains most firmly rooted in its application to water-related resources governed under state law,⁹ which has created an interesting theoretical dilemma for American water law. For at the same time that the public trust doctrine was developing to protect commons values, a wholly independent system of law was evolving to determine how much water individual users could take from these public watercourses for their own private enjoyment. And these independent water law doctrines do not always follow from the same theoretical premise as the public trust doctrine.

The Eastern riparian rights system, imported directly from British common law, assigns correlative rights to private riparian owners, requiring all authorized users to share the resource with due regard to one another's interests.¹⁰ Deriving from a similar common-pool theory of access to a shared resource, American riparianism has expanded public rights and co-existed with the public trust doctrine with relatively mild

public trust doctrine as a modern legal tool to aid in the protection of natural resources); Michael C. Blumm, *Public Property and the Democratization of Western Water Law: A Modern View of the Public Trust Doctrine*, 19 ENVTL. L. 573, 580 (1989) (discussing the public trust doctrine as "a democratizing force by (1) preventing monopolization of trust resources and (2) promoting natural resource decision making that involves and is accountable to the public").

⁵ See, e.g., Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 64.

⁶ See, e.g., Nat'l Audubon Soc'y v. Superior Court (*Mono Lake Case*), 658 P.2d 709, 726-27 (Cal. 1983); see also *infra* Parts I(B)-(C).

⁷ See, e.g., *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020); see also Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60-64; see generally Ryan, et al., *Debating the Fundamentals of the Fundamental Right*, *supra* note 1.

⁸ See *infra* notes 240-264 and accompanying text.

⁹ Ryan, *The Historic Saga*, *supra* note 1, at 625-26.

¹⁰ See *infra* Part IV(A) (discussing riparian rights regimes).

legal friction.¹¹ However, the prior appropriations doctrine, the dominant rule of water allocation in the Western United States, allows whomever first diverts from a watercourse to establish a right to continue taking the same amount of water for that same use, potentially indefinitely.¹² These appropriative entitlements to water hold something closer to the force of conventional private property rights, even if that water is coming from a public waterway protected by the public trust doctrine.¹³

Figuring out how these two sets of legal rules intersect has caused no small amount of trouble, leading to such famous conflicts as *National Audubon Society v. Superior Court*, the epic battle over how much water the City of Los Angeles could divert from distant Mono Lake, the eastern watershed of the Yosemite High Sierra, despite serious ecological harm.¹⁴ Similarly, in *Environmental Law Foundation v. State Water Resources Control Board*, litigants disputed how the public trust doctrine intersects private agricultural rights to withdraw hydrologically connected groundwater from the Scott River watershed, despite direct ecological harm to the river.¹⁵ While these disputes have been the subject of deeper scholarly inquiry elsewhere,¹⁶ this article provides the missing historic and legal analysis underlying the core doctrinal conflicts between the public trust doctrine and private water law. It further contrasts California's approach of balancing of public trust obligations and private water rights with Idaho's outright rejection of public trust principles as a constraint on appropriative water rights, and the mixed approach taken by the Nevada Supreme Court in recent litigation over Walker Lake.

This article offers a short history of the development of public trust principles in the United States, providing foundation for the unresolved relationship between the public trust doctrine and the contrasting doctrines of private water allocation, riparian rights and prior appropriations. It begins by introducing the public trust doctrine as a creature of common law, constitutional law, and perhaps as an underlying feature of sovereign authority more generally. Part I introduces the historical origins of the doctrine, identifying the earliest statements of public trust principles in ancient Rome and early British law. Part II traces the formal reception of the doctrine in the United States through state and

¹¹ *Id.*

¹² See *infra* Part IV(B) (discussing prior appropriations).

¹³ *Id.*

¹⁴ *Mono Lake Case*, 658 P.2d at 726–27 (adjudicating an epic water dispute amidst the conflict between these two doctrines).

¹⁵ *Env'tl. Law Found. v. State Water Res. Control Bd. (Scott River Case)*, 237 Cal. Rptr. 3d 393, 399–403 (Cal. Ct. App. 2018), *review denied*, 2018 Cal. LEXIS 9313 (Cal. Nov. 28, 2018) (concluding that the public trust doctrine protected groundwater tributaries of navigable waters).

¹⁶ See, e.g., sources cited *supra* note 1.

ultimately federal law, including its intersection with the Equal Footing Doctrine and the School Trust Lands conveyed to the states early in the nation's history by the congressional Lands Ordinance of 1785.

Part III reviews the acceptance of public trust principles in modern U.S. law, including the Supreme Court's seminal decision in *Illinois Central Railroad*, the ratification of the doctrine in many state constitutions, and questions that remain open about the extent to which the doctrine applies at the federal level. This analysis considers the role of doctrine as a background principle in constitutional takings contexts, and the extent to which it should be considered a constitutive constraint on federal authority. It further reports on a long obscured debate over the nature of the public trust doctrine among the Supreme Court justices deciding an important 1987 takings case involving coastal lands, *Nollan v. California Coastal Commission*.¹⁷

Finally, Part IV reviews the broad mechanics of water allocation law, setting up the potential for conflict with the public trust doctrine. It begins with a cursory review of the riparian rights doctrine of the eastern United States, inherited from British common law. It then explores the prior appropriations doctrine that developed later in the western states, and which has clashed notoriously with the public trust doctrine in so many western water conflicts. The analysis reveals how the unresolved relationship between these doctrines creates ongoing friction in the water governance regimes that follow them, with special attention to the distinct approaches to managing this friction in the western states of California, Idaho, and Nevada. Understanding these underlying legal theory conflicts should enable us to better understand the core conflicts within water disputes—and, ideally, prevent them in the future.

The Article concludes with brief reflections on the evolution of public commons doctrines worldwide that take similar and contrasting approaches to environmental rights, such as ancient Ottoman law and the modern Rights of Nature movement. Each plays a different role in helping us locate the dynamic equipoise between the conflicting values at stake in contemporary environmental disputes.

I. HISTORICAL ORIGINS OF THE PUBLIC TRUST DOCTRINE

Modern public trust principles, which assign state responsibility for natural resources held in trust for the public, are most commonly associated with American law.¹⁸ American legal scholars have long

¹⁷ 483 U.S. 825 (1987).

¹⁸ See, e.g., M.C. Mehta v. Kamal Nath, (1996) 1 SCC 388 (India), in 1 U.N. ENVIRONMENT PROGRAMME, COMPENDIUM OF JUDICIAL DECISIONS IN MATTERS RELATED TO ENVIRONMENT,

debated the merits and the mechanics of the public trust doctrine, in a robust discourse that matches enthusiastic support¹⁹ with deep concerns.²⁰

NATIONAL DECISIONS 259 (1998) (referring to the California public trust doctrine, as expressed in the *Mono Lake* case, in adopting similar public trust principles as a feature of Indian constitutional law); see also Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L. REV. 699, 701 (2006) (discussing American versions of the public trust doctrine in general and referring to various expressions of the trust as “public trust principles”).

¹⁹ The list of scholarship sympathetic to the public trust doctrine is too long to capture in one footnote, but for a general overview, see generally MICHAEL BLUMM & MARY CHRISTINA WOOD, *THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW* (2013); Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1; Ryan, *The Historic Saga*, *supra* note 1; Mary Turnipseed, Stephen E. Roady, Raphael Sagarin & Larry B. Crowder, *The Silver Anniversary of the United States' Exclusive Economic Zone: Twenty-Five Years of Ocean Use and Abuse, and the Possibility of a Blue Water Public Trust Doctrine*, 36 ECOLOGY L.Q. 1 (2009) (advocating that the public trust doctrine apply to federal fisheries management); Klass, *supra* note 18 (advocating an integrated approach to the public trust doctrine that includes common law, statutory, and constitutional bases); J.B. Ruhl & James Salzman, *Ecosystem Services and the Public Trust Doctrine: Working Change from Within*, 15 SE. ENVTL. L.J. 223 (2006) (arguing for the protection of natural capital and ecosystem services through the public trust doctrine); Allan Kanner, *The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources*, 16 DUKE ENVTL. L. & POL'Y F. 57 (2005) (advocating for the role of the public trust doctrine in contamination cleanups); Richard Roos-Collins, *A Plan to Restore the Public Trust Uses of Rivers and Creeks*, 83 TEX. L. REV. 1929 (2005) (advocating for the wider adoption of public trust principles in water rights regulation); Dale D. Goble, *Three Cases / Four Tales: Commons, Capture, the Public Trust, and Property in Land*, 35 ENVTL. L. 807 (2005) (advocating for the role of the public trust doctrine in application to wildlife); William D. Araiza, *Democracy, Distrust, and the Public Trust: Process-Based Constitutional Theory, the Public Trust Doctrine, and the Search for a Substantive Environmental Value*, 45 UCLA L. REV. 385 (1997) (identifying a foundation for the public trust doctrine in many state constitutions); Epstein, *infra* note 163, at 428–30 (supporting the public trust doctrine from a libertarian, property rights perspective as a natural limitation on government power, comparable to restrictions on eminent domain); Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269 (1980) (advocating for the use of public trust principles in judicial review of public land management decisions); Blumm, *supra* note 4; Sax, *supra* note 4; see also sources cited *infra* note 240.

²⁰ See, e.g., Barton H. Thompson, Jr., *The Public Trust Doctrine: A Conservative Reconstruction and Defense*, 15 SE. ENVTL. L.J. 47, 49 (2006) (suggesting reconstruction of the public trust doctrine in response to libertarian and property rights critiques); Randy T. Simmons, *Property and the Public Trust Doctrine*, PERC POLICY SERIES-39 (2007) (discussing the public trust doctrine as a threat to private property rights); Lloyd R. Cohen, *The Public Trust Doctrine: An Economic Perspective*, 29 CAL. W. L. REV. 239, 274–76 (1992) (criticizing the public trust doctrine's effects on private property rights); 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) (arguing that the doctrine is too weak to contend with broader environmental challenges); Thompson, *infra* note 207, at 1532–33 (criticizing use of the doctrine to avoid just compensation for what otherwise looks like a taking); James L. Huffman, *A Fish Out of Water: The Public Trust in a Constitutional Democracy*, 19 ENVTL. L. 527 (1989) (arguing that the doctrine lacks foundation in the police power and critiquing the judicial role under the doctrine as antidemocratic); Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA. L. REV. 631 (1986) (arguing that the property-based concepts of the doctrine are a problematic approach for accomplishing environmental protection in comparison with the

However, the central idea of the public trust has roots in some of the oldest doctrines of the common law tradition.²¹ Many accounts date its origins to early British law, and some go all the way back to ancient Rome.²² Versions of the public trust doctrine now operate in every American state and many other nations,²³ but the underlying theory evolved over a time horizon so long that it can be easy to miss the breadth of its historical reach. This Part presents the conventional historical account of the development of the modern public trust doctrine, anchored with references to contemporaneous events to convey its remarkable journey through history.

A. *The Roman and Byzantine Empires: The Institutes of Justinian*

The earliest written accounts of public trust principles go astonishingly far back in time. For context, in the Sixth Century A.D., King Arthur's victory in the battle of Mound Badon was slowing the Saxon conquest of England, and Yang Jian was reuniting China at the advent of the Sui Dynasty.²⁴ At about the same time, the Byzantine Emperor Justinian I set

stewardship approach of modern environmental statutory law); James L. Huffman, *Trusting the Public Interest to Judges: A Comment on the Public Trust Writings of Professors Sax, Wilkinson, Dunning and Johnson*, 63 DENV. U. L. REV. 565 (1986) (questioning the policy motives of pro-public trust scholarship).

²¹ See, e.g., Sax, *supra* note 4, at 475 (laying the seminal academic foundations for the public trust doctrine as a tool to aid in the protection of natural resources, and crediting its origins to early British and Roman law). But see James L. Huffman, *Speaking of Inconvenient Truths—A History of the Public Trust Doctrine*, 18 DUKE ENVTL. L. & POL'Y F. 1, 20-23 (2007) (critiquing the conventional account of this history).

²² See J. INST. PROEMIUM, 2.1.1. (T. Sandars trans., 4th ed. 1869) (translation from the INSTITUTES OF JUSTINIAN, by the Byzantine Emperor, Justinian I). But 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) (critiquing the standard account of the Justinian roots of the doctrine).

²³ See, e.g., Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PENN. ST. ENVTL. L. REV. 1 (2007) (comparing eastern states' public trust doctrines); Robin Kundis Craig, *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) (comparing western states' public trust doctrines); Michael C. Blumm & Rachel D. Guthrie, *Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxon Vision*, 45 CAL. DAVIS L. REV. 741, 760 (2012) (reviewing the adoption of public trust principles internationally); ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY*, Chapter VII-VIII (Cambridge University Press, forthcoming, 2021) (discussing examples of public trust principles in operation around the nation and around the globe).

²⁴ *King Arthur*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/King-Arthur> (last visited Sept. 23, 2019) (noting that the battle at Mount Badon is believed to have taken place sometime that century); *Sui Dynasty*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/Sui-dynasty> (last visited Sept. 23, 2019) (noting that Yang Jian reunited China in 581).

to work codifying Roman Common Law of the previous era, for the combined purpose of fortifying legal education and restating the law for enforcement purposes.²⁵ In the *INSTITUTES OF JUSTINIAN*, published in 533, he documented the *Jus Publicum*, a principle addressing the common ownership of certain natural resources:

By the law of nature these things are the common property to mankind—the air, running water, the sea, and consequently the shores of the sea.²⁶

Thousands of years later, it is hard to know exactly how these principles helped govern the Roman Empire,²⁷ but this commanding early statement of public commons has echoed through common law jurisprudence ever since, in both judicial decisions and constitutional affirmations.²⁸ Analogous principles of public commons ownership, especially pertaining to waterways,²⁹ also appear in civil law countries with legal codes that draw on ancient Roman law, including France, Spain, and other post-colonial nations with related legal systems.³⁰

B. Early British Law: The Magna Carta, Forest Charter, and Common Law

Some *Jus Publicum* principles were later incorporated into early British law, beginning with the Magna Carta. In 1215, a few decades before Marco Polo set sail for Asia and shortly after the sack of Constantinople during the Fourth Crusade,³¹ King John of England issued

²⁵ H.F. JOLOWICZ & BARRY NICHOLAS, *HISTORICAL INTRODUCTION TO THE STUDY OF ROMAN LAW* 492-93 (3d ed. 1972).

²⁶ J. INST. PROEMIUM, 2.1.1. (T. Sandars trans., 4th ed. 1869).

²⁷ See Huffman, *supra* note 21; Ruhl & McGinn, *supra* note 22.

²⁸ See ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER RIGHTS, AND SAVING MONO LAKE* (Cambridge Univ. Press, forthcoming 2021), Chapter VIII (“The Evolving PTD”) (tracing the evolution of the doctrine in the U.S. and international jurisdictions).

²⁹ The public trust doctrine is most often invoked in application to waterways, but it is worth noting that the first item on Justinian’s list—“the air”—is an important element in the modern atmospheric trust movement, which attempts to deploy public trust principles in the context of climate governance. See, e.g., *Juliana v. United States*, 217 F.Supp.3d 1224 (D. Or. 2016), *rev’d*, 947 F.3d 1159 (9th Cir. 2020).

³⁰ See, e.g., Glenn J. Macgrady, *The Navigability Concept in the Civil and Common Law: Historical Development, Current Importance, and Some Doctrines that Don’t Hold Water*, 3 FLA. ST. U. L. REV. 513, 536-45 (1975), <https://ir.law.fsu.edu/cgi/viewcontent.cgi?Article=1801&context=lr> (reviewing Roman-inspired doctrines of public ownership over navigable waterways in Spain, France, and other civil law countries).

³¹ *Marco Polo*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/biography/Marco-Polo> (last visited Sept. 23, 2019) (dating Marco Polo’s eastern voyage as beginning in 1271); *Sack of Constantinople*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/event/Sack-of-Constantinople-1204> (last visited Sept. 23, 2019) (discussing the sack of Constantinople during the Fourth Crusade in 1204)..

the Magna Carta (“Great Charter”), promising his rebellious barons that he and all future sovereigns would operate within the rule of law.³²

Although the Magna Carta was unsuccessful in the first instance, it eventually provided the foundations of the modern English legal system, and it is widely credited as a progenitor of Western democracy and constitutional law.³³ In addition to declaring the sovereign subject to the rule of law, the Magna Carta also set forth rights to speedy justice, trial by jury, and against unusual punishments.³⁴ It also incorporated into English law certain principles of Roman common law, including elements of the *Jus Publicum*. For example, Chapter 33 of the Magna Carta required the removal of all weirs in the Thames and Medway Rivers “throughout the whole of England” that interfered with fishing or navigation.³⁵ The Magna Carta, negotiated among a common pool of aristocrats, effectively decreed these navigable waters a public commons for these purposes.³⁶

The Charter of the Forest, added to the Magna Carta in 1217 by King Henry III, further protected public rights to access natural resources on certain undeveloped royal lands (not just forests), and it remained in effect for centuries thereafter.³⁷ Re-establishing traditional rights of public commons that had been eroded by William the Conqueror, the Forest Charter promised that the King would not interfere with commoners’ rights to graze animals, forage, plant crops, and collect lumber on open lands subject to Forest Law.³⁸ Notably, this law still

³² See ANDREW BLICK, *BEYOND MAGNA CARTA: A CONSTITUTION FOR THE UNITED KINGDOM* (2015).

³³ See Doris Mary Stenton, *Magna Carta*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/topic/Magna-Carta> (last modified Mar. 16, 2020).

³⁴ Magna Carta, ch. 20, 39-40 (Eng. 1215), <https://www.bl.uk/collection-items/magna-carta-1215?shelfitemviewer=1>.

³⁵ Magna Carta, ch. 33 (Eng. 1215), <https://www.bl.uk/collection-items/magna-carta-1215?shelfitemviewer=1>; see also Michael C. Blumm & Courtney Engel, *Proprietary and Sovereign Public Trust Obligations: From Justinian and Hale to Lamprey and Oswego Lake*, 43 VT. L. REV. 1, 7 (2018). A weir is a barrier that crosses a river in order to alter its flow characteristics, usually changing the height of the water level, and often to control water flow into associated reservoirs, lakes, or ponds.

³⁶ Blumm & Engel, *supra* note 35, at 7 (discussing the implementation of Justinian public trust principles in the Magna Carta).

³⁷ Magna Carta, ch. 12 (Eng. 1217); see Sarah Nield, *The New Forest: Ancient Forest and Modern Playground*, in 2 MODERN STUDIES IN PROPERTY LAW 287, 294 (Elizabeth Cooke ed., 2003); Anne Bottomley, *Beneath the City: The Forest! Civic Commons as Practice and Critique*, 5 BIRKBECK L. REV. 1, 2-3 (2018); Nicholas Robinson, *The Public Trust Doctrine in the 21st Century*, 10 GEO. WASH. J. ENERGY & ENVTL. L. 83, 84-87 (2020).

³⁸ See Dr. John Langton, *The Charter of the Forest of King Henry III*, FORESTS AND CHASES OF ENGLAND AND WALES C. 1000 TO C. 1850, St. John’s College Research Centre, <http://info.sjc.ox.ac.uk/forests/Carta.htm> (last visited Aug. 8, 2018).

governs the New Forest territory in southern England.³⁹ While these provisions do not necessarily follow from the Justinian references to common property in air, water, and coastlines, they do express an early affirmation of what would develop into more modern public trust principles of public rights in natural resource commons.

Early British common law also made reference to public trust principles in a series of cases and authorities affirming sovereign authority over submerged tidelands.⁴⁰ In 1611, the same year that Galileo first observed sunspots⁴¹ and Shakespeare's *The Tempest* debuted,⁴² the King's Bench held that while the beds of non-navigable waterways could be privately held, navigable waters were owned by the sovereign for public use.⁴³ Sir Matthew Hale, in his renowned 1670 *Treatise on English Maritime Law*, later described sovereign ownership of tidelands in an account of the three different kinds of coastal land: (1) that under the royal right (or police power), (2) that available for public navigational access, and (3) that which was privately owned.⁴⁴

British law primarily applied the sovereign ownership principle to submerged lands beneath coastal tidelands, the navigable waterways of primary value there. American law would ultimately apply the doctrine to submerged lands beneath all navigable waterways, including large watercourses to which there were no true analogs in Britain, such as America's Great Lakes and enormous river systems.⁴⁵ As detailed further in Part II, the doctrine made its first American appearances in key state court decisions during the early nineteenth century, and it was affirmed repeatedly by the U.S. Supreme Court by that century's end. While these decisions created uniquely American law going forward, they drew heavily on the historical roots of the doctrine in these pre-American times.⁴⁶

³⁹ See Nield, *supra* note 37, at 303.

⁴⁰ See Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 727-30 (1986).

⁴¹ *Sunspot*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/science/sunspot> (last visited Sept. 24, 2019).

⁴² *The Tempest*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/The-Tempest> (last visited Sept. 24, 2019).

⁴³ *The Royal Fishery of Banne*, 80 Eng. Rep. 540, 543 (K.B. 1611).

⁴⁴ Matthew Hale, *A Treatise De Jure Maris et Brachiorum Ejusdem*, reprinted in STUART A. MOORE, *A HISTORY OF THE FORESHORE AND THE LAW RELATING THERETO*, 370, 371-72 (1888).

⁴⁵ See Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 453 (1892).

⁴⁶ See *infra* Part II.

C. Critiquing the Conventional Account

While this account of the historical roots of the doctrine is frequently repeated in American jurisprudence and scholarship,⁴⁷ some regard the conventional account with skepticism.

Some scholars debate the extent to which ancient legal practice does or should provide justification for the evolution of the modern public trust doctrine. In copious writings on this point, Professor James Huffman has been especially troubled by the conventional account. He concedes that some claims typically made by public trust proponents are consistent with early Roman and British law—for example, that public trust resources must be made available for certain defined public uses, such as fishing and navigation.⁴⁸ However, he argues that other central claims by public trust proponents—for example, that certain natural resources require public ownership by their nature, and that the state cannot alienate them or use them inconsistently with these public rights—are unsupported by his readings of either Roman or English law.⁴⁹ He notes that the Magna Carta, created by British Barons to protect their own property rights, was never meant as a declaration of rights for commoners.⁵⁰ Huffman maintains that unlike contemporary statements of the public trust doctrine, the relevant portions of the Magna Carta protected only British nobility, rather than the general public, and that this weakens the historical foundations so often relied on by modern public trust proponents.⁵¹ He further argues that the King's prerogatives under British common law did not include trust-like responsibilities to the public until

⁴⁷ See, e.g., *Scott River Case*, 237 Cal. Rptr. 3d at 399 (“From ancient Roman roots, the English common law has developed a doctrine enshrining humanity’s entitlement to air and water as a public trust.”); MICHAEL BLUMM & MARY CHRISTINA WOOD, *THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW* 12-13, 57-82 (2013) (identifying the Roman roots of the public trust doctrine); Sax, *supra* note 4, at 475 (1970); Ewa M. Davison, *Enjoys Long Walks on the Beach: Washington’s Public Trust Doctrine and the Right of Pedestrian Passage over Private Tidelands*, 81 WASH. L. REV. 813, 830-31 (2006) (invoking the Justinian roots of the public trust doctrine).

⁴⁸ Huffman, *supra* note 21, at 18-27.

⁴⁹ *Id.* Huffman points to the text that follows the previously quoted portion of Justinian’s *Jus Publicum* for support of his argument that Roman law protected private rights as strenuously as it did public rights. The rest of the passage reads: “No one, therefore, is forbidden to approach the sea-shore, provided he respects habitations, monuments, and buildings, which are not, like the sea, subject only to the law of nations.” J. INST. PROEMIUM, 2.1.1. (T. Sandars trans., 4th ed. 1869) (translation from the INSTITUTES OF JUSTINIAN, by the Byzantine Emperor, Justinian I).

⁵⁰ Huffman, *supra* note 21, at 19-20; see also Patrick Deveney, *Title, Jus Publicum, and the Public Trust: An Historical Analysis*, 1 SEA GRANT L. J. 13, 39 (1976); Glenn J. MacGrady, *The Navigability Concept in the Civil and Common Law: Historical Development, Current Importance, and Some Doctrines That Don’t Hold Water*, 3 FLA. ST. U. L. REV. 513, 554 (1975).

⁵¹ Huffman, *supra* note 21, at 20-21.

well into the 19th century.⁵² His argument, in essence, is that while American courts ground public trust decisions in this story we like to tell about the Roman and British roots of the doctrine, the story we are telling ourselves isn't really true.⁵³

Professors J.B. Ruhl and Tom McGinn have also examined the meaningfulness of modern invocations of the Justinian statement of the *jus publicum*, especially by those who would apply it to protect the air commons in climate change litigation.⁵⁴ They begin with skepticism, questioning the unclear relationship between this twenty-one word passage and actual Roman legal practice during the relevant historical period.⁵⁵ They worry that modern atmospheric trust advocates may overstate the environmental values associated with the historical premise, when the Roman public trust progenitor arose primarily to protect economic interests.⁵⁶ Nevertheless, they find more support for modern public trust scholars' reliance on the Roman doctrine than Huffman, and ultimately contend that the public trust principle commonly credited to Justinian probably extends even further back in time.⁵⁷

Classics Professor Bruce Frier reports with sympathy on the ongoing debate between legal scholars who turn to Roman law in support of modern invocations of the public trust and critics, like Huffman, who argue that the Roman sources were misinterpreted and “therefore used to grant a false patina of antiquity to a deeply suspect theory justifying public seizure of private property.”⁵⁸ He concedes that gaps in the available historical sources leave some Roman law principles unclear or ambiguous.⁵⁹ Nevertheless, his analysis of the ancient Roman concept of *res communes* (“common things”) provides, if not a perfect analog to the

⁵² *Id.* (citing *Carter v. Murcot*, 98 Eng. Rep. 2162 (1768), and quoting F. POLLOCK & F. W. MAITLAND, *THE HISTORY OF ENGLISH LAW* 518 (2d ed. 1952)).

⁵³ Ruhl & McGinn, *supra* note 22 at 123-24 (explaining that Huffman's objections to Roman roots is because “the *res communes omnium* (RCO) resources were ‘things common to all’ mostly because their supply was abundant and demand for them slight,” and “until late in the Empire, Roman law made no distinction between the public and the personal status of the ruler”).

⁵⁴ Ruhl and McGinn, *supra* note 22.

⁵⁵ *Id.* at 136-39, 171-74.

⁵⁶ *Id.* at 167-71 (“[T]he surviving sources suggest to us that Roman policies are not linked, at least not in any obvious sense, to the protection of the environment. Instead they are keyed to the exploitation of certain natural resources for economic motives.”).

⁵⁷ *Id.* at 130, 163 (noting that “[t]he Institutes was an attempt to summarize and synthesize Roman law going back many centuries before its publication” and was “stitched together from excerpts drawn from the works of two juristic predecessors,” Guis and Marcian); see also Bruce W. Frier, *The Roman Origins of the Public Trust Doctrine*, 32 *J. OF ROMAN ARCHAEOLOGY* 641, 643 (2019).

⁵⁸ Frier, *supra* note 57, at 641-42 and n.7.

⁵⁹ *Id.* at 642.

modern trust, a Roman groundwork for what the trust has become.⁶⁰ Although he does not believe that the Roman concept is identical to the modern public trust doctrine, he nevertheless concludes that the two share distinctive and important features, especially in application to navigable waterways:

[T]he Anglo-American concept of a trust, with its division of ownership between a trustee who holds property and a beneficiary who has an equitable title in it, is not altogether unlike—at least in the case of *res communes* that the jurists describe as public, namely larger rivers and the seashore—the division between public ownership and the common ‘ownership’ of beneficiaries[.]⁶¹

He finds the parallel between the Roman and modern doctrines further reinforced by the Roman jurists’ insistence that the *res communes* doctrine is rooted in Natural Law, that set of unchanging moral principles that forms the basis of human-made laws and government.⁶²

This adherence to the Natural Law origins of the Roman doctrine is reminiscent of the modern understandings of the public trust, discussed further in Part III, as a quasi-constitutional doctrine.⁶³ Like the constraints of Natural Law, this interpretation holds that the public trust doctrine operates as a constraint on sovereign authority, and one that the sovereign cannot easily extinguish.⁶⁴

Although elements of the historical critique have merit, their arguments remain a footnote to the mainstream historical account. Even Ruhl and McGinn, in the most rigorous interrogation of the Roman origin story to date, find support for the continuity of public trust principles to ancient common law. And while Huffman is right that the Magna Carta was conceived as a political device by British nobles to protect their own aristocratic privileges, and not those of the general public—these unstately origins did not dull the worldwide inspiration that the Magna Carta would eventually provide for the development of universal civil rights. For the same reason, its aristocratic origins should not necessarily

⁶⁰ *Id.* at 647. Frier discusses the distinction between *res communes omnibus*, property singled out only for general use, and *res communes omnium*, property that is commonly owned. *Id.* at 646. Notably, this distinction between public property and common property survives in the modern public trust doctrine’s distinction between the *jus publicum* and *jus privatum*. *Cf.* *Glass v. Goeckel*, 703 N.W. 2d 58 (Mich. 2005) (distinguishing between the private title that a sovereign may convey and the public trust “easement” over submerged lands that remains with the public).

⁶¹ Frier, *supra* note 57, at 647.

⁶² *Id.*

⁶³ *See infra* Part III (“Contemporary Overview”); *infra* text accompanying notes 240-255 (discussing the public trust as a constraint on sovereign authority).

⁶⁴ *Id.*

tarnish the force of this historical account on the development of more universal public rights in natural resources. The ideals set forth in the Forest Charter addendum to the Magna Carta, which unequivocally speak to commoners' rights in natural resources, may come even closer to the modern public trust principles that would ultimately evolve in the United States and elsewhere.⁶⁵

In the end, whether or not critics like Huffman are right about the veracity of this public trust history—it is a story that American jurists have been telling for a very long time. As detailed below, the American courts that adopted the public trust doctrine have been referring copiously (and perhaps defensively) to its roots in both British and Roman law for two hundred years.⁶⁶ Notwithstanding critique of the Roman and British origin story, the modern public trust doctrine today finds its most important jurisprudential roots in the only body of law with precedential significance in the United States—the long chain of American judicial decisions and other sources that affirm its role in American law from early through modern times.

II. RECEPTION IN THE UNITED STATES

The doctrine of sovereign authority over submerged lands was received in the United States through the individual states' reception of British common law and began making appearances in litigation within a few decades of the nation's founding. The emerging public trust doctrine established sovereign ownership over the submerged lands beneath navigable waterways, usually up to the mean high-water mark (the point representing the maximum rise of the waterbody at issue over the surrounding land).⁶⁷ In the expanding territory of the new United States, where the shores of the sea are matched by thousands of miles of navigable rivers and enormous freshwater lakes, the doctrine was expanded from the British focus on coastal tidelands to the resources

⁶⁵ Nicholas Robinson, *The Public Trust Doctrine in the 21st Century*, 10 GEO. WASH. J. ENERGY & ENVTL. L. 83, 84-85 (2020).

⁶⁶ See *infra* Part II.

⁶⁷ The mean high-water mark (MHW) is the primary tool for measuring the boundaries between public and private lands beneath navigable waterways, but some jurisdictions use other boundaries for certain waterways, such as the ordinary low water mark (OLWM) for non-tidal or littoral waterways, designating the lowest point of rise by the waterbody over its submerged lands. See Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PA. ST. ENVTL. L. REV. 1, 15-17 (2007). For example, the first case discussed below, *Arnold v. Mundy*, refers to the OLWM line. Some jurisdictions that adopted OLWM boundaries early in their history later changed to MHW by statute. See Katrina M. Wyman and Nicholas R. Williams, *Migrating Boundaries*, 65 FLA. L. REV. 1957, 1964-65 (2013).

associated with navigable waterways more generally.⁶⁸ The doctrine was first recognized by state courts during the early 1800s, not long after Thomas Jefferson's tenure as the third President of the United States and Lewis and Clark's expedition of the western territories.⁶⁹ By the end of that century, the U.S. Supreme Court had affirmed it several times as an underlying feature of the American common law landscape.

This Part reviews key moments in this early history of the American doctrine,⁷⁰ tracing its arrival in state courts in the early nineteenth century through the U.S. Supreme Court's seminal treatments of the doctrine near the turn of the twentieth century. These cases had consequential stakes, such as the rightful ownership of Chicago Harbor⁷¹ and submerged lands on the Columbia River in Oregon.⁷² Yet among the first cases to turn on the public trust doctrine had lesser stakes, a New Jersey dispute over the ownership of submerged oyster beds.

A. State Common Law: *Arnold v. Mundy*

In 1821, the former French Emperor Napoleon Bonaparte died in exile,⁷³ and the New Jersey Supreme Court became the first American court to discuss the sovereign ownership of submerged lands in *Arnold v. Mundy*, a case about who was entitled to harvest oysters from a riverbed.⁷⁴

The plaintiff had purchased a farm alongside a navigable river, in which he planted oysters below the ordinary low-water mark⁷⁵ and staked off the bed.⁷⁶ When the defendant took oysters from this bed, the farmer argued that he was trespassing on submerged lands that had long been

⁶⁴ See *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 453 (1892).

⁶⁹ *Thomas Jefferson*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/biography/Thomas-Jefferson> (last visited Sept. 24, 2019) (dating Jefferson's presidency between 1801-09); *Lewis and Clark Expedition*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/event/Lewis-and-Clark-Expedition> (last visited Sept. 24, 2019) (dating Lewis and Clark's journey to find a route to the Pacific Ocean as beginning in 1804).

⁷⁰ For an even more thorough history of the early American doctrine, see generally Harrison C. Dunning, *The Public Right to Use Water in Place*, in *WATERS AND WATER RIGHTS* 28-1 to 33-22 (Amy C. Kelley ed., 2009).

⁷¹ *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387 (1892).

⁷² *Shively v. Bowlby*, 152 U.S. 1, 53-54 (1894).

⁷³ *Napoleon I*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/biography/Napoleon-I> (last visited Sept. 24, 2019).

⁷⁴ *Arnold v. Mundy*, 6 N.J.L. 1 (1821).

⁷⁵ For discussion of mean high and ordinary low water marks, see generally James L. Huffman, *supra* note 21, at 1, 18-27. It is noteworthy that the oyster bed here was below the ordinary low water mark, indicating that it would meet the requirements of public ownership under either measuring approach.

⁷⁶ *Arnold*, 6 N.J.L. at 9-10, 65-66.

claimed and defended by his predecessors in title.⁷⁷ Although the farmer was able to show surveys proving the previous private claims to these submerged lands, and to prove that these predecessors in title really had driven would-be competitors away from them, the defendant argued that all citizens of New Jersey had a common right to take oysters from a navigable river where oysters would grow naturally.⁷⁸

Writing for the court, Chief Justice Kirkpatrick determined that the farmer could only prevail in his suit if he had proper title to the oyster bed⁷⁹—but that this farmer could not do so, because his private claim extended only to the landward side of the water’s edge.⁸⁰ The Chief Justice held that the land beneath navigable waterways⁸¹ is common property,⁸² and that proprietors have no more power than the English crown to convert lands beneath them into private property.⁸³ Referencing Justinian, the Chief Justice characterized common property as “the air, the running water, the sea, the fish, and the wild beasts,” and held that title to these were in the sovereign, to “be held, protected, and regulated for the common use and benefit.”⁸⁴ Writing with strong tones of judicial gravity, he concluded:

The sovereign power itself, therefore, cannot, consistently with the principles of the law of nature and the constitution of a well ordered society, make a direct and absolute grant of the waters of the state, divesting all the citizens of their common right. It would be a grievance which never could be long borne by a free people.⁸⁵

With these words, he became the first American jurist to tie the public commons element of the public trust doctrine to the orderly functioning of democracy. Not long thereafter, in 1842, the U.S. Supreme Court approved the reasoning of *Arnold v. Mundy* in a similar case about the ownership of submerged oyster beds, *Martin v. Waddell*.⁸⁶

⁷⁷ *Id.* at 9, 66.

⁷⁸ *Id.* at 66.

⁷⁹ *Id.* at 11-14.

⁸⁰ *Id.* at 67.

⁸¹ *Id.* at 12 (specifying “the navigable rivers, where 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 the other uses of the water and its products”).

⁸² *Id.* at 71-72.

⁸³ *Id.* at 78 (indicating that any grants purporting to convey this common property were therefore null and void).

⁸⁴ *Id.* at 71.

⁸⁵ *Id.* at 78.

⁸⁶ 41 U.S. 367, 410 (1842) (“[W]hen the Revolution took place, the people of each state became themselves sovereign; and in that character hold the absolute right to all their navigable waters and

B. Affirmation by the U.S. Supreme Court: Martin v. Waddell

The United States Supreme Court first formally invoked the public trust doctrine in 1842, the same year that the Chinese and British Empires ended the First Opium War.⁸⁷ In *Martin v. Waddell*, the Supreme Court affirmed the sovereign ownership of navigable waters and their submerged resources in another dispute over oyster beds.⁸⁸ Here, the plaintiff claimed ownership of tidelands whose chain of title traced back to a grant to the Duke of York from King Charles of England, made to facilitate the establishment of the early American colonies.⁸⁹ Yet the Court held that the plaintiff proprietors could not prevail, because even a royal grant was subject to public trust rights of common fishery for the common people.⁹⁰ In affirming the public trust principles of sovereign ownership of navigable waters and the submerged resources therein,⁹¹ the Court referenced the presence of the doctrine in English law as far back as the Magna Carta:

The lands under the navigable waters within the limits of the charter passed to the grantee, as one of the royalties incident to the powers of government; and were to be held by him, in the same manner, and for the same purposes, that the navigable waters of England and the soils under them are held by the Crown.

The policy of England since Magna Charta (for the last six hundred years), has been carefully preserved—to secure the common right of piscary for the benefit of the public.

[I]t would require very plain language in these letters-patent [to the Duke of York] to persuade [the Court] that the public and common right of fishery in navigable waters, which has been so long and so carefully guarded in England, and which was

the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government.”); *see also id.* at 409 (“The country mentioned in the letters patent, was held by the king in his public and regal character as the representative of the nation, and in trust for them.”).

⁸⁷ *Opium Wars*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/Opium-Wars#ref1262803> (last visited Sept. 24, 2019).

⁸⁸ *Martin v. Waddell*, 41 U.S. 367 (1842).

⁸⁹ *Id.* at 407-18.

⁹⁰ *Id.* at 416-18.

⁹¹ *Id.* at 418. The court concludes that the former proprietors had no right to alienate the submerged land as private property in conflict with the people’s rights to common fisheries. The original royal charters to the Duke of York, later surrendered to these proprietors, conferred the same powers as those held by the crown, which protected common rights of fishery absent clear contrary language (not evident here) to convert the land under navigable waters to private property. *See id.* at 413-14.

preserved in every other colony founded on the Atlantic borders, was intended, in this one instance, to be taken away.⁹²

Three years later, the Supreme Court applied the same principles in a more consequential case resolving a dispute over the ownership of submerged lands in Alabama and Georgia.⁹³

C. The Public Trust on Equal Footing: Pollard v. Hagan

In 1845, the year Texas was admitted as the 45th U.S. state and Henry David Thoreau took up residence at Walden Pond,⁹⁴ the Supreme Court considered the relationship between the public trust and equal footing doctrines. In *Pollard v. Hagan*, the Court rejected an argument that territory in Alabama that had originally been ceded by Spain should not be subject to the public trust doctrine,⁹⁵ partnering the common law concept of sovereign ownership with the federal constitutional doctrine of “equal footing” between the states.⁹⁶ The equal footing doctrine holds that all states in the union, regardless of the timing and circumstances of their entry, possess the same sovereign rights and responsibilities as the original thirteen states, including those regarding submerged lands.⁹⁷

In this case, the issue turned on whether the common law public trust doctrine would apply in Alabama, a state whose territory had come into the United States by Treaty with the King of Spain, a non-common law sovereign. The plaintiff claimed ownership by a U.S. Patent to submerged land under the Mobile River, which had originally been ceded to the United States by Spain under the 1819 Adams-Onís Treaty, also known as the Florida Treaty.⁹⁸ When the case went to trial, the jury was instructed—consistent with the public trust doctrine—that if they believed the land was below the high-water mark at the time Alabama was admitted to the union, then the patent was void and the plaintiff had no title.⁹⁹ When the jury found against the plaintiff, he appealed on grounds that they had been improperly instructed.

⁹² *Id.* at 368, 413-14.

⁹³ *Pollard v. Hagan*, 44 U.S. 212 (1845).

⁹⁴ *Texas*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/place/Texas-state> (last visited Sept. 24, 2019); *Walden Pond*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/place/Walden-Pond> (last visited Sept. 24, 2019).

⁹⁵ *Pollard*, 44 U.S. at 228-29.

⁹⁶ *Id.* at 222-23.

⁹⁷ *Id.* at 222 (“The manner in which the new States were to be admitted into the union, according to the Ordinance of 1787, as expressed therein, is as follows: ‘And whenever any of the said states shall have sixty thousand free inhabitants therein, such state shall be admitted by its delegates into the Congress of the United States, on an equal footing with the original States in all respects whatever.’”).

⁹⁸ *Id.* at 225.

⁹⁹ *Id.* at 220.

In his appeal, the plaintiff argued that because the land had been conveyed to the U.S. by Spain, and not England, the fuller powers of the Spanish Crown over navigable waters should govern his ownership rights.¹⁰⁰ The Spanish Crown had held full title to these submerged lands without the encumbering public trust obligations of British common law. By his reasoning, those were the unencumbered rights that had been conveyed to the United States, which later conveyed those same unencumbered rights to him.

In a critical moment for the American public trust doctrine, the Court rejected this argument. Instead, it determined that when Alabama was admitted to the Union, it entered on “equal footing” with neighboring states, such as Georgia, and thereby succeeded to all the same rights of sovereignty, jurisdiction, and eminent domain as these other states.¹⁰¹ The Court explained that the U.S. had not succeeded to the specific rights the King of Spain had held previously, but came into possession of the new territory subject to the institutions and laws of its own government:

It cannot be admitted that the King of Spain could, by treaty or otherwise, impart to the United States any of his royal prerogatives; and much less can it be admitted that they have capacity to receive or power to exercise them. Every nation acquiring territory, by treaty or otherwise, must hold it subject to the constitution and laws of its own government, and not according to those of the government ceding it.¹⁰²

The court held that the land under navigable waters was reserved to the states, that new states have the same sovereignty and rights over navigable waters as did the original states, and that the United States did not have the power to grant the lands claimed by the plaintiff.¹⁰³

Pollard v. Hagan is an especially important case because it sheds light on some of the questions that continue to preoccupy public trust jurisprudence today. By establishing that all lands passing into U.S. possession are encumbered by the public trust regardless of their source, it lends credence to contemporary arguments that the public trust doctrine constrains federal as well as state sovereign management of public trust resources.¹⁰⁴ After all, if all submerged lands within the United States are subject to the trust regardless of what sovereign possessed them beforehand, what distinguishes submerged lands under federal

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 223, 228-29.

¹⁰² *Id.* at 225.

¹⁰³ *Id.* at 230.

¹⁰⁴ See *infra* Part III.C; see generally *Juliana v. United States*, 217 F. Supp. 3d 1224, 1234 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020).

jurisdiction? Some scholars also read the case to suggest that the doctrine has quasi-constitutional features, drawing from a well of constitutive authority that departs from more ordinary doctrines of law. Accordingly, some argue that *Pollard* reveals the constitutional dimensions of the doctrine as an attribute of sovereignty that transcends mere common law status.¹⁰⁵ Others have argued that the public trust doctrine expresses a fiduciary aspect of the constitutional equal footing doctrine.¹⁰⁶

D. The Definitive Supreme Court Statement: Shively v. Bowlby

By the late nineteenth century, it was well established among American courts that the state holds navigable waterways in trust for the public.¹⁰⁷ In 1894, the Supreme Court made its most definitive statement of the public trust doctrine as an attribute of sovereign authority in *Shively v. Bowlby*, a case quieting title to submerged lands beneath a state-sanctioned wharf on the Columbia River in Oregon.¹⁰⁸

The case resolved a dispute over the ownership of submerged lands along the Columbia River near its delta into the Pacific, in what would eventually become the city of Astoria, Oregon.¹⁰⁹ The defendant's riverbed claim was challenged in a complicated fact pattern involving a countervailing claim by successors in title who had built a wharf on the same land.¹¹⁰ The original claimant had taken title under a grant from the U.S. Congress to U.S. territorial lands before Oregon had become a state, and the case turned on whether that grant had conveyed not only the uplands, but also the submerged lands below the mean high-water mark.¹¹¹

In a meticulous exposition, the Court traced how the doctrine of public rights in submerged lands had progressed from English common law into the original thirteen states and those that had followed, identifying the overwhelming majority that had explicitly adopted the public trust. Citing both *Martin v. Wadell* and *Pollard v. Hagan*, the Court once again

¹⁰⁵ Harrison C. Dunning, *The Public Trust: A Fundamental Doctrine of American Property Law*, 19 ENVTL. L. 515, 516-524 (1989). *But see* James R. Rasband, *The Disregarded Common Parentage of the Equal Footing and Public Trust Doctrines*, 32 LAND & WATER L. REV. 1 (1997) (arguing that both the equal footing doctrine and public trust doctrine should be understood as flip sides of the same federal common law coin). For further discussion of the relationship between the equal footing doctrine and the public trust doctrine, *see infra* notes 248-253 and accompanying text.

¹⁰⁶ *See generally* Michael C. Blumm, Harrison C. Dunning, & Scott W. Reed, *Renouncing the Public Trust Doctrine: An Assessment of the Validity of Idaho House Bill 794*, 24 ECOLOGY L.Q. 461 (1997).

¹⁰⁷ *See* Blumm, *supra* note 4, at 580.

¹⁰⁸ 152 U.S. 1, 53-54 (1894).

¹⁰⁹ *Id.* at 7, 9.

¹¹⁰ *Id.*

¹¹¹ *Id.* at 52-55, 57.

affirmed that submerged lands had been held by the English King for the benefit of the public,¹¹² that those rights became vested in the original states after the American Revolution,¹¹³ and that all U.S. territory ever-after would be subject to the same public trust limitations on submerged lands.¹¹⁴ The Court held that whenever territory came into the U.S. by whatever means, the same public ownership of submerged lands below the mean high-water mark passed to the federal government, held in trust for the new states that would be carved from this territory.¹¹⁵

As new states entered the Union, they therefore did so on equal footing with the original states, holding the same rights and responsibilities in submerged lands.¹¹⁶ While Congress could have conveyed title to submerged territorial land before statehood, it could only have done so for appropriate public purposes, and did not do so by general law.¹¹⁷ Otherwise, sovereign grants of riparian and littoral lands to private owners remain subject to the paramount right of navigation inherent in the public.¹¹⁸

Having traced the full history of the doctrine from British law through the American Revolution and forward since then, it concluded that the disputed lands near the Columbia River Delta “include[] no title or right in the land below high-water mark; and the statutes of Oregon, under which the defendants in error hold, are a constitutional and legal exercise by the state of Oregon of its dominion over the lands under navigable waters.”¹¹⁹ But the force of its exposition immediately before this holding, summarizing its exhaustive analysis, is worth quoting at length:

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

At common law, the title and the dominion in lands flowed by the tide were in the king for the benefit of the nation. Upon the settlement of the colonies, like rights passed to the grantees in the royal charters, in trust for the communities to be established.

¹¹² *Id.* at 48-49.

¹¹³ *Id.* at 14-15, 57.

¹¹⁴ *Id.* at 58.

¹¹⁵ *Id.* at 57.

¹¹⁶ *Id.* at 49, 57.

¹¹⁷ *Id.* at 58.

¹¹⁸ *Id.* at 52, 57-58.

¹¹⁹ *Id.* at 58.

Upon the American Revolution, these rights, charged with a like trust, were vested in the original states within their respective borders, subject to the rights surrendered by the constitution to the United States.

Upon the acquisition of a territory by the United States, whether by cession from one of the states, or by treaty with a foreign country, or by discovery and settlement, the same title and dominion passed to the United States, for the benefit of the whole people, and in trust for the several states to be ultimately created out of the territory.

The new states admitted into the Union since the adoption of the constitution have the same rights as the original states in the tide waters, and in the lands under them, within their respective jurisdictions. The title and rights of riparian or littoral proprietors in the soil below high-water mark, therefore, are governed by the laws of the several states, subject to the rights granted to the United States by the constitution.

The United States, while they hold the country as a territory, having all the powers both of national and of municipal government, may grant, for appropriate purposes, titles or rights in the soil below high-water mark of tide waters. But they have never done so by general laws, and, unless in some case of international duty or public exigency, have acted upon the policy, as most in accordance with the interest of the people and with the object for which the territories were acquired, of leaving the administration and disposition of the sovereign rights in navigable waters, and in the soil under them, to the control of the states, respectively, when organized and admitted into the Union.

Grants by [C]ongress of portions of the public lands within a territory to settlers thereon, though bordering on or bounded by navigable waters, convey, of their own force, no title or right below high-water mark, and do not impair the title and dominion of the future state, when created, but leave the question of the use of the shores by the owners of uplands to the sovereign control of each state, subject only to the rights vested by the constitution in the United States.¹²⁰

In so holding, the U.S. Supreme Court formally ratified, then and forever, the general provenance of American lands submerged in navigable waters (below the mean high-water mark) as owned by the sovereign and held in trust for the benefit of the public.

¹²⁰ *Id.* at 57-58.

E. Contrasting School Trust Lands

The foundational nature of the public trust distinguishes lands protected under this doctrine from other important lands set aside for public purposes early in the nation's history, such as the lands conveyed in trust to the states by the congressional Land Ordinance of 1785 to support public education.¹²¹ In these earliest days of the republic, Congress allocated to new states a designated quadrant of land in each undeveloped township for the express purpose of providing for public education.¹²² Under the Land Ordinance, new states were surveyed and divided into townships of thirty-six square miles, each composed of thirty-six sections.¹²³ The sixteenth section of each township was set aside as "school trust land," to be held in trust by the state and used specifically for the maintenance and benefit of both primary schooling and public universities.¹²⁴ Some states used trust lands for the construction of actual schools, but most managed the lands to provide income in support of education.¹²⁵ For example, Colorado's state trust lands mostly generate income for public education through the development of oil and gas reserves, though some are also managed for hunting, fishing, and recreation.¹²⁶

The state school trust lands seem familiar, since they also represent an ownership interest in land allocated to the state as trustee to provide the public with specific benefits. However, unlike public trust lands held by every state under the equal footing doctrine, state trust lands were designated in only about half the states, mostly during the westward expansion following the Revolutionary War.¹²⁷ Like public trust lands, school trust lands were conveyed for a specific public purpose. Yet public trust lands belong to the state without a specific conveyance, held in trust as an attribute of state sovereignty, whereas school trust lands were created by legislative statute and conveyed without constraint on subsequent alienation. In fact, Congress later explicitly authorized states

¹²¹ 28 JOURNALS OF THE CONTINENTAL CONGRESS 1774-1789, 375-78 (John C. Fitzpatrick ed., 1933).

¹²² Peter W. Culp et al., *State Trust Lands in the West, Fiduciary Duty in a Changing Landscape*, LINCOLN INST. OF LAND POL'Y 2 (2015), <https://www.lincolninst.edu/sites/default/files/pubfiles/state-trust-lands-in-the-west-updated-full.pdf>.

¹²³ *Id.* at 8-9.

¹²⁴ *Id.*

¹²⁵ *Id.* at 16, 53-62.

¹²⁶ *Id.* at 45, 55.

¹²⁷ *Id.* at 4-5 (noting that school trust lands were designated in 23 states and that "the practice of granting reserved lands in support of schools began when Ohio was admitted to the Union in 1803, and continued throughout the process of state accession").

to sell school trust lands to generate revenue, prompting many states to alienate trust lands for one-time yields that provided only short-term benefits for public education.¹²⁸ Today, nine western states maintain the lion's share of the 46 million acres of school trust land that remains,¹²⁹ and another fourteen continue to hold some of the originally granted lands in trust, though some holdings are now very small.¹³⁰

Moreover, and most importantly, school trust lands are logically subjugated to the temporally and conceptually prior public trust doctrine. While the question has not often been litigated, Louisiana courts most clearly clarified the relationship in concluding that designated school trust lands cannot include navigable waters, which are already held by the state in trust for all citizens.¹³¹ Policy arguments for the primacy of the public trust doctrine also appear in the legal literature.¹³² Legal recognition of the distinction follows both from history and from the uniquely nonfungible nature of the public commons protected by the public trust doctrine. After all, there are many means to generate support

¹²⁸ *Id.* at 11 (noting that state trust lands restrictions evolved over time, and that after Congress granted states authority to sell land to generate revenue, "most early states rushed to sell their lands in the frenzy of frontier land disposals," and that "[w]hile this supported early school systems, it provided few lasting benefits for schools"). Some states, however, enacted their own constitutional limits on the short-term disposal of school trusts lands. *See id.* (discussing Michigan's approach to ensuring a sustainable source of education funding from school trust land revenue); *Hill v. Thompson*, 564 So. 2d 1, 14-15 (Miss. 1989) (holding that school trust lands could not be leased, as this would constitute a donation of public trust lands thus violating the state's own constitution).

¹²⁹ *See Culp et al., supra* note 122, at 3 ("While most state trust lands have long since passed into private ownership, the remaining 46 million acres are a significant resource, concentrated primarily in nine western states."); *id.* at 6 ("State trust lands comprise approximately 46 million acres of land spread across 23 of the lower 48 states, primarily west of the Mississippi River. These landscapes span the forests and mountain ranges of the Intermountain West and the Pacific Northwest, the grasslands and rich farmlands of the Midwest, and the arid deserts of the Southwest.").

¹³⁰ *See id.* at 15 ("Twenty-three states continue to hold some state trust lands from their original grants: Alaska, Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Louisiana, Minnesota, Mississippi, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wisconsin, and Wyoming. Several of these states have retained only a small fraction of the original lands—Nevada, for example, holds only around 3,000 acres of its original 2.7-million-acre grant. By contrast, Arizona, Montana, and Wyoming each still have more than 80 percent of their original land grants.").

¹³¹ *State ex rel. Plaquemines Par. Sch. Bd. v. Plaquemines Par. Gov't.*, 652 So.2d 1 (La. App. 4 Cir. 1994).

¹³² *See* John B. Arum, *Old-growth Forests on State School Lands—Dedicated to Oblivion?—Private Trust Theory and the Public Trust*, 65 WASH. L. REV. 151, 163-66 (1990) (arguing for the explicit imposition of public trust obligations on school trust lands to better align with public concern for resource conservation); Sean E. O'Day, *School Trust Lands: The Land Manager's Dilemma Between Educational Funding and Environmental Conservation, A Hobson's Choice?*, 8 N.Y.U. ENVTL. L.J. 163, 194-95, 213-17 (1999) (advocating that school trust land be managed to better advance environmental protection, and suggesting ways in which school trust obligations may be subsidiary to the public trust doctrine and other environmental regulations).

for public education, but the values associated with navigable waterways are not easily transferable or conferred by other means.

III. CONTEMPORARY OVERVIEW: A COMMON LAW AND CONSTITUTIONAL DOCTRINE

Over the two centuries since the doctrine was formally received in the United States, the American public trust doctrine has gradually evolved from a doctrine about *sovereign authority*, focusing on the prerogatives of ownership, to one that is also about *sovereign responsibility*, emphasizing the sovereign's specific obligations to the public with regard to public trust resources. This is evident in two separate spheres of American law: (1) the ongoing development of the common law trust, and (2) the independent development of the doctrine as a feature of state constitutional law. Today, there are growing points of intersections between the public trust doctrine and federal law, some of them controversial. This Part briefly reviews these three separate realms of public trust evolution, beginning with an old decision that is still the U.S. Supreme Court's leading public trust case, the 1892 decision of *Illinois Central Railroad Co. v. Illinois*.¹³³

A. With Power Comes Responsibility: Illinois Central Railroad Co. v. Illinois

Although *Shively v. Bowlby* was the U.S. Supreme Court's most definitive treatment of the public trust doctrine, its most famous statement of the doctrine arose in *Illinois Central*, a decision issued two years earlier.¹³⁴ In 1892, the same year Sir Arthur Conan Doyle published *The Adventures of Sherlock Holmes*,¹³⁵ the Supreme Court provided a crisp statement of the traditional American public trust doctrine that is routinely quoted by the cases that have followed:

[T]he State holds the title to the lands under the navigable waters . . . 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.¹³⁶

¹³³ 146 U.S. 387 (1892).

¹³⁴ *Id.*

¹³⁵ *The Adventures of Sherlock Holmes*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/The-Adventures-of-Sherlock-Holmes-by-Conan-Doyle> (last visited Sept. 24, 2019).

¹³⁶ *Ill. Cent.*, 146 U.S. at 452.

Yet note how the theme of state ownership of trust resources is limited by the fact that the state only holds title *in trust* for the public. With great power comes great responsibility.

The public trust's doctrinal infrastructure shows that it doesn't just protect the public nature of these common resources—it also assigns responsibility for their protection—specifically, to the government. Analogizing to the property law construct of the legal “trust,” the government (acting as trustee) is responsible for protecting the resource (or trust *res*) for the public benefit.¹³⁷ With very narrow exceptions,¹³⁸ the trustee can neither alienate the trust resource nor allow its destruction.¹³⁹ This means that, when it is acting as trustee, the government does not own trust resources in the same way that it owns more ordinary public lands under its jurisdiction. Instead, it holds the resource “in trust” for the real legal owner—the public it serves. Some scholars have described the difference as one between state “sovereign” and “proprietary” ownership, in which resources held as sovereign property are subject to the trust, while those subject to proprietary ownership may be alienated by the state on terms more like ordinary private property.¹⁴⁰

The public is the ultimate beneficiary of the trust, and as in conventional trust relationships, the public can hold the government accountable for failure to manage trust resources in accordance with its responsibility as trustee.¹⁴¹ If they feel the government is failing its obligations as trustee, citizens can usually seek to enforce their rights in court.¹⁴² In this critically important way, the public trust doctrine acts not just as a *grant* of sovereign authority with regard to trust resources, but also as a *limit* on sovereign authority with regard to the same resources,

¹³⁷ See, e.g., Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past and Charting Its Future*, 45 U.C. DAVIS L. REV. 665, 667 (2012) (“Simply stated, however, the doctrine provides that certain natural resources are held by the government in a special status—in ‘trust’—for current and future generations.”).

¹³⁸ See, e.g., Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 453 (1892) (approving limited dispositions of trust resources to private parties to improve navigation or when discrete parcels can be disposed of without impairing the public interest in the remaining trust resource); see also Michael C. Blumm, *The Public Trust Doctrine and Private Property: The Accommodation Principle*, 27 PACE ENVTL. L. REV. 649, 660-62 (2010) (discussing the *Illinois Central* exception, “authoriz[ing] privatization of trust resources when 1) the conveyance furthered public purposes, and 2) there was no substantial effect on remaining trust resources”).

¹³⁹ Frank, *supra* note 137, at 667 (“Government officials may neither alienate those resources into private ownership nor permit their injury or destruction.”).

¹⁴⁰ See DAVID C. SLADE ET AL., PUTTING THE PUBLIC TRUST DOCTRINE TO WORK 6–8 (1997) (describing the distinction between *jus privatum*, which the state may convey public lands to a private interest, and *jus publicum*, which it may not).

¹⁴¹ See Sax, *supra* note 4, at 473 (describing how citizens have brought lawsuits to enforce the trust obligations of the state).

¹⁴² *Id.*

constraining what the government can and cannot do to ensure against private expropriation and monopolization.¹⁴³

In *Illinois Central*, the Court not only affirmed sovereign authority over submerged lands, it clarified the nature of the sovereign's obligations to the public as trustee of those lands.¹⁴⁴ And indeed, the facts of *Illinois Central* case demonstrate just how powerful that public trust obligation can be.

To give a sense of the enormous power packed by this seemingly simple doctrine, consider the striking facts of the case. This nineteenth century legal *mêlée* followed a fraught moment in Illinois history, when, in 1869, the state legislature conveyed the better part of Chicago Harbor—the most valuable submerged lands in all of Lake Michigan—to the Illinois Central Railroad, a private company.¹⁴⁵ After a series of complicated transactions in which the legislature granted Illinois Central rights to construct infrastructure along the dry and wet sides of the lakeshore,¹⁴⁶ the legislature enacted the Lake Front Act of 1869,¹⁴⁷ which conveyed ownership rights in perpetuity to the railroad.¹⁴⁸ To accomplish this, the legislature had to first override a gubernatorial veto, by which the Governor of Illinois had attempted to prevent the conveyance.¹⁴⁹

Whether the legislative grant was an example of flagrant government corruption or a well-intended plan to spur economic development,¹⁵⁰ the

¹⁴³ See Brief for Law Professors et al. as Amici Curiae in Support of Granting Writ of Certiorari at 1–2, 7, Alec L. *ex rel.* Looz v. McCarthy, 561 F. App'x 7 (D.C. Cir. 2014) (No. 14-405), *cert. denied*, 135 S. Ct. 774 (2014) (discussing the public trust doctrine as an attribute of sovereignty).

¹⁴⁴ Ryan, *The Historic Saga*, *supra* note 1, at 568.

¹⁴⁵ *Ill. Cent.*, 146 U.S. at 438-39 (describing “a grant by the State in 1869 of its right and title to the submerged lands, constituting the bed of Lake Michigan”).

¹⁴⁶ Joseph D. Kearney & Thomas W. Merrill, *The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central*, 71 U. CHI. L. REV. 799, 818–23 (2004) (discussing the railroad's improvements to the lakeshore; see also Crystal S. Chase, *The Illinois Central Public Trust Decision and Federal Common Law: An Unconventional View*, 16 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 113, 126 (2010).

¹⁴⁷ See Kearney & Merrill, *supra* note 146, at 860–77 (discussing the enactment of the Lake Front Act of 1869); see also H.R. Journal, 26th Cong., at 239-40 (Ill. 1869) (noting the Senate's passage of the House's version of the bill, enacting the Act).

¹⁴⁸ See Kearney & Merrill, *supra* note 146, at 800-01 (describing the Lake Front Act, by which the state legislature “awarded the Illinois Central both a portion of the lakeshore for a new depot and over one thousand acres of submerged land for the development of an outer harbor for Chicago”). Professors Kearney & Merrill explain that “[t]he practical effect of the Lake Front Act, in terms of the market for harbor facilities in Chicago, was to authorize the creation of a large, privately owned harbor facility in the lake.” *Id.* at 881.

¹⁴⁹ *Id.* at 874-75.

¹⁵⁰ See Sax, *supra* note 4, at 490 (arguing that the conveyance could not be justified by any public benefit); Kearney & Merrill, *supra* note 146, at 893 (“[A]lthough the documentary record from 1869 cannot be said definitely to establish . . . corrupt means . . . it probably leans in that direction.”).

people of Illinois were not delighted.¹⁵¹ Public reaction ranged from dubious to furious.¹⁵² While some hoped that associated economic development would eventually confer public benefits, the gift smacked of political patronage and cronyism, and it generated considerable outrage.¹⁵³ When both the *Chicago Tribune* and the *Chicago Times* condemned the conveyance, legislative support for the deal began to collapse, and the Illinois House and Senate created committees to investigate the possibility of corruption.¹⁵⁴

When the legislative session finally turned over, the new legislature—responding to this significant public pressure—attempted to undo what the previous legislature had wrought.¹⁵⁵ In 1873, legislators sought to reestablish public control over the full harbor by repealing the original conveyance.¹⁵⁶ Ten years later, when the railroad continued to assume a proprietary posture toward the harbor, the state sued for declaratory relief to establish public ownership of the lakebed.¹⁵⁷ Now Illinois Central was the outraged party, and it fiercely resisted the state’s claim.

In court, the Railroad argued that the new legislature could not repeal the Chicago Harbor conveyance made by the prior legislature.¹⁵⁸ It argued that these submerged lands were now its private property, conveyed by the Lake Front Act of 1869,¹⁵⁹ and that the state lacked authority to reclaim property that had already passed in a fully executed conveyance.¹⁶⁰ As the railroad argued, the state could not formally convey a thing of such value and then just take it back, as if the conveyance had never happened!¹⁶¹

Of course, even if the legislative grant were sound, it is worth noting that in actuality, the state *could* have just taken it back—though not as if the conveyance had never happened. The state’s power of eminent

¹⁵¹ See Kearney & Merrill, *supra* note 146, at 840-42, 875-76 (describing public outrage over the conveyance).

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 889-90, 908-09 (describing legislative committees created to investigate potential corruption).

¹⁵⁵ See *id.* at 911 (indicating the legislative turnover that followed); *Ill. Cent.*, 146 U.S. at 449 (“On the 15th of April, 1873, the legislature of Illinois repealed the act.”).

¹⁵⁶ *Ill. Cent.*, 146 U.S. at 449.

¹⁵⁷ *Id.* at 439.

¹⁵⁸ *Id.* at 438-39.

¹⁵⁹ *Id.* at 450.

¹⁶⁰ *Id.* at 450-51 (“[The Act] is treated by the counsel of the company as an *absolute* conveyance to it of title to the submerged lands, giving it as full and complete power to use and dispose of the same . . . and not as a license to use the lands subject to revocation by the state.” (emphasis added)).

¹⁶¹ As my students have often remarked, the Railroad’s claim would have been well understood by any toddler under the hallowed doctrine of “No Backsies!”

domain would have allowed it to reclaim the property for public use, so long as it paid just compensation to the railroad.¹⁶² Indeed, other scholars have written about *Illinois Central* as though the most important issue in the litigation was the state's liability for an uncompensated taking¹⁶³—a legal issue in which the public trust doctrine might also play a role¹⁶⁴—but that claim was not a subject of the actual litigation.¹⁶⁵ Instead, *Illinois Central* staked its most important claim on the power of the original legislative grant and the lack of state authority to undo it (together with subsidiary claims for rights incident to its ownership of riparian lands and a later claim that the repeal interfered with rights under its original charter).¹⁶⁶

Nevertheless, the state had a formidable response, deploying public trust principles as a novel legal shield. Illinois argued that its power to undo a fully executed conveyance was immaterial under the circumstances.¹⁶⁷ Conceding that there might have been a legal problem if there really had been a legal gift, the state argued that in this case, there was not an actual problem, because—thanks to the public trust doctrine—there had not been any actual gift.¹⁶⁸ Even if it looked as though the previous legislature had conveyed the bed of Chicago Harbor to the Railroad, in fact, no such thing had happened.¹⁶⁹ The bed of Chicago Harbor was subject to the public trust doctrine—held by the state in trust for the public—and therefore, as a matter of law, could not be alienated way.¹⁷⁰

The state argued that the previous legislature had lacked the power to make a gift of lands encumbered by the public trust.¹⁷¹ Such an act would be *ultra vires*—literally, beyond the authority of the state—at least without taking more heroic measures to clarify why such an unusual

¹⁶² See U.S. CONST. amend. V.

¹⁶³ See, e.g., Richard A. Epstein, *The Public Trust Doctrine*, 7 CATO J. 411, 422–26 (1987); Lloyd R. Cohen, *The Public Trust Doctrine: An Economic Perspective*, 29 CAL. W. L. REV. 239, 246 (1992).

¹⁶⁴ See, e.g., Erin Ryan, Palazzolo, *The Public Trust, and the Property Owner's Reasonable Expectations: Takings and the South Carolina Marsh Island Bridge Debate*, 15 SE. ENVTL. L.J. 121, 137–40 (2006) (discussing use of the public trust doctrine to defend takings claims by defusing the reasonableness of claimants' expectations).

¹⁶⁵ See Kearney & Merrill, *supra* note 146, at 811 n.54 (explaining this popular misconception).

¹⁶⁶ Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 438–39 (1892) (stating the railroad's claims).

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ See *id.*

¹⁷⁰ See *id.* at 453–54 (“The trust devolving upon the State for the public, and which can only be discharged by the management and control of property in which the public has an interest, cannot be relinquished by a transfer of the property. The control of the State for the purposes of the trust can never be lost.”).

¹⁷¹ See *id.*

conveyance was in accord with its public trust obligations.¹⁷² As a result, there was no actual gift, and accordingly no harm in repealing it, and therefore, no legal foul.

Accepting this argument, the Supreme Court affirmed that the operation of the public trust doctrine had prevented the legislature from ever alienating the harbor in the first place.¹⁷³ The railroad had never been the actual owner of the submerged lands, and so its legal claims ended there. In this way, Illinois was able to successfully reestablish public ownership of Chicago Harbor on the grounds that the public trust doctrine acted as a limit on the state's legal ability to casually convey trust lands.¹⁷⁴

More importantly, *Illinois Central* demonstrated that the public trust doctrine functions not only as a grant of affirmative state authority over submerged lands, but also as a limit on state authority with regard to the management of those lands. This is because the state is required to manage them as trustee for the public benefit.¹⁷⁵ The public, as the beneficiary of this trust relationship, is entitled to call the state to account for errant management choices in the courts. If members of the public believe the state has failed its obligations as trustee, they can pursue their legal claim under the public trust doctrine in court.

The premise affirmed in *Illinois Central* provided critical impetus for the development of the common law public trust in nearly all of the United States.¹⁷⁶ Today, the common law public trust doctrine offers meaningful protection of navigable waterways as public commons in nearly every state.¹⁷⁷ Over the years, as plaintiffs across the country have

¹⁷² *Id.* at 455-56 (“The ownership of the navigable waters of the harbor and of the lands under them is a subject of public concern to the whole people of the State. The trust with which they are held, therefore, is governmental and cannot be alienated, except in those instances . . . of parcels used in the improvement of the interest thus held, or when parcels can be disposed of without detriment to the public interest in the lands and waters remaining.”).

¹⁷³ *Id.* at 453. Of note, Justice Field explained that the trust extended to Chicago Harbor because it was “a subject of public concern to the whole people,” leaving open the possibility, embraced by later scholars and litigants, that the same rationale should apply to other commons resources also vulnerable to monopolization. *Id.* at 455. See also MICHAEL C. BLUMM & MARY CHRISTINA WOOD, *THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW* 72-73 (2013) (discussing *Illinois Cent.* and various scholars' interpretations of the case).

¹⁷⁴ See *Ill. Cent.*, 146 U.S. at 453, 463.

¹⁷⁵ *Shively v. Bowlby*, 152 U.S. 1, 57 (holding that the “title and the control of [submerged lands] are vested in the sovereign, for the benefit of the whole people”); see *supra* notes 107-120 and accompanying text (quoting *Shively* more fully and discussing its significance).

¹⁷⁶ See Kearney & Merrill, *supra* note 146, at 802-03 (outlining the history of the case in light of its importance in modern public trust theory).

¹⁷⁷ See generally Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PENN. ST. ENVTL. L. REV. 1 (2007) (comparing eastern states' public trust doctrines); Robin Kundis Craig, *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) (comparing

litigated to vindicate and define public trust obligations, the doctrine has developed differently from one state to the next.¹⁷⁸ Some states protect different resources under the doctrine and some assign different levels of protection to trust resources,¹⁷⁹ but at a minimum, most share the common principle of sovereign authority over lands beneath navigable waters held in trust for the public.¹⁸⁰ Following the Mono Lake *National Audubon Society* decision and the cases that paved its way in California law, the doctrine has become increasingly associated not only with the protection of such traditional uses as boating, commerce, fishing, and swimming, but with environmental protection as well.¹⁸¹ In some jurisdictions, the public trust doctrine has also been applied to protect other resources, including groundwater, wildlife, and atmospheric resources.¹⁸²

western states' public trust doctrines); ALEXANDRA B. KLASS & LING-YEE HUANG, RESTORING THE TRUST: WATER RESOURCES AND THE PUBLIC TRUST DOCTRINE, A MANUAL FOR ADVOCATES 21–24 (2009)

(comparing the sources of various states' public trust doctrines); MICHAEL C. BLUMM ET AL., THE PUBLIC TRUST DOCTRINE IN FORTY-FIVE STATES (2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2235329 (analyzing the public trust doctrines of 45 states); LING-YEE HUANG, CTR. FOR PROGRESSIVE REFORM, RESTORING THE TRUST: AN INDEX OF STATE CONSTITUTIONAL AND STATUTORY PROVISIONS AND CASES ON WATER RESOURCES AND THE PUBLIC TRUST DOCTRINE (2009), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1478512.

¹⁷⁸ See sources cited *supra* note 177.

¹⁷⁹ See *id.* For example, most states protect public access to submerged lands below the high-water mark, but New Jersey protects access to dry sand beaches as well. *Matthews v. Bay Head Imp. Ass'n*, 471 A.2d 355, 363 (N.J. 1984).

¹⁸⁰ See sources cited *supra* note 177.

¹⁸¹ See, e.g., *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971) (finding increasing recognition that one of the most important uses of tidelands protected by the doctrine is “the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area”); *Mono Lake Case*, 658 P.2d 709 (affirming the application of the public trust doctrine to protect the environmental values at Mono Lake).

¹⁸² See, e.g., *Scott River Case*, 237 Cal. Rptr. 3d 393 (following the Mono Lake rule in applying the public trust doctrine to protect the non-navigable groundwater tributaries of a navigable waterway); *Owsichek v. Guide Licensing & Control Bd.*, 763 P.2d 488, 495 (Alaska 1988) (“[C]ommon law principles incorporated in the common use clause impose upon the state a trust duty to manage the fish, wildlife and water resources of the state for the benefit of all the people.”); *Betchart v. Dep’t of Fish & Game*, 158 Cal. App. 3d 1104, 1106 (1984) (“California wildlife is publicly owned and is not held by owners of private land where wildlife is present.”); Environmental Protection Act of 1970, MICH. COMP. LAWS ANN. § 691.1202(1) (1970) (extending the public trust, via statute, to authorize legal actions “for the protection of the air” in addition to water and other natural resources) (repealed and replaced by the Natural Resources and Environmental Protection Act, MICH. COMP. LAWS § 324.1701(1) (1994)).

B. State Constitutions: Florida, Hawaii, & Pennsylvania

The common law public trust doctrine continues to play an important role in the regulation of public waterways, but the trust concept has also developed independently as a matter of state constitutional law. Public trust principles have been incorporated into a number of U.S. state constitutions,¹⁸³ even where the doctrine is also part of that state's common law.¹⁸⁴

Some constitutionalized versions look very similar to the common law statement of the public trust doctrine affirmed in *Illinois Central*. For example, Florida's Constitution includes a provision that recognizes public ownership of critical water commons and confers traditional protections for submerged lands beneath navigable waters:

The title to lands under navigable waters, within the boundaries of the state, which have not been alienated, including beaches below mean high water lines, is held by the state, by virtue of its sovereignty, in trust for all the people.¹⁸⁵

Constitutionalization in other states have further broadened the scope and effect of the trust, sometimes far beyond the *Illinois Central* versions. For example, Article XI of the Hawaii Constitution declares that the state holds all of its natural resources in trust for the public, including (but not necessarily limited to) land, water, air, minerals, and energy sources:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.¹⁸⁶

The Environmental Rights Amendment to the Pennsylvania Constitution reveals a similarly expansive conception of the public trust. Article I, Section 27 of the Pennsylvania Constitution adds natural,

¹⁸³ See sources cited *supra* note 177; see also Barton H. Thompson, Jr., *Environmental Policy and State Constitutions: The Potential Role of Substantive Guidance*, 27 RUTGERS L.J. 863, 866 (1996) ("[T]he 'public trust' doctrine which plays a constitutional role in most states even though less than a handful of states refer to the trust in the constitution itself.").

¹⁸⁴ See, e.g., Klass, *supra* note 18, at 714; Jeffrey S. Silvyn, *Protecting Public Trust Values in California's Waters: The Constitutional Alternative*, 10 UCLA J. ENVTL. L. & POL'Y 355 (1992) (comparing California's common law and constitutional public trust rights and concluding that the latter may be more expansive).

¹⁸⁵ FLA. CONST. ART. X, § 11.

¹⁸⁶ HAW. CONST. art. XI, § 1.

scenic, historic, and esthetic values to the body of the state's public trust resources:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.¹⁸⁷

In contrast to the simple affirmation of public ownership of natural resources in Florida, the Hawaii and Pennsylvania doctrines establish a substantive commitment to protecting the environmental values associated with public trust resources, and they partner that commitment with an unequivocal ethic of intergenerational equity. Like the California Supreme Court in the Mono Lake case,¹⁸⁸ the Hawaii Supreme Court has established that its public trust doctrine is not displaced by the statutory law of private water allocation.¹⁸⁹ However, it goes even further than California, and far further than the traditional *Illinois Central* version, in holding that all water resources—and not just navigable waterways—are protected by the doctrine.¹⁹⁰

Demonstrating the power of this substantive commitment, the Pennsylvania Supreme Court famously invoked the Environmental Rights Amendment to overturn a state law preventing local governments from regulating horizontal shale drilling and hydraulic fracturing (“fracking”) through zoning.¹⁹¹ Fracking is commonly used to extract natural gas from the rich Marcellus shale resources of the state, but its use can threaten water resources with contamination and overuse. Through their land use planning ordinances, many state municipalities had disapproved fracking operations that they feared would negatively impact local water supplies.¹⁹²

In the 2014 decision of *Robinson Township v. Commonwealth*, a plurality of the Pennsylvania high court invalidated a state statute that had been enacted to preempt local regulation of fracking operations through

¹⁸⁷ PA. CONST. Art. I, § 27.

¹⁸⁸ *Mono Lake Case*, 658 P.2d at 712, 727-28.

¹⁸⁹ *In re Water Use Permit Applications (Waiahole Ditch)*, 9 P.3d 409, 445 (Haw. 2000) (holding that the state water code “does not supplant the protections of the public trust doctrine”).

¹⁹⁰ *Id.* (“[T]he public trust doctrine applies to all water resources without exception or distinction.”).

¹⁹¹ John C. Dermbach, *The Potential Meanings of a Constitutional Public Trust*, 45 ENVTL. L. 463, 478, 481 (2015).

¹⁹² *Id.* at 481-82 (describing how the challenged state statute interfered with “local regulation of oil and gas operations” under various state environmental and land use laws).

zoning ordinances.¹⁹³ Surprising everyone involved, the court concluded that the statute conflicted with the state's obligation under the Environmental Rights Amendment to protect present and future generations' interests in public natural resources.¹⁹⁴ Notably, the court invoked the doctrine *sua sponte* to resolve the case, even though the parties had not even raised it in their arguments.¹⁹⁵ The move has drawn renewed attention to the possibilities for intersections between the public trust and other forms of state action that threaten public natural resources.¹⁹⁶

A few years later, a majority of the same court confirmed that Pennsylvania is obligated to manage its state parks and forests, including the oil and minerals therein, as a trustee in accordance with the public trust principles of the Environmental Rights Amendment.¹⁹⁷ The court reasoned that the clear language expressly affirms both the right of the people to enjoy these public natural resources and the Commonwealth's obligation to maintain them.¹⁹⁸

Constitutionalized versions of the doctrine thus provide additional means of protecting public trust resources and expanded recognition for new public trust values beyond those traditionally protected at common law. Even so, scholars like Professor Alexandra Klass have sounded concerns that statutory public trust principles may inadvertently displace more flexible common law versions of the doctrine, undermining the further development of public trust principles to respond to emerging problems through traditional common law processes.¹⁹⁹ An inadvertent

¹⁹³ *Robinson Twp. v. Commonwealth*, 83 A.3d 901, 981–82 (Pa. 2013).

¹⁹⁴ *Id.* (“In our view, the framers and ratifiers of the Environmental Rights Amendment intended the constitutional provision as a bulwark against enactments, like Act 13, which permit development with such an immediate, disruptive effect upon how Pennsylvanians live their lives. To comply with the constitutional command, the General Assembly must exercise its police powers to foster sustainable development in a manner that respects the reserved rights of the people to a clean, healthy, and esthetically-pleasing environment.”); *see also id.* at 919-20 (noting, in its standing analysis, that “a political subdivision has a substantial, direct, and immediate interest in protecting the environment and the quality of life within its borders” and that “[t]he protection of environmental and esthetic interests is an essential aspect of Pennsylvanians’ quality of life and a key part of local government’s role”).

¹⁹⁵ *See, e.g., Dernbach, supra* note 191.

¹⁹⁶ *Id.*

¹⁹⁷ *Pa. Env'tl. Def. Found. v. Commonwealth*, 161 A.3d 911 (Pa. 2017).

¹⁹⁸ *Id.* at 916.

¹⁹⁹ Alexandra B. Klass, *The Public Trust Doctrine in the Shadow of State Environmental Rights Laws: A Case Study*, 45 ENVTL. L. 431 (2015) (exploring how environmental rights statutes can effectively displace the common law public trust doctrine and limit its evolution as a tool for environmental protection); *see also* Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L. REV. 699, 726, 744-45 (2006) (discussing the limitations of both common law and statutory approaches to public trust governance, and proposing an integrated approach).

result could be the calcification of the public trust, effectively freezing it in time by stifling the organic process of common law development that has thus far enabled the doctrine to evolve with the changing needs of the community.²⁰⁰ Indeed, some states, such as Idaho, have committed the public trust doctrine to statute specifically to prevent the further development of the doctrine through the judicial common law process.²⁰¹

C. *The Public Trust and Federal Law*

American case law has generally presumed that the public trust doctrine is a feature of purely state law—a view that has been affirmed directly by the D.C. Circuit in dismissing an attempt to hold the federal government accountable under the doctrine,²⁰² and one that has been supported indirectly in dicta by the U.S. Supreme Court on an unrelated matter.²⁰³ While the Supreme Court has not directly addressed the question of whether the doctrine applies to federal authority, it declined a petition for certiorari to review the D.C. Circuit’s rejection of that position.²⁰⁴ Nevertheless, points of intersection between the public trust doctrine and important areas of federal law have become evident, especially its role as a background principle of law in constitutional takings analysis, and in ongoing debate over the extent to which it should operate as a constitutive constraint on federal sovereign authority.

²⁰⁰ Alexandra B. Klass, *The Public Trust Doctrine in the Shadow of State Environmental Rights Laws: A Case Study*, 45 *Envtl. L.* 431, 457-59 (2015).

²⁰¹ IDAHO CODE § 58-1201-1203 (1996) (Chapter 12. Public Trust Doctrine). For a fuller discussion of the Idaho example, see *infra* Part IV(C)(2); see also Erin Ryan, *From Mono Lake to the Atmospheric Trust: Navigating the Public and Private Interests in Public Trust Resource Commons*, 10 *GEO. WASH. J. ENERGY & ENVTL. L.* 39, 56-57 (2019) (“After the Idaho Supreme Court issued a series of public trust decisions converging on the California Supreme Court’s interpretation in *Mono Lake*, the state legislature enacted a statute that expressly foreclosed this interpretive path. The legislation declared that the public trust doctrine did limit the state’s ability to alienate title to the beds of navigable waters, but that it had little impact beyond that, preventing the doctrine from impacting the allocation of prior appropriative water rights or state decisions about the commercial, agricultural, or recreational uses of public trust waterways.”); James M. Kearney, *Closing the Floodgates? Idaho’s Statutory Limitation on the Public Trust Doctrine*, 34 *IDAHO L. REV.* 91, 94 (1997); Blumm et al., *supra* note 106 at 472 (noting that the new statute “was the legislature’s response to judicial public trust declarations” in a series of Idaho Supreme Court cases).

²⁰² Alec L. *ex rel. Looz v. McCarthy*, 561 F. App’x 7, 8 (D.C. Cir. 2014). *But see* Michael Blumm & Lynn S. Schaffer, *The Federal Public Trust Doctrine: Misinterpreting Justice Kennedy and Illinois Central Railroad*, 45 *ENVTL. L.* 399, 400–01 (2015) (arguing that the D.C. Circuit is incorrect on this point).

²⁰³ PPL Montana, LLC *v. Montana*, 132 S. Ct. 1215, 1235 (2012) (“[T]he public trust doctrine remains a matter of state law.”).

²⁰⁴ Alec L. *v. McCarthy*, 135 S. Ct. 774 (2014) (denying certiorari to address whether there is a federal public trust doctrine).

1. *The Doctrine as a Background Principle in Takings Claims.*

The public trust doctrine is increasingly invoked in litigation brought under the U.S. Constitution's Takings Clause,²⁰⁵ where it operates as a legal principle relevant to the parties' reasonable expectations with regard to the use of trust resources. While it would take a century to become clear, the *Pollard v. Hagan*, *Shively v. Bowlby*, and *Illinois Central* decisions discussed above have effectively enshrined the public trust doctrine among what contemporary takings jurisprudence refers to as the "background principles" of state common law, or those built-in legal norms that constrain owners' legitimate expectations about the suitable uses of different kinds of property.²⁰⁶ This intersection between the public trust doctrine and federal constitutional law drew increasing recognition after the 1990s, when the Rehnquist Court issued a series of decisions that strengthened takings claims against regulations limiting property development.²⁰⁷

Just as the Internet went public and satellite phones were introduced,²⁰⁸ the Supreme Court clarified in *Lucas v. South Carolina Coastal Council* that takings liability applies whenever state regulation obstructs all economically viable use of private property, no matter what public interests are at stake.²⁰⁹ It was an important moment in the evolution of the Court's takings jurisprudence, because it removed these conflicts from the standard regulatory takings balancing test by which courts normally assess the economic harm to the regulated owner against the

²⁰⁵ U.S. CONST. amend. V.

²⁰⁶ See Erin Ryan, Palazzolo, *The Public Trust, and the Property Owner's Reasonable Expectations: Takings and the South Carolina Marsh Island Bridge Debate*, 15 SE. ENVTL. L.J. 121, 123 (analyzing how the public trust doctrine operates as a background principle of law that can constrain the reasonable expectations of a property owner alleging a taking); *id.* at 137-40 (2006) (discussing use of the public trust doctrine to defend takings claims by defusing the reasonableness of claimants' expectations); see also John D. Echeverria, *The Public Trust Doctrine as a Background Principles Defense in Takings Litigation*, 45 U.C. DAVIS L. REV. 931, 931-34 (2012) (analyzing use of the doctrine as a takings defense in light of two California cases that did not allow it); J. Peter Byrne, *The Public Trust Doctrine, Legislation, and Green Property: A Future Convergence?*, 45 U.C. DAVIS L. REV. 915, 916 (2012) (suggesting that the doctrine be used as a defense to innovative regulatory takings claims and to "sustain environmental legislation against judicial hostility"). But see Barton H. Thompson, Jr., *Judicial Takings*, 76 VA. L. REV. 1449, 1532-33 (1990) (criticizing use of the doctrine to avoid just compensation for what otherwise looks like a taking).

²⁰⁷ Richard H. Fallon, Jr., *The "Conservative" Paths of the Rehnquist Court's Federalism Decisions*, 69 U. CHI. L. REV. 429, 459-60 (2002) (noting that the Rehnquist Court "toughened judicial scrutiny of governmental action under the Takings Clause").

²⁰⁸ *Internet*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/technology/Internet> (last visited Sept. 24, 2019); *Mobile Telephone*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/technology/mobile-telephone> (last visited Sept. 24, 2019).

²⁰⁹ 505 U.S. 1003, 1027-30 (1992); see also *Palazzolo v. Rhode Island*, 533 U.S. 606, 626-30 (2001).

public harm the regulation is designed to prevent.²¹⁰ By sidestepping the balancing test, the per se rule in *Lucas* cleared an easier path for plaintiff owners to challenge environmental regulations limiting the development of fragile coastal or wetland property. However, the new *Lucas* rule contained an important exception: the per se rule would not apply if the challenged regulation is already among the “background principles” of state property law—such as the common law of nuisance—that limit the owner’s reasonable expectations from the start about what they should be able to do with their property.²¹¹

The Supreme Court’s nineteenth century recognition that the public trust doctrine is a foundational element of state law thus took on new importance as its twentieth century takings jurisprudence expanded liability for environmental regulations that interfere with economic use.²¹² Today, the doctrine is increasingly invoked by state and municipal parties defending takings claims against regulations involving construction on tidelands and wetlands, public access to waterways, and interference with water rights.²¹³ For example, the Hawaii Supreme Court rejected a takings challenge against the state’s denial of water use permits because “the original limitation of the public trust” extinguished any claim the plaintiffs could make to an absolute right to water for purposes other than those protected by the trust.²¹⁴ Quoting Professor Joseph Sax, one of the original scholarly proponents of the modern public trust doctrine,²¹⁵ the court explained that “[t]he state is not ‘taking’ something belonging to an owner, but is asserting a right it always held as a servitude burdening owners of water rights.”²¹⁶

Resort to the background principles argument as a shield against takings challenges has expanded across the United States. Many courts have affirmed the doctrine as a defense to takings claims in these circumstances, including decisions in New Jersey,²¹⁷ Hawaii,²¹⁸

²¹⁰ Compare *Lucas*, 505 U.S. 1003, with *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (describing the three factor regulatory takings balancing test).

²¹¹ *Lucas*, 505 U.S. at 1027-30; see also *Palazzolo*, 533 U.S. at 626-30.

²¹² See, e.g., *Echeverria*, *supra* note 206; *Frank*, *supra* note 137, at 682-84.

²¹³ See *Ryan*, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 45-46.

²¹⁴ *In re Water Use Permit Applications*, 9 P.3d 409, 494-95 (Haw. 2000).

²¹⁵ See *Sax*, *supra* note 4; see also *Ryan*, *The Historic Saga*, *supra* note 1, at 602 (discussing the impact of Professor Sax’s article on early public trust litigation).

²¹⁶ *In re Water Use Permit Applications*, 9 P.3d at 497 (quoting Joseph L. Sax, *The Constitution, Property Rights and the Future of Water Law*, 61 U. COLO. L. REV. 257, 280 (1990)).

²¹⁷ *Nat’l Ass’n of Home Builders v. N.J. Dep’t Envl. Prot.*, 64 F. Supp. 2d 354 (D.N.J. 1999) (rejecting a takings challenge to a state agency rule requiring developers of waterfront property to provide walkways along the water, because the public trust doctrine prevents owners from claiming any entitlement to exclude).

²¹⁸ *In re Water Use Permit Applications*, 9 P.3d 409 (Haw. 2000).

Wisconsin,²¹⁹ South Carolina,²²⁰ Louisiana,²²¹ Rhode Island,²²² and the Ninth Circuit.²²³ Given the extensive history reported in this article and recited in these decisions, it seems difficult to argue that the public trust doctrine is *not* a background principle of state law that should impact reasonable expectations, even if it remains possible to argue over how, exactly, it should impact them. Even so, the issue is not fully settled; the Federal Court of Claims has twice cast doubt on the background principles defense,²²⁴ and Texas Supreme Court has also greeted it with skepticism.²²⁵

²¹⁹ See *R.W. Docks & Slips v. State*, 628 N.W.2d 781 (Wis. 2001) (rejecting a takings challenge to the state's denial of a marina's dredging permit because the developer lacked reasonable investment-backed expectations to fill wetlands and because riparian rights are inferior to the public trust doctrine). The Wisconsin Supreme Court emphasized, "The public trust doctrine as an encumbrance on riparian rights is established 'by judicial authority so long acquiesced in as to become a rule of property.' It is part of the organic law of the state, and is to be broadly and beneficially construed." *Id.* at 788 (quoting the 1903 case of *Franzini v. Layland*, 120 Wis. 72, 81 (1903)).

²²⁰ *McQueen v. S.C. Coastal Council*, 580 S.E.2d 116 (S.C. 2003) (holding that the public trust doctrine properly blocked tidelands development without compensation, even when the lands at issue became submerged after the owner took title).

²²¹ See *Avenal v. State*, 886 So. 2d 1085, 1088, 1102 (La. 2004) (in rejecting a takings challenge against erosion controlling freshwater diversion programs, holding that "the redistribution of existing productive oyster beds to other areas must be tolerated under the public trust doctrine").

²²² See *Palazzolo v. State*, No. WM 88-0297, 2005 WL 1645974, at *1 n.2, *7, *15 (R.I. Super. Ct. July 5, 2005) (in an unpublished decision on remand from the U.S. Supreme Court, rejecting a takings challenge against the denial of permit to develop in coastal wetlands because, *inter alia*, the public trust doctrine prevented the formation of reasonable investment-backed expectations to "fill or develop that portion of the site which is below mean high water").

²²³ *Esplanade Prop., LLC v. City of Seattle*, 307 F.3d 978 (9th Cir. 2002) (affirming the city's refusal to allow construction of residences on an elevated platform above tidelands, because the public trust doctrine vitiated any entitlement by the owner to build there).

²²⁴ *Compare Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1293-96 (Fed. Cir. 2008) (Judge Moore, reversing dismissal of a takings claim by a California irrigator required to create fish passage lanes to satisfy the Endangered Species Act, and rejecting, in dicta, all counterarguments that would have barred the claim), *with id.* at 1297 (Judge Mayer, writing in dissent: "Casitas does not own the water in question because all water sources within California belong to the public. Cal. Wat. Code §§ 102, 1001. Whether Casitas even has a vested property interest in the use of the water is a threshold issue to be determined under California law. California subjects appropriative water rights licenses to the public trust and reasonable use doctrines, so Casitas likely has no property interest in the water, and therefore no takings claim."). Although the court allowed the Casitas Water District to litigate its takings claim in the 2008 decision, a different panel on the same court ultimately dismissed the claim (without prejudice) when litigation concluded in 2013, though without addressing the public trust background principle issue. *Casitas Mun. Water Dist. v. United States*, 708 F.3d 1340, 1360 (Fed. Cir. 2013). See also *Tulare Lake Basin Water Dist. v. United States*, 49 Fed. Cl. 313 (2001) (in an opinion by the same judge who authored the 2008 *Casitas* decision, rejecting the state's public trust "background principles" defense against a takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act).

²²⁵ See *Severance v. Patterson*, 370 S.W.3d 705, 723 (Tex. 2012) ("[W]hile losing property to the public trust as it becomes part of the wet beach or submerged under the ocean is an ordinary

2. *The Secret Supreme Court Public Trust Debate.*

Although the Supreme Court has not weighed in directly on the public trust background principles debate, the issue was the subject of a notorious internal dispute in an important takings case from the Rehnquist Court era involving coastal lands and municipal exactions. In *Nollan v. California Coastal Commission*, the majority concluded that the state was not entitled to require a private owner to allow public beach access by a trail easement along the edge of private waterfront land in exchange for permission to exceed existing land use regulations on building height.²²⁶ Justice Brennan authored a lengthy dissent in which he briefly invoked the public trust doctrine in defense of the state's attempt to preserve public access to coastal waters: "The Court's insistence on a precise fit between the forms of burden and condition on each individual parcel along the California coast would penalize the Commission for its flexibility, hampering the ability to fulfill its public trust mandate."²²⁷ For many years, however, the public was unaware of how substantially this published dissent departed from Justice Brennan's initial draft.

Justice Brennan had initially circulated a proposed dissent that began with a ten-page exposition of the public trust doctrine and its modern importance, citing it as the foundation for California's coastal regulatory policy and an independent basis for rejecting any takings claim premised on the plaintiff's claimed right to exclude the public from the beach.²²⁸ In reviewing the original draft (among the Papers of Justices Harry Blackmun and Thurgood Marshall that are on file at the Library of Congress), Professor Richard Lazarus reports that the dissent began by tracing the doctrine from the California constitution back to Roman law and ended with the conclusion that this historical understanding of public and private property rights in waterways forms the basis for intensive state regulation of coastal areas.²²⁹ According to Lazarus, Brennan's initial dissent argued that the public trust doctrine "independently

hazard of ownership for coastal property owners, it is far less reasonable, and unsupported by ancient common law precepts, to hold that a public easement can suddenly encumber an entirely new portion of a landowner's property or a different landowner's property that was not previously subject to that right of use.").

²²⁶ 483 U.S. 825, 828, 837, 841-42 (1987).

²²⁷ *Nollan*, 483 U.S. at 847 (1987).

²²⁸ Richard J. Lazarus, *Judicial Missteps, Legislative Disfunction, and the Public Trust Doctrine: Can Two Wrongs Make It Right?*, 45 ENVTL. L. 1139, 1146-47 (2015) (citing Memorandum from Judicial Clerk, Supreme Court of the United States, to Harry A. Blackmun, Assoc. Justice, Supreme Court of the United States 1 (June 9, 1987) (on file with the Manuscript Division, Library of Congress, Papers of Harry A. Blackmun)).

²²⁹ Richard J. Lazarus, November 8, 2019 email communication to the Environmental Law Professors Listserv, on file with author (telling the full story); July 7, 2019 email communication to author (affirming permission for publication of this story).

defeated any possible takings claim based on a private property right to exclude the public from the beach in front of the landowner's home."²³⁰

In Professor Lazarus's account of the judicial exchange behind closed doors, Justice Brennan's proposed dissent resulted in "a firestorm of controversy within and between chambers," prompting a series of negotiations between the Justices.²³¹ Justice Blackmun vehemently opposed Brennan's invocation of the public trust in support of a position being rejected by the majority, fearing that it would prompt a punishing response in Justice Antonin Scalia's majority opinion that could undermine the potential force of the doctrine in future jurisprudence.²³² He worried that even if the majority did not directly repudiate the doctrine, the central role that the doctrine would play in Justice Brennan's dissent would indirectly suggest that the Court had rejected it.²³³ The two justices and their clerks then engaged in a back-and-forth exchange of draft opinions in which Blackmun sought to persuade Brennan to eliminate his reliance on the public trust doctrine by threatening to specifically repudiate this analysis in a separate dissent that he would author himself.²³⁴

²³⁰ Lazarus, *supra* note 228 at 1146.

²³¹ See sources cited *supra* notes 228-229.

²³² Lazarus, *supra* note 228, at 1146 ("Justice Blackmun's chambers objected to Justice Brennan's inclusion of that discussion—not because of any substantive disagreement, but instead on purely tactical grounds.").

²³³ *Id.* at 1146-47 ("Justice Blackmun's clerk believed that any such discussion in Justice Brennan's dissent was ill-advised because it increased the odds that Justice Scalia might add language to the majority opinion expressly rejecting the doctrine or, even absent such a direct majority response, his opinion for the Court might more likely be read by the lower courts as implicitly doing so.").

²³⁴ See sources cited *supra* notes 228-229. Richard Lazarus offered even more detail about the exchange in an account to the Environmental Law Professor's Listserv. This account includes so much more delightful intrigue than he reports in the published article that, with his permission, I thought it worth including here:

"On June 9, Justice Blackmun's clerk for the case advised her Justice about what Brennan had done, with ominous words, and suggested he decline to join the dissent. Her concern was that 'By featuring it so exhaustively in the dissent, Justice Brennan in effect incorporates the public trust doctrine into the position rejected by the majority. I regard this as unnecessary and unfortunate.' The clerk accordingly recommended that Blackmun ask Brenna [sic] 'to eliminate the first portion of this opinion and then to join the rest.' The clerk further warned that she was not sure this would work – 'I do not know if there is any hope of getting him to do this' but because 'The Brennan clerk who worked on this case is known for launching grand strategies to order to get votes,' and 'they might be willing to modify the opinion in order to get your joinder.'

"On June 12, Blackmun circulated his own first draft of a dissent just for himself saying not just [] what his final published dissent later said – 'I do not understand the Court's opinion in this case to implicate in any way the public-trust doctrine' – but also a broadside complaint to Brennan for his then draft dissent: 'I thus find Justice Brennan's reliance on this ground somewhat unusual, and I base my dissent on reasons independent of the public trust doctrine.'

"Blackmun's ploy apparently worked. On June 15, Blackmun's clerk wrote her Justice that Brennan did now 'remove the major section with the exposition of the public trust doctrine.' She

In the end, Justice Brennan's published dissent featured only the single reference to the doctrine, which signaled the importance of state obligations to protect public interests in coastal waters but in an understated way that did not prompt a response.²³⁵ Justice Blackmun's bid to minimize the public trust discussion from Brennan's dissent succeeded in keeping the majority from repudiating the doctrine entirely, but Justice Scalia's majority decision troubled Blackmun enough that he nonetheless penned a separate dissent.²³⁶ And within it, out of "an apparent abundance of caution,"²³⁷ he took pains to stress that he did "not understand the Court's opinion in this case to implicate in any way the public-trust doctrine."²³⁸

3. *A Constitutive Constraint on Federal Authority?*

Yet even beyond the specific issue of constitutional takings, some scholars have long argued that the doctrine is better understood not as an inherent limit on only state sovereign authority,²³⁹ but as a quasi-constitutional "constitutive" limit on sovereign authority in general, including federal authority.²⁴⁰ A constitutive limit is one that is built into

further explained in her memo that their 'major goal is to prevent Justice Scalia from adding something to the majority that repudiates the public trust doctrine' and to that end, she recommended that Blackmun now withdraw his separate dissent and join Brennan's.

"On June 24, just before the final decision was published, the clerk wrote to Blackmun to say that the 'case has gone from bad to worse' in light of more changes made by Scalia and there was no need to withdraw his (Blackmun's) separate dissent and still chiding Brennan's chambers, though happily the lengthy public trust discussion was now out of Brennan's dissent: 'The damage has been done by Justice Brennan's dissent, not by your separate statement' though Blackmun should now take the last sentence of his draft out, to delete the reference to Brennan's extended public trust discussion, which was no longer there." Lazarus email of Nov. 8, 2019, *supra* note 229.

²³⁵ *Nollan*, 483 U.S. at 847 (1987); *see also* text accompanying note 227, *supra*.

²³⁶ *See Nollan*, 483 U.S. at 865 (J. Blackmun, dissenting).

²³⁷ *Lazarus*, *supra* note 228, at 1147.

²³⁸ *Nollan*, 483 U.S. at 865 (J. Blackmun, dissenting).

²³⁹ *See, e.g.*, Jan S. Stevens, *The Public Trust and In-Stream Uses*, 19 ENVTL. L. 605, 609 (1989) (arguing that the public trust is an inalienable attribute of state sovereignty).

²⁴⁰ *See, e.g.*, Joseph Regalia, *A New Water Law Vista: Rooting the Public Trust Doctrine in the Courts*, 108 KY. L.J. 1, 6 (2020) ("Not only should litigants be able to argue for an expansion of trust duties in state courts under state constitutions, they should also be able to argue for this expansion in federal courts under the U.S. Constitution."); Michael Blumm & Mary Christina Wood, "No Ordinary Lawsuit": *Climate Change, Due Process, and The Public Trust Doctrine*, 67 AM. U. L. REV. 1, 43-44 (2017) (arguing that the public trust doctrine is "an inherent constitutional limit on sovereignty"); Blumm & Schaffer, *supra* note 202 (arguing that the public trust doctrine is an inherent limit on both state and federal sovereign authority, and that *Illinois Central* represents an application of the Tenth Amendment's reserved powers doctrine); Gerald Torres & Nathan Bellinger, *The Public Trust: The Law's DNA*, 4 WAKE FOREST J. L. & POL'Y 281, 288 (2014) (arguing that the public trust doctrine is an implied limit on federal authority because "is the chalkboard on which the Constitution is written"); Chase, *supra* note 146, at 133, 137-42 (2010) (arguing that the *Illinois Central* public trust doctrine is grounded in federal common law, and that the federal common law reading confers continuing legitimacy on the decision, even after the 1938

the fabric of sovereign authority, such that it cannot be extinguished through normal judicial or legislative process, as are ordinary exercises of sovereign power. State Supreme Courts in California and Hawaii, among others, have already made this determination with regard to the role of the doctrine in state law.²⁴¹ Pursuing the same intuition, scholars and advocates increasingly suggest that relevant federal sovereign authority should also be subject to public trust limits.²⁴² As Professor Gerald Torres and Nathan Bellinger have written,

While some rights are created by government, others—often the most important pre-existing rights—are inherent to humankind and merely secured by government. The public trust doctrine is one of these inherent rights that pre-dates the United States Constitution. As such, we suggest that the public trust doctrine is the chalkboard on which the Constitution is written. When one writes something on a chalkboard, we see the meaning of the writing, but we commonly forget that there is still a chalkboard that created the space for the writing. We recognize that meaning comes from what is actually written, but there could be no such conveyance of meaning without the chalkboard as a foundation. After all, the Constitution was not written on a blank slate but was written with certain principles and rights in mind. As the chalkboard on which the Constitution was written, the public trust

Erie Railroad decision limited the reach of federal common law); Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425, 453, 458, 461-62 (1989) (arguing that the Supreme Court's *Illinois Central* decision was "premised on federal law" and that the public trust doctrine is therefore a feature of both federal and state law, because states manage trust lands within a federally imposed limit that prevents them from abdicating their responsibility as trustees). *But see* Charles F. Wilkinson, *The Public Trust Doctrine in Public Lands Law*, 14 U.C. DAVIS L. REV. 269, 273-74, 278 (1980) (arguing for a public trust responsibility in the federal administration of federal public lands, but that this trust responsibility arises from a different source from the state-constraining public trust in submerged lands).

²⁴¹ See *supra* notes 188-189 and accompanying text.

²⁴² See, e.g., MARY CHRISTINA WOOD, NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE 133-36 (2014) [hereinafter NATURE'S TRUST]; 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, 74 (2009) [hereinafter Wood, Part I]; Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part II): Instilling a Fiduciary Obligation in Governance*, 39 ENVTL. L. 91, 135-36 (2009) [hereinafter Wood, Part II] (suggesting avenues for Congress to meet its public trust responsibilities); Blumm & Schaffer, *supra* note 202, at 401 (arguing that "there is considerable precedent applying the public trust doctrine to the federal government"); Blumm et al., *supra* note 106, at 494 ("[T]he public trust is grounded in the federal constitutional equal footing doctrine."); Epstein, *supra* note 163, at 426 (asserting that the constitutional nature of the trust limits sovereign authority over public property in the same way the takings clause limits sovereign authority over private property).

doctrine provides the background and context for the Constitution.²⁴³

New litigation following this line of argument assert that as an inherent limit on sovereign authority, the public trust doctrine may also be an implied feature of federal constitutional law.²⁴⁴ If so, then it may have application to waters under federal jurisdiction, and possibly to other natural resources that can be protected only by federal authority, such as the atmospheric commons under assault by greenhouse gas pollution.²⁴⁵

The argument proceeds along both logical and historical lines. The logical argument is that there no principled reason to differentiate between the state or federal nature of the sovereign power rightfully constrained by the doctrine when the sovereign acts in a manner contrary to the public interest in trust resources.²⁴⁶ Received as part of the English common law that forms the bedrock of all American legal institutions, the doctrine is neither a creature of state nor federal law, but a constraint on the sovereign authority delegated to each level of government within our federal system.²⁴⁷ Whatever sovereign possesses legal authority over critical natural resource commons must match it with responsibility for protecting the public interests in them that have been recognized since ancient Rome.

The historical argument asserts that the public trust doctrine must constrain federal as well as state authority, because there are neither logical nor historical grounds to differentiate their implicit origins. Except for the very first states, the trust obligations of most American states arose by delegation of federal authority over lands previously held in federal ownership. Today, the doctrine most often constrains state authority, because under the equal footing doctrine of the U.S. Constitution,²⁴⁸ states own the submerged lands beneath navigable

²⁴³ Torres & Bellinger, *supra* note 240, at 288.

²⁴⁴ See, e.g., Blumm & Schaffer, *supra* note 202, at 403-06; see also Ryan, *supra* note 1, *From Mono Lake to the Atmospheric Trust*, at 60-64 (discussing the argument as raised in atmospheric trust litigation, including *Juliana v. United States*); *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020).

²⁴⁵ See WOOD, NATURE'S TRUST, *supra* note 235, at 136 (arguing that federal trust obligations should apply to protect the atmosphere against private appropriation as a disposal site for greenhouse gas pollution).

²⁴⁶ Blumm & Schaffer, *supra* note 202, at 401 ("The public trust doctrine, properly understood, is an inherent limit on all sovereigns—not merely state sovereigns."); WOOD, NATURE'S TRUST, *supra* note 242, at 133-36.

²⁴⁷ See WOOD, NATURE'S TRUST, *supra* note 242, at 133-36.

²⁴⁸ U.S. CONST. art. IV, § 3, cl. 1; *Coyle v. Smith*, 221 U.S. 559, 566 (1911) (interpreting the equal footing clause); see also Blumm et al., *supra* note 106 at 490 (1997) (discussing the relationship between the equal footing doctrine and the public trust doctrine); Dunning, *supra* note 105, at 524 (same).

waterways;²⁴⁹ and under the Submerged Lands Act,²⁵⁰ they are the primary regulators of tidelands within three miles of shore.²⁵¹ But other than the original thirteen colonies, all states inherited their trust obligations through the medium of federal sovereignty that applied before their lands were carved out of federal holdings.²⁵² The states must have inherited a pre-existing trust obligation, goes this reasoning, because there is no clear legal moment when new trust obligations were expressly conferred. Therefore, the doctrine must have implicitly inhered at the federal level before it was delegated to the states, and by this theory, it remains there in application to all trust resources that were not delegated to the states.²⁵³

Advocates thus maintain that, by the logic underlying the doctrine and the history over which it came into effect, there is no persuasive reason to distinguish between state or federal sovereignty when they govern resources that are appropriately subject to the public trust.²⁵⁴ The trust simply establishes a constraint on sovereign authority at whatever is the relevant level to protect public trust resources from private expropriation or monopolization. For submerged lands that remain under federal jurisdiction, or for other obligations the doctrine may be held to create, these scholars and litigants argue that the federal government should be equally bound as trustee.²⁵⁵

Nevertheless, the Supreme Court has not squarely considered the issue, leaving open to question the ultimate role of the doctrine as a limit on federal authority. To be sure, such a finding would have to overcome formidable hurdles in other Supreme Court dicta suggesting that there is no cognizable federal public trust.²⁵⁶ In *PPL Montana v. Montana*, the Court considered a separate doctrine involving the role of navigable waterways in establishing state title, but the majority opinion noted that

²⁴⁹ See *Pollard's Lessee v. Hagan*, 44 U.S. 212, 222, 230 (1845) (affirming under the equal footing doctrine that the state of Alabama owned the submerged land beneath its navigable waterways); see also Chase, *supra* note 146, at 121-22 (discussing the equal footing doctrine, as set forth in *Pollard's Lessee*, as an analytical building block of the public trust doctrine).

²⁵⁰ 43 U.S.C. §§ 1301-1315 (2012).

²⁵¹ 43 U.S.C. §§ 1311-1312 (2012) (discussing state authority over submerged lands and seaward boundaries).

²⁵² One way of viewing this is that in the equal footing conveyances, the federal government itself imposed the trust on the states. See Blumm & Schaffer, *supra* note 202, at 403-06 (discussing Justice Kennedy's reference to the equal footing doctrine in *Idaho v. Coeur d'Alene Tribe*, 521 U.S. 261 (1997) and what it means for the public trust doctrine's origins).

²⁵³ See Blumm & Shaffer, *supra* note 202.

²⁵⁴ *Id.*; WOOD, NATURE'S TRUST, *supra* note 242, at 133-36.

²⁵⁵ See Blumm & Shaffer, *supra* note 202.

²⁵⁶ *PPL Mont., LLC v. Montana*, 132 S. Ct. 1215, 1235 (2012); cf. *Alec L. v. McCarthy*, 135 S. Ct. 774 (2014) (denying a petition for certiorari to the United States Court of Appeals for the District of Columbia).

the public trust doctrine is a matter of state law.²⁵⁷ That brief reference, suggesting that the doctrine is not an implied feature of federal constitutional law, weakens the argument that the public trust doctrine binds federal authority in the same way that it binds the states—but the reference appears as dicta, presenting a conclusion that was not properly presented or argued before the court. It remains to be seen whether this dicta will hold firm over time or be dislodged by more directed Supreme Court litigation in the future.

The issue was most recently raised, together with other novel claims, in *Juliana v. United States*,²⁵⁸ the “Kid’s Climate Case,” in which youth plaintiffs sought injunctive relief for state and federal regulatory failures to protect the air commons from private appropriation by greenhouse gas polluters.²⁵⁹ The federal district court judge in Oregon initially agreed that the claim deserved its day in court, upholding the case against multiple motions to dismiss and two writs of mandamus by the Trump Administration.²⁶⁰ Similarly, the Supreme Court dismissed two petitions by the Administration for certiorari, but in the second one, lightly weighed in on the substantive issue by obliquely suggesting that the Ninth Circuit consider the writ of mandamus on interlocutory appeal.²⁶¹ The district court judge heard the unspoken implications of the Supreme Court’s order and reversed herself, certifying the plaintiff’s writ of

²⁵⁷ *PPL Mont., LLC*, 132 S. Ct. at 1235 (“Unlike the equal-footing doctrine, however, which is the constitutional foundation for the navigability rule of riverbed title, the public trust doctrine remains a matter of state law.”).

²⁵⁸ 947 F.3d 1159 (9th Cir. 2020).

²⁵⁹ *Id.*; see also Ryan, et al., *Debating the Fundamentals of the Fundamental Right*, *supra* note 1 (analyzing both the atmospheric trust claim and the accompanying fundamental rights claim for climate stability); Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60-64 (discussing the atmospheric trust litigation and analyzing the substantive and procedural history of *Juliana v. United States*).

²⁶⁰ *Juliana*, 947 F.3d at 1164-66. For Judge Aiken’s dramatic ruling on the initial motion to dismiss, see *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016).

²⁶¹ *In re Juliana v. United States*, 139 S. Ct. 452, 586 U.S. ___ (No. 18A410, Nov. 2, 2018), <https://www.scotusblog.com/wp-content/uploads/2018/11/18A410-In-Re-United-States-Order.pdf>. The Court’s order suggested that it was denying the petition because relief might still be available from the Ninth Circuit, and it implied that the Ninth Circuit had previously rejected the government’s efforts to dismiss the case for reasons that may no longer be valid: “At this time . . . the Government’s petition for a writ of mandamus does not have a ‘fair prospect’ of success in this Court because adequate relief may be available in the United States Court of Appeals for the Ninth Circuit Although the Ninth Circuit has twice denied the Government’s request for mandamus relief, it did so without prejudice. And the court’s basis for denying relief rested, in large part, on the early stage of the litigation, the likelihood that plaintiffs’ claims would narrow as the case progressed, and the possibility of attaining relief through ordinary dispositive motions. Those reasons are, to a large extent, no longer pertinent. The 50-day trial was scheduled to begin on October 29, 2018, and is being held in abeyance only because of the current administrative stay.” *Id.*

mandamus to the Ninth Circuit on interlocutory appeal.²⁶² After an extended period of consideration, the Ninth Circuit finally reversed the trial court and dismissed the case,²⁶³ over a vigorous dissent.²⁶⁴ As this piece goes to press, the plaintiffs are considering further appeals, but the procedural history of the case to date suggests that the Supreme Court is not eager to entertain the issue. However, the extraordinary volley of the federal public trust claim back and forth among the different levels of federal jurisdiction testifies to the gravity of the issue, and the likelihood that the Court will eventually have to consider it.

IV. CONFLICTS WITH AMERICAN WATER LAW

So far, this Article has introduced the public trust doctrine as a public commons-based theory of rights and responsibilities with regard to natural resource commons, especially waterways.²⁶⁵ However, there is a countervailing body of law that we must also contend with to understand the regulation of waterways in the United States, and it follows a wholly different theoretical model. This is the law of private water allocation, known more simply in the United States as “water law,” and it tells us who gets to use the water within these watercourses and for what purposes.

Water law regulates the private benefits that individuals and others can receive from public water commons. Deciding how much water can be withdrawn from a waterway is just as important to the maintenance of public environmental values as the public trust doctrine (and in many cases, arguably more so), but historically, water law has been more focused on promoting economic development through the allocation and protection of private rights in water resources. Water laws grant discrete rights for the use or extraction of freshwater, including both surface and groundwater sources. This enables families, farms, and businesses to claim water for household, agricultural, and industrial purposes. Water laws also enable cities, towns, and irrigation districts to claim water that they then make available to residents and commercial entities for the same uses through distribution networks within their jurisdictions.

²⁶² Certification of Interlocutory Appeal, *Juliana v. United States*, No. 6:15-cv-01517-AA, 2018 WL 6303774, at *3 (D. Or. Nov. 21, 2018).

²⁶³ *Juliana*, 947 F.3d at 1175.

²⁶⁴ *Id.*

²⁶⁵ For analysis of other public commons arguably subject to the public trust, see MICHAEL C. BLUMM & MARY CHRISTINA WOOD, *THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW* (2013), discussing wildlife (*id.* at 195-232), parks and public lands (*id.* at 233-256), atmospheric resources (*id.* at 349-64); ocean resources (*id.* at 365-67), electromagnetic spectrum (*id.* at 386-91), cultural property (*id.* at 392-96), and others.

Like the public trust doctrine, there is much regional variation in American water law. Water allocation is a feature of state law, and though there are many differences between the states, there are two main models for allocating water rights: (1) the riparian rights approach followed in most eastern states, under which all users must share, and (2) the prior appropriations approach preferred in most western states, in which the first to claim water has a superior right to later comers.²⁶⁶ In a smaller “hybrid” category, a few states incorporate elements of both systems.²⁶⁷ The eastern approach establishes correlative rights in a common pool framework, but the western approach comes closer to a privatization model, allowing users to claim an entitlement to water from which they can exclude later-comers, no matter how compelling their need.²⁶⁸

The looming problem should be obvious by now, especially in the Western United States: while the public trust doctrine follows a public commons model, the prior appropriations doctrine follows a privatization model—and yet the water governed under both laws is *the very same water*. The water to which individuals and other entities can obtain private rights of use under water allocation doctrines is the exact same water that makes up the waterways protected by the public trust doctrine. If all available water in the watercourse is allocated to private appropriators, then there will no longer be a watercourse for protection under the public trust doctrine. Indeed, the two bodies of law—the public trust doctrine and the law of private water allocation—are doctrinally orthogonal, with no intentional points of overlap. In one of the more serious follies of American legal evolution, each developed independently of the other, as though they have no substantive relationship at all.²⁶⁹

This Part introduces these two approaches to water allocation, touching on the eastern riparian rights approach before focusing on the western approach of prior appropriations that is poised for more serious conflict with the public trust doctrine. It shows why these two bodies of laws were inevitably destined to collide, as they have done so famously in epic western water battles like the Mono Lake and Scott River cases in California, the legislative-judicial showdown in Idaho, and the Walker Lake Basin dispute in Nevada.

²⁶⁶ See Christine Klein, Mary Jane Angelo & Richard Hamann, *Modernizing Water Law: The Example of Florida*, 61 FLA. L. REV. 403, 406-07 (2009) (contrasting eastern and western water law).

²⁶⁷ California, Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Washington have hybrid system. STEPHEN HODGSON, DEV. L. SERV., FAO LEGAL OFF., FAO LEGIS. STUDY 92: MODERN WATER RIGHTS THEORY AND PRACTICE 13 and n.2 (2006).

²⁶⁸ Klein et al, *supra* note 266, at 406-09.

²⁶⁹ See Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 47.

A. Eastern Riparian Rights

Eastern states generally follow the riparian rights doctrine inherited from British common law, which historically assigned interdependent rights for reasonable use of water resources among all the landowners along a watercourse.²⁷⁰ In riparianism, the “reasonableness” of use is contextual, determined by the total set of individual demands on the available resource.²⁷¹

The riparian rights approach treats the waterway as a common pool resource in which authorized users hold correlative rights, because the scope of every right to withdraw is dependent on the scope of all others. As a rule, everybody has to share.²⁷² At common law, authorization to use the waterway was based on the possession of riparian land bounding the watercourse. Today, many riparian jurisdictions have modernized the doctrine to de-privilege riparian ownership, allowing water to be exported from the riparian tract and treating all users under the same rubric for assigning claims.²⁷³ Yet under both the modern and traditional approach, all rights of use are coupled with a duty not to unreasonably harm other rights-holders by overdrawing or otherwise compromising the resource.

By establishing correlative rights in a shared resource with liability to other users for unreasonable harm, riparianism incorporates elements of tort law within a framework bearing resemblance to the public commons model that animates the public trust.²⁷⁴ These laws treat the water subject to allocation as a public commons or a common pool, establishing interdependent rights wherein every user’s rights are limited by the legitimate needs of all other users.²⁷⁵ For example, in 1888, as Susan B. Anthony was organizing for women’s suffrage²⁷⁶ the Connecticut Supreme Court enjoined one mill owner from impounding a stream to the detriment of other downstream mill operators in *Mason v. Hoyle*.²⁷⁷ Emphasizing the reciprocal nature of rights and duties among riparian claimants, the court articulated the five core principles for “reasonably”

²⁷⁰ See Klein et al., *supra* note 266, at 406.

²⁷¹ *Id.* at 407.

²⁷² *Id.*

²⁷³ *Id.* at 411-12 (discussing the elimination by regulated riparianism of the common law riparian ownership criteria).

²⁷⁴ Professor Christine Klein has characterized the model as based in tort, because users are prohibited from inflicting unreasonable harm on one another by their use of the shared water resource. *Id.* at 406.

²⁷⁵ *Id.* at 406-07.

²⁷⁶ *International Council of Women*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/topic/International-Council-of-Women> (Sept. 24, 2019) (explaining that in 1888, Susan B. Anthony organized the International Council of Women to fight for suffrage).

²⁷⁷ *Mason v. Hoyle*, 14 A. 786 (Conn. 1888).

allocating water under the common law “reasonable use” doctrine of riparian rights:

- (1) All riparians have an equal opportunity to use the stream;
- (2) No owner may use his own property so as to injure another;
- (3) Adjudicators should consider the character and capacity of the stream;
- (4) The burden of foreseeable shortages should be allocated fairly among all riparians; and
- (5) Customary practices provide a foundation for evaluating “reasonableness.”²⁷⁸

Modern riparianism jurisdictions continue to apply the correlative spirit of reasonable use riparianism in considering the interests of all claimants on a waterway before assigning definitive rights to any, and they increasingly consider the environmental values of healthy stream ecosystems as well. For example, in 2005, in *Michigan Citizens for Water Conservation v. Nestlé Waters North America*, the Michigan Court of Appeals enjoined some—but not all—of the Nestlé Corporation’s claims to withdraw water from a stream that also served boating, swimming, fishing, wildlife, and aesthetic purposes.²⁷⁹ The case highlights the responsibility of a riparian rights state to fairly allocate water to preserve as many different uses of a waterway as possible.

One advantage of the riparian rights system, especially after de-privileging riparian ownership, is that it puts the needs of all claimants on relatively equal footing—every riparian claim is as important as any other. Local Michigan residents could challenge lucrative diversions by the Nestlé Corporation, and the concerns of mill owners harmed by upstream impoundments were not foreclosed if their mills were established later in time. However, a resulting disadvantage is that the pure common law system creates enormous uncertainty about the scope of any user’s rights, because new claims along the waterway will always require a new analysis of the resulting web of interdependent rights. The workability of riparian rights hinged on the assumption, generally true in Britain and the early eastern American states, that there would usually be enough water to go around.²⁸⁰ As water resources have come under the

²⁷⁸ *Id.* at 788-90.

²⁷⁹ *Michigan Citizens for Water Conservation v. Nestlé Waters N. Am.*, 709 N.W. 2d 174, 194-95, 208 (Mich. Ct. App. 2005).

²⁸⁰ See Klein et al., *supra* note 266, at 429; T. E. Lauer, *The Common Law Background of the Riparian Doctrine*, 28 MO. L. REV. 60, 64 (1963).

pressure of increasing population and development in the east, many states have therefore adopted statutory systems of “regulated riparianism.” These systems partner elements of the original correlative rights framework with a permit-based system that preserves the riparian “reasonableness” inquiry with greater security of right over set periods of time.²⁸¹

Because riparian rights are premised on a theory of waterways as commons resources, conflicts with the public trust doctrine—which also presumes that waterways are public commons—have been relatively modest thus far. Riparianism also includes features that, at least historically, have been more friendly to environmental and distributive justice concerns than the western appropriations doctrine. Conceptualizing water as a resource that everyone must share, riparianism requires a balancing of equities during water emergencies,²⁸² requiring all users to proportionally “share the shortage” during times of drought or emergency. Moreover, riparianism has always protected uses that leave water in the stream (as for fishing, swimming, and boating), on par with uses that extract water from the stream (as for irrigation or manufacturing). For this reason, riparian rights have historically afforded more protection for such environmental concerns as ecological values, habitat, and the scenic and recreational values associated with instream flow and intact stream systems.²⁸³

Indeed, under the original “natural flow doctrine” of riparian rights that American states initially inherited from England, rights to withdraw were limited by the requirement that the stream retain enough water to approximate its “natural flow.”²⁸⁴ Under “natural flow” riparian rights, instream uses like fishing, swimming, and boating were favored over extractive uses, and waterways were necessarily protected from overdraft in ways that benefited their associated ecological, recreational, and esthetic values. However, by mandating unimpeded flows in waterways, the natural flow doctrine substantially inhibited economic development and was eventually replaced by the modern “reasonable use doctrine” of riparian rights.²⁸⁵ The reasonable use doctrine limits users from depleting

²⁸¹ See Klein et al., *supra* note 266 (discussing Florida’s model of regulatory riparianism); see generally REGULATED RIPARIAN MODEL WATER CODE (AMERICAN SOC’Y OF CIVIL ENG’RS 2004).

²⁸² In the traditional common law doctrine, water was shared equally by all riparian landowners. See RESTATEMENT (SECOND) OF TORTS § 858 cmt. a., illus. 1 (AM. LAW INST. 1979). In states that adopt regulated riparianism statutes, most privileges associated with riparian ownership are eliminated. See Klein et al., *supra* note 266, at 411–12.

²⁸³ See Klein et al., *supra* note 266, at 410–11.

²⁸⁴ See, e.g., *Merrit v. Parker*, 1 N.J.L. 460 (1795).

²⁸⁵ See, e.g., *Mason v. Hoyle*, 56 Conn. 255, 14 A. 86 (1888).

streamflow only relative to the needs of other users, thus enabling fuller depletion if extractors' claims outweigh those for instream use.²⁸⁶

The shift from "natural flow" to "reasonable use" riparianism represents a rare example from water law in which the original common law doctrine is more environmentally protective than the modern trend. It stands in opposition to the historical arc of the public trust doctrine described in this Article, in which environmental values have received increasingly more doctrinal protection over time—and it is noteworthy that the contrast may not be accidental. As water allocation law became less environmentally protective over time, perhaps more responsibility for maintaining the health of the waterway was effectively shifted to the state's obligations under the public trust doctrine.

In any event, as demands on the water resource intensify even in the comparatively wet eastern states, riparianism is coming under more and more of the same environmental pressures as appropriative rights regimes. Without additional regulation, traditional riparianism could provoke a tragedy-of-the-commons race to withdraw, with no absolute requirement to leave flow instream independent of claimed uses. Exactly such a dilemma is now playing out in the Apalachicola-Chattahoochee-Flint river basin dispute among Georgia, Alabama, and Florida, where growing withdrawals by Atlanta and other upstream users have so depleted river flows that it has decimated the oyster fishery at the river system's delta in Apalachicola Bay on the northern Gulf Coast.²⁸⁷ As this piece goes to press, the dispute is entering its third decade of Supreme Court adjudication.²⁸⁸

For this and other reasons, riparian rights states shifting from the pure common law system to statutory systems of regulated riparianism generally add protections for instream uses, environmental values, distributive justice, and other concerns that are not necessarily addressed by the common law.²⁸⁹ These protective measures will hopefully forestall the tragedy of the commons that the traditional doctrine could enable. However, increasing water scarcity issues in the east suggest that the potential for conflicts between riparian rights and the public trust doctrine that have remained dormant until now could materialize at some future point.²⁹⁰

²⁸⁶ *Id.*

²⁸⁷ *Florida v. Georgia*, 585 U.S. ____ (2018); 138 S. Ct. 2502 (2018).

²⁸⁸ See *Florida v. Georgia*, SCOTUSBLOG, <https://www.scotusblog.com/case-files/cases/florida-v-georgia-2/> (last visited Nov. 2, 2020).

²⁸⁹ See Klein et al., *supra* note 266 (discussing Florida's model of regulatory riparianism).

²⁹⁰ See, e.g., *Florida v. Georgia*, 138 S. Ct. 2502 (2018) (remanding to the special master a dispute between three riparian rights jurisdictions, Florida, Alabama, and Georgia, over Atlanta's

B. Western Prior Appropriations

The doctrine of prior appropriations, adopted in arid western states where water scarcity is the defining feature, works very differently. Following the “first-come-first-claimed” rule of resource allocation that nineteenth century miners brought with them as they pushed westward, this doctrine establishes first-in-time rights to appropriate water for exclusive private use.²⁹¹ Under the traditional common law approach, the first user to take water out of a watercourse and put it to “beneficial use” (domestic or economically productive use) creates a perpetual right to continue taking the same amount for the same use.²⁹² That right of appropriation can be asserted against any conflicting needs by those who come later—including the general public.²⁹³ There is no formal obligation to share or proportionally curtail use during times of shortage.

Moreover, instream uses like fishing, navigation, and related environmental values received no protection at common law, because appropriative rights could be substantiated only by withdrawal.²⁹⁴ For example, in the 1882 case of *Coffin v. Left Hand Ditch*, the first case to formally apply the new doctrine of appropriative rights, the Colorado Supreme Court affirmed the rights of an irrigator removing water from the stream over the claims of a downstream riparian farmer who had long benefited from the stream without specifically diverting it.²⁹⁵ In the same year that western outlaw Jesse James was brought to justice,²⁹⁶ the Colorado high court brought justice for the irrigator that had first removed water from the watercourse, protecting his right to continue appropriating that water for his own purposes without regard to the needs of the downstream user who had failed to perfect an appropriative claim.²⁹⁷

Water rights administration under the traditional prior appropriations doctrine had the advantage of being relatively simple, especially in comparison to riparianism. There was no need for a contextual determination of reasonableness, or to repeatedly account for all the

depletion of the Apalachicola-Chattahoochee-Flint River system to the point of leaving insufficient water to sustain the fishing industry at the river’s terminus in Florida’s Apalachicola Bay).

²⁹¹ Klein et al., *supra* note 266, at 406 (2009) (“[T]he arid western states historically have followed the prior appropriation doctrine, protecting the right to use water according to temporal priority of use.”).

²⁹² *Id.* at 408–09.

²⁹³ *See id.*

²⁹⁴ *Id.* at 215–18.

²⁹⁵ *Coffin v. Left Hand Ditch. Co.*, 6 Colo. 443 (1882).

²⁹⁶ *Jesse James and Frank James*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/biography/Jesse-James-and-Frank-James> (last visited Sept. 24, 2019).

²⁹⁷ *Coffin*, 6 Colo. at 447.

needs that might be asserted along a watercourse. In the world of appropriative rights, it was understood from the start that there would not be sufficient water in the stream to satisfy everyone's needs. First-in-time rights were adopted and then entrenched to encourage the settlement and economic development of the arid west, ensuring rewards to those who had invested in anticipation of continued access to the water resources they had been first to identify.²⁹⁸ Waterways were still public commons,²⁹⁹ but once use rights were assigned, they operated independently of one another—at least to the extent that earlier claims would not be diminished by the demands of later-comers.³⁰⁰

Appropriative rights are not correlative, but assigning them on the basis of temporal priority nevertheless creates elaborate webs of interrelated claims along a watercourse. Long-established uses are always satisfied before newer uses, whether they are upstream, downstream, more or less geographically or economically sensible, or of lower or higher social value. But the ordering of different uses from the top to the bottom of the stream creates multiple points of intersection that tie one use to another.³⁰¹ Some uses are purely extractive, while others, such as irrigation or hydropower generation, return some or all of their flow back to the watercourse. These “return flows” are then available for junior claimants downstream from the point of reintroduction (upstream claimants, even those more senior in time, are obviously out of luck), so return flows are assiduously calculated, reclaimed, and jealously guarded.³⁰² An inefficient alfalfa farm in place before an upstream hospital was built will always be able to satisfy its claim before the hospital can draw any water, but whatever water returns to the stream after irrigating the alfalfa will be available to a downstream factory that came later still . . . and so the web extends.

For this reason, even seemingly exclusive western water rights can be as interdependent as riparian rights. Rights are interrelated because water in a stream cycles through multiple uses along its journey through the watershed, with the sequence of claims depending not only on the temporal priority of users, but also the nature of their use, how much is

²⁹⁸ NAT'L RES. COUNCIL, WATER TRANSFER IN THE WEST: EFFICIENCY, EQUITY, AND THE ENVIRONMENT 70-71 (1992), <https://doi.org/10.17226/1803>.

²⁹⁹ See, e.g., COLO. CONST. art. XVI, § 5 (declaring that all waters in the state belong to the public).

³⁰⁰ Klein, *supra* note 266, at 408.

³⁰¹ See, e.g., *Irwin v. Phillips*, 5 Cal. 140, 147 (1855) (involving the overlapping nature of appropriative rights).

³⁰² See Steven E. Clyde, *Marketplace Reallocation in the Colorado River Basin: Better Utilization of the West's Scarce Water Resources*, 28 J. LAND RESOURCES & ENVTL. L. 49, 57 (2008) (explaining the importance of the historic right to return flows).

returned, and their positions along the watercourse. Many prior appropriation states similarly imposed first-in-time rules for allocating groundwater—often without appreciating the hydrological relationship between surface and ground water resources—further intertwining appropriative claims.³⁰³ Making changes within these webs is accordingly very difficult, because altering the nature, amount, or positioning of any one use will likely affect the availability of water claimed by other appropriators on the stream.³⁰⁴ And when their entitlements to continue diverting water have been challenged, appropriators have defended their claims vigorously, sometimes with the full force of constitutional protection for private property.³⁰⁵

In contrast to the riparian rights common-pool approach, then, the prior appropriation doctrine takes a privatization approach to resource allocation—the very opposite of the public commons approach implied by the public trust doctrine.³⁰⁶ Whoever is first to put water to beneficial use can claim the right to continue doing so, potentially indefinitely, and excluding all others.³⁰⁷ Not only does the doctrine reward early movers, granting them a protectable right to exclude those who seek to establish claims afterward, it rewards those who take full possession of the water—literally removing it from the waterway, leaving nothing behind for other uses. As noted, a common law appropriator had to actually withdraw water from the stream to perfect a claim; appropriative rights were not available for instream uses like fishing, swimming, wildlife, or aesthetic purposes. And because any water that remains or returns to the stream

³⁰³ See, e.g., *Scott River Case*, 237 Cal. Rptr. 3d 393 (applying the public trust doctrine to curtail groundwater withdrawals that were affecting the surface water resources of the Scott River in California). The law of groundwater withdrawals has historically been treated separately from the law of surface water withdrawals, having developed awkwardly before science demonstrated that proximate ground and surface waters are usually hydrologically connected. In some states, water law has evolved to account for this relationship, while in others, ground and surface water remain separately allocated. Compare *Cline v. Am. Aggregates Corp.*, 474 N.E. 2d 324 (Ohio 1984) (rationalizing groundwater allocation with surface water allocation doctrines under the Restatement's Reasonable Use doctrine) with *Sipriano v. Great Spring Waters of Am.*, 1 S.W.3d 75 (Texas 1999) (affirming that Texas groundwater is allocated under the rule of capture, even though surface water is allocated by prior appropriation, and one who captures groundwater may directly interfere with a prior appropriative right to impacted surface waters).

³⁰⁴ BARTON H. THOMPSON, JR. ET AL., *LEGAL CONTROL OF WATER RESOURCES: CASES AND MATERIALS* 224–27 (5th ed. 2013) (discussing the requirements for maintaining a permit).

³⁰⁵ See, e.g., *Tulare Lake Basin v. United States*, 49 Fed. Cl. 313 (Fed. Cl. 2001) (holding that efforts to protect species under the Endangered Species Act constitute a taking of property in violation under the Fifth Amendment); *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276 (Fed. Cir. 2008) (a government-ordered water diversion to protect an endangered fish species under the ESA may be a physical taking under the Fifth Amendment, requiring government compensation to holders of private water rights).

³⁰⁶ Ryan, *The Historic Saga*, *supra* note 1, at 576–77 (2015).

³⁰⁷ Klein et al., *supra* note 266, at 408–09.

after use is subject to subsequent claims enforceable by other users, the prior appropriation doctrine creates powerful incentives to use as much as possible, as early as possible—and if you don't want to be subject to someone else's future demands, with as little return to the common pool as possible.

Some water dependent users and communities have learned this lesson the hard way. In 1913, for example, as the first coast-to-coast highway was paved,³⁰⁸ a small Colorado town sued to prevent a hydroelectric power company from diverting the entirety of a stream that had long cascaded over a beautiful waterfall through the heart of the town, forming the basis of its tourism and resort-based economy.³⁰⁹ However, in *Empire Water & Power v. Cascade Town*, the Eighth Circuit applied the prior appropriation doctrine to hold that only the power company had a protectable water right, because only the power company had made an actual withdrawal from the stream.³¹⁰ The town had been relying on the water for economic purposes even longer, but only by leaving it instream.³¹¹ Thus, the power company could continue to divert water to its reservoir for economic uses, even though doing so would fully dewater the Cascade Creek Canyon waterfalls and destroy the longstanding economic mainstay of the town.³¹²

Just as many riparian rights states are shifting away from the common law and toward a model of regulated riparianism, most western states have adopted a regulatory overlay on top of the common law doctrine of prior appropriations. While these states preserve the temporal priority at the heart of the common law system, most users beyond a threshold must now seek state recognition of their rights in an administrative permit.³¹³ Permits are subject to licensing requirements that supplement the common law approach with new statutory criteria, including a public interest analysis that requires consideration of factors beyond pure temporal priority before new rights may be assigned.³¹⁴ Beginning in the

³⁰⁸ All Things Considered, *America's First Transcontinental Highway Turns 100* (2013), <https://www.npr.org/2013/10/31/242129231/americas-first-transcontinental-highway-turns-100>.

³⁰⁹ *Empire Water & Power Co. v. Cascade Town Co.*, 205 Fed. 123 (8th Cir. 1913).

³¹⁰ *Id.* at 128-129.

³¹¹ *Id.*

³¹² *Id.*

³¹³ See, e.g., N.D. STATE WATER COMM'N, NORTH DAKOTA'S WATER PERMITTING PROCESS (Jan. 2018), http://www.swc.nd.gov/pdfs/water_permitting_process.pdf; Montana Water Use Act, MONT. CODE ANN. § 85-2-101 (5) (establishing a permit system for obtaining water rights for new or additional water developments); MINN. DEP'T OF NAT. RES., *Water Appropriations Permit Program*, https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/index.html (last visited Oct. 17, 2015).

³¹⁴ See, e.g., *Shokal v. Dunn*, 707 P.2d 441, 448-50 (Idaho 1985) (analyzing the public interest requirements that “appear frequently in the statutes of the prior appropriation states of the West”).

1970s, most western states have also provided greater statutory protections for instream flow values—some even approximating public trust values³¹⁵—in an attempt to mitigate the enormous pressure to withdraw from the stream in order to receive a legally protected water right.³¹⁶

In this respect, eastern and western states may be converging on a modern regulatory permit system with a bit more in common than previous generations. A handful of states, including California, allocate water under both riparian and appropriative rights regimes simultaneously, adding further complexity to an already complicated field.³¹⁷ And today, water rights in all states are also subject to various forms of federal regulation, and occasionally to the federal reservation of water for public and tribal lands (if, following the rule of temporal priority, the federal lands were reserved for these purposes before later assertions of private rights).³¹⁸ However, commentators have pointed out that the later protections introduced to western water law can be of limited value in a system that continues to be defined by temporal priority.³¹⁹ In most respects, the heart of the western water law analysis remains the traditional rules of prior appropriations.³²⁰ Very few states treat these the

³¹⁵ See e.g., Steven M. Smith, *Instream Flow Right Within Proper Appropriation Doctrine: Insights from Colorado*, 59 NAT. RES. J. 1, 192 (discussing how the Colorado Conservation Board appropriates “instream water rights on behalf of the public to ‘preserve the natural environment to a reasonable degree.’”).

³¹⁶ THOMPSON ET AL., *supra* note 305, at 215–16.

³¹⁷ In California, the owners of land abutting watercourses hold some traditional riparian rights, which coexist with the more abundant appropriative rights that are unconnected to riparian land ownership but subject to similar requirements of reasonable and beneficial use. See THOMPSON ET AL., *supra* note 286, at 200 (discussing California’s hybrid system of water law); see also CAL. CONST. art. X, § 2 (confirming the protection of riparian rights and discussing the requirement of beneficial use). However, prior appropriations remains the defining doctrinal approach in the state. See THOMPSON ET AL., *supra* note 286, at 208 (explaining how the doctrines interact with one another in California); see also John Franklin Smith, *The Public Trust Doctrine and National Audubon Society v. Superior Court: A Hard Case Makes Bad Law or the Consistent Evolution of California Water Rights*, 6 GLENDALE L. REV. 201, 207–09 (1984) (outlining the history of California’s dual water rights system).

³¹⁸ See *Winters v. United States*, 207 U.S. 564 (1908) (creating the doctrine of federal reserved water rights, which implies such water rights as needed to fulfill the purpose of federal reservations of land, here Indian reservations, with priority established as of the date of the reservation); *United States v. New Mexico*, 438 U.S. 696 (1978) (applying the doctrine to other federal public lands); see also PETER FOLGER ET AL., CONG. RSCH. SERV., R45259, *THE FEDERAL ROLE IN GROUNDWATER SUPPLY: OVER AND LEGISLATION IN THE 115TH CONGRESS* 3-6 (2018).

³¹⁹ THOMPSON ET AL., *supra* note 305, at 215–16.

³²⁰ See, e.g., Norman K. Johnson & Charles T. DuMars, *A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands*, 29 NAT. RES. J. 347, 367–71 (1989) (considering ramifications of the public trust doctrine for the future of western, prior appropriations-based water law).

same way they do conventional appropriations; for example, only three states allow private parties to hold them.³²¹

C. Private Water Allocation and the Public Trust

Notwithstanding this modern convergence, the emerging variants of regulated riparian and statutory appropriative rights systems continue to showcase stark differences, and they each intersect differently with the public trust doctrine. Even as the public trust doctrine requires the state to protect navigable waterways in trust for the public, the doctrines of private water allocation govern how the state gives away the waters within them. And while the public trust and riparian rights doctrines are more grounded in a public commons theory of waterways, emphasizing correlative rights and shared duties, the prior appropriations doctrine tends toward a privatization model, establishing perpetual first-in-time rights to exclude others.

Both the public trust and prior appropriation doctrines have deep roots in state common and statutory law, and the values they protect are independently legitimate and important. Yet reconciling them is difficult, because each one operates from a theoretical framework that seemingly excludes the central premise of the other. If the public trust doctrine commits the sovereign to maintaining the public commons values of waterways—from instream uses to ecological benefits—then how should the law cope with established rights to withdraw water for private use if they threaten the health of the waterway? If private water law allocates protectable rights to withdraw water from public sources for private uses, potentially even protected by the Takings Clause, how should the state honor its obligations to manage public trust resources for the benefit of the public, including future generations yet to come?

These contrasting legal frameworks have set in motion a collision that was inevitable, and that continues to unfold across the American west even now. The following section explores how it has been managed in three different western prior appropriations states: California, Idaho, and Nevada.

1. California: A Balancing Act at Mono Lake and the Scott River.

The unavoidable conflict between the underlying premises of the public trust and prior appropriations doctrines erupted most spectacularly in the early 1980s at Mono Lake, an ancient and otherworldly lake that

³²¹ THOMPSON, *supra* note 305, at 216 (noting that while most states now allow some sort of appropriation to protect instream flows, only Alaska, Arizona, and Nevada allow private entities to claim them).

drains the eastern slope of the Sierra Nevada mountains at Yosemite National Park. In *National Audubon Society v. Superior Court*, the California Supreme Court was tasked with resolving the visceral conflict between the state's obligations under the public trust doctrine to protect Mono Lake, a navigable waterway, and the appropriative rights it had granted to divert Mono Basin water some 400 miles south to Los Angeles.³²² The resulting decision is among the most important public trust cases of the modern era, impacting the development of the doctrine across the nation and the world,³²³ and so other scholars³²⁴ and I have exhaustively catalogued the Mono Lake story in previous work.³²⁵

In a nutshell, the Mono Lake plaintiffs argued that the public trust doctrine, defining a core requirement of state sovereign ownership of waterways, should trump any contrary claims under the later law of prior applications. The City of Los Angeles argued that the prior appropriations doctrine, an abrogating act of statutory law, should trump any countervailing common law doctrine.³²⁶ Simultaneously affirming and disappointing the central arguments by both sides, the California Supreme Court ultimately concluded that the prior appropriations statute did not displace the state's obligations under the public trust doctrine,³²⁷ but neither could the public trust doctrine unwind California's massive and entrenched system of statewide water transfers.³²⁸ Solomon-like, the

³²² See *Mono Lake Case*, 658 P.2d 709 (Cal. 1983).

³²³ See ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY*, Chapter VIII (Cambridge Univ. Press, forthcoming 2021) (reviewing the impacts of the case domestically and internationally). For example, the Mono Lake case played a critical role in the development of the doctrine as a feature of Indian Constitutional law. M.C. Mehta v. Kamal Nath, (1997) 1 S.C.C. 388 (1996) (India), in I UNITED NATIONS ENVIRONMENT PROJECT COMPENDIUM OF JUDICIAL DECISIONS IN MATTERS RELATED TO THE ENVIRONMENT, NATIONAL DECISIONS 259 (1998), http://www.asianjudges.org/wpcontent/uploads/2013/10/Compendium_Judicial_Decisions_Nat_v_1.pdf (discussing the role of the public trust doctrine in Indian law and quoting the California Supreme Court's description of the doctrine in *Mono Lake*).

³²⁴ See, e.g., Stevens, *supra* note 239, at 612–14 (discussing the relationship between the public trust and prior appropriations doctrines); Timothy J. Conway, *National Audubon Society v. Superior Court: The Expanding Public Trust Doctrine*, 14 ENVTL. L. 617, 630–33 (1984) (analyzing the state court's reconciliation of the public trust and prior appropriations doctrines in *Mono Lake*); Craig Anthony (Tony) Arnold & Leigh A. Jewel, *Litigation's Bounded Effectiveness and the Real Public Trust Doctrine: The Aftermath of the Mono Lake Case*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 1177, 1188–95 (2008) (same).

³²⁵ See, e.g., Ryan, *supra* note 1, *The Historic Saga*; Ryan, *supra* note 1, *From Mono Lake to the Atmospheric Trust*; ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY* (Cambridge Univ. Press, forthcoming 2021).

³²⁶ *Mono Lake Case*, 658 P.2d at 727.

³²⁷ *Id.* at 712.

³²⁸ *Id.* at 712, 727.

court announced that neither of the two doctrines trumps the other, and that the state must somehow find an accommodation between them.³²⁹

While the court's decision emphasized the importance of balancing the values served by the two different doctrines, the decision broke ground on multiple points of law, affirming that the public trust doctrine (1) protects environmental values associated with trust resources, (2) applies to the non-navigable tributaries of trust resources; (3) creates an ongoing duty of state supervision, (4) constrains state authority to license water rights in derogation of trust values, and (5) was neither abrogated by nor subsumed into California's statutory system of prior appropriation law.³³⁰ After an additional decade of painstaking consultation with scientists and stakeholders, the State Water Board reissued Los Angeles's water rights according to a complex scheme that balanced the legitimate needs of the City for water against the important public trust values requiring state protection at Mono Lake.³³¹

The Mono Lake doctrine was recently extended by the California courts in application to groundwater resources, a realm in which most states have not fully considered the public trust doctrine. For many years, agricultural groundwater withdrawals had been depleting the Scott River, a navigable tributary of the larger Klamath River system.³³² In litigation widely known as the Scott River case, the plaintiffs sought to extend the logic of the Mono Lake case to this unfamiliar yet parallel context, in which the public trust values associated with the navigable Scott River were pitted against established appropriative rights to pump non-navigable tributary groundwater for agricultural use.³³³

In 2018, the California Court of Appeals concluded that the public trust doctrine does protect the Scott River from the diversion of groundwater tributaries, notwithstanding claimed statutory rights to the water.³³⁴ The court anchored its reasoning in the *National Audubon Society* decision protecting Mono Lake, declaring that "[t]he analysis begins and ends with whether the challenged activity harms a navigable waterway and thereby

³²⁹ *Id.* at 712, 727-28. For fuller analysis of the court's decision, see Ryan, *The Historic Saga*, *supra* note 1, at 605-11.

³³⁰ See Ryan, *supra* note 1, *The Historic Saga*, at 605-13; Ryan, *supra* note 1, *From Mono Lake to the Atmospheric Trust*, at 54-55.

³³¹ Mono Lake Basin Water Right Decision 1631, 154-55 (State of Calif. Water Res. Control Bd. Sept. 28, 1994) (hereinafter Decision 1631); see also Ryan, *supra* note 1, *The Historic Saga*, at 614-15; Ryan, *supra* note 1, *From Mono Lake to the Atmospheric Trust*, at 55-56.

³³² *Scott River Case*, 237 Cal. Rptr. 3d at 397.

³³³ *Id.* at 397-98.

³³⁴ *Id.* at 402 ("[T]he water subject to the trust is the Scott River, a navigable waterway . . . [and] the public trust doctrine applies if extraction of groundwater adversely impacts a navigable waterway to which the public trust doctrine does apply.").

violates the public trust.”³³⁵ It held that the state may not forsake its obligation to protect a critical public trust commons by allowing private expropriation, by whatever means.³³⁶ Drawing on many of the landmark public trust decisions reviewed in this Article, it concluded:

What *Illinois Central* was on the national level in the 19th century, *National Audubon* was to California in the 20th century—a monumental decision enforcing, indeed expanding, the right of the public to benefit from state-owned navigable waterways and the duty of the state to protect the public’s “common heritage” in its water. We reject the County’s effort to diminish the importance of the opinion, including its mistaken labeling of its central holdings as dicta. To the contrary, *National Audubon* is binding precedent, factually analogous, precisely on point, and indeed dispositive of the threshold question in this appeal: does the public trust doctrine apply to the extraction of groundwater that adversely impacts the Scott River, a navigable waterway?³³⁷

Environmental advocates were elated when the California Supreme Court declined to hear the matter on appeal, apparently settling the matter at least with regard to the Scott River. Nevertheless, disputes over the public trust treatment of groundwater more generally, which is also heavily regulated by statute in California, are likely to continue.

So, too, will larger disputes over the nature of the public trust doctrine itself. In addition to deploying the doctrine to protect environmental values, the Mono Lake and Scott River cases are noteworthy because they express a powerful view of the public trust doctrine at the level of legal theory. Following the sovereign constraint theory reviewed in Part III(C)(3),³³⁸ these decisions suggest that the public trust possesses quasi-constitutional features, because in contrast to conventional common law, it can withstand ordinary abrogation by the legislature.³³⁹ In these disputes, the litigants holding private water rights under state allocation laws argued that statutorily-based water rights should trump whatever values the public trust doctrine protects, because (after all) that is

³³⁵ *Id.* at 403; *see also id.* (adding “the dispositive issue is not the source of the activity, or whether the water that is diverted or extracted is itself subject to the public trust, but whether the challenged activity allegedly harms a navigable waterway”).

³³⁶ *Id.* at 401-05.

³³⁷ *Id.* at 401.

³³⁸ *See supra* notes 239-257 and accompanying text (discussing the public trust doctrine as a constitutive constraint on sovereign authority).

³³⁹ *See Ryan, From Mono Lake to the Atmospheric Trust, supra* note 1, at 56-57 (exploring this issue in the context of the *Mono Lake* decision); *id.* at 58 (noting similar issues at play in the unfolding Scott River litigation).

normally how the common law works.³⁴⁰ Judge-made common law is used to resolve disputes that have not been directly regulated by statute, but it is generally overridden when the legislature enacts contrary directives.³⁴¹ However, the Mono Lake case and its progeny established that, at least in California, the public trust doctrine was not displaced by the prior appropriations doctrine, so the state remained obligated to protect trust values as much as possible while also maintaining its statutory water allocation system.³⁴²

As I have discussed in previous work, the California approach suggests that the doctrine is best understood “as a constitutive grant of authority and obligation regarding the management of public commons water resources,” because it grants sovereign ownership of trust resources while simultaneously obligating the sovereign to manage them in trust for the public.³⁴³ Because the California doctrine imposes a constraint on sovereign authority in addition to its sovereign grant, it cannot be abrogated by simple statute.³⁴⁴ Permitting the state to use its legislative authority to abolish a foundational constraint on its authority would undermine the very purpose of the doctrine in protecting public commons.³⁴⁵ Most American jurisdictions that have addressed the issue have followed the California approach set forth in the Mono Lake decision,³⁴⁶ including Hawaii,³⁴⁷ New Jersey,³⁴⁸ and Washington,³⁴⁹ and

³⁴⁰ *Id.* at 56.

³⁴¹ *Id.*

³⁴² *Mono Lake Case*, 658 P.2d at 728.

³⁴³ Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 56; *see also* Ryan, *The Historic Saga*, *supra* note 1, at 573–74.

³⁴⁴ *But see supra* note 138 (discussing the narrow exceptions to the general public trust constraints stated in *Illinois Central*).

³⁴⁵ Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 56 (noting that “[s]ome have argued that this interpretation of the public trust doctrine is a necessary implication of the equal footing doctrine, which is also recognized as a principle of U.S. constitutional law—even though, like the words “public trust,” the words “equal footing” appear nowhere in the U.S. Constitution”).

³⁴⁶ *See, e.g., Lawrence v. Clark Cnty.*, 254 P.3d 606, 613 (Nev. 2011) (“The final underpinning of our formal adoption of the public trust doctrine arises from the inherent limitations on the state’s sovereign power.”).

³⁴⁷ *See In re Water Use Permit Applications for the Waiahole Ditch*, 9 P.3d 409, 443 (Haw. 2000) (“[H]istory and precedent have established the public trust as an inherent attribute of sovereign authority.”).

³⁴⁸ *See East Cape May v. State Dept. of Environmental Protection*, 777 A.2d 1015, 1034 (N.J. Super A.D. 2001) (noting that “tidally-flowed land has always been subject to the public trust doctrine . . . [which] provides that the sovereign never waives its right to regulate the use of public trust property”).

³⁴⁹ *See Caminiti v. Boyle*, 107 Wash.2d 662, 732 P.2d 989, 994 (1987) (“The state can no more convey or give away this jus publicum interest than it can ‘abdicate its police powers in the administration of government and the preservation of the peace.’”).

those with express constitutional trusts, such as Pennsylvania.³⁵⁰ Nevertheless, at least one other western state, Idaho, has pointedly rejected it.³⁵¹

2. Idaho: Legislative Repudiation of the Constitutive Constraint.

In the decade after the Mono Lake decision, the Idaho State Supreme Court decided several public trust cases converging on the California's approach³⁵² when the state legislature intervened with a statute that expressly foreclosed the court's apparent interpretive path.³⁵³ The legislation was designed specifically to clarify the scope of the public trust doctrine, with the apparent target audience of the state's supreme court justices.³⁵⁴ While it acknowledged that the doctrine prevents the state from alienating title to submerged lands,³⁵⁵ it specified that the doctrine will not impact the allocation of prior appropriative water rights or other state decisions about the use of public trust waterways for commercial, agricultural, or recreational uses.³⁵⁶ In other words, the state legislature formally rejected the California approach before the state supreme court could fully articulate it. As a result, and in contrast to California and the other states that follow similar principles, in Idaho, the prior appropriation doctrine *does* trump the public trust doctrine.

Environmental scholars quickly condemned the Idaho statute as illegitimate,³⁵⁷ but as I have observed in prior work, the legitimacy of the

³⁵⁰ See *supra* notes 187-198 and accompanying text (discussing the Environmental Rights Amendment to the Pennsylvania State Constitution).

³⁵¹ See Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 56-57. The move prompted considerable scholarly controversy on this issue. See Kearney, *supra* note 201, at 94; Blumm et al., *supra* note 106, at 472 (noting that the new statute "was the legislature's response to judicial public trust declarations" in a series of Idaho Supreme Court cases).

³⁵² See *Selkirk-Priest Basin Ass'n v. State ex rel. Andrus*, 127 Idaho 239, 240, 242-45 (1995) (suggesting that the public trust doctrine might be used to constrain harm from logging activities to an impacted water body); *Idaho Conservation League v. State*, 911 P.2d 748 (Idaho 1995) (declining intervention by environmental groups to raise public trust issues where state ownership was not at issue, but suggesting in dicta that the public trust doctrine could take precedence over vested water rights); see also Kearney, *supra* note 201, at 95-96 (1997) (discussing these cases and the legislature's reaction).

³⁵³ IDAHO CODE tit. 58, ch. 12 § 58-1201-1203 (1996) (Chapter 12. Public Trust Doctrine).

³⁵⁴ *Id.* § 58-1201(6) (clarifying that the purpose of the act is to define limits on the public trust doctrine).

³⁵⁵ *Id.* § 58-1201(4) (defining the public trust doctrine as guiding alienation of the title of the beds of navigable waters; *id.* § 58-1203(1) (limiting the doctrine to "solely a limitation on the power of the state to alienate or encumber the title to the beds of navigable waters").

³⁵⁶ *Id.* § 58-1203(3) (clarifying that the doctrine does not limit the state to authorize public and private use of submerged lands, or even alienation of title to them, if the state land commission determines that it is in accordance with Idaho statutes and constitution and for the purposes of navigation, commerce, recreation, agriculture, mining, forestry, or other uses).

³⁵⁷ See, e.g., Kearney, *supra* note 146; Blumm et al., *supra* note 106.

statute really depends on the underlying nature of the public trust doctrine.³⁵⁸ If the doctrine includes a constitutive limit on sovereign authority over natural resource public commons, as the California approach understands it, then the Idaho legislature's move to abrogate that limit would indeed exceed the scope of legislative authority at its disposal.³⁵⁹ Yet the Idaho legislature treated the doctrine as an ordinary exercise of state authority to protect the public health, safety, and welfare—the conventional reservoir of police power authority that is normally subject to legislative adjustment.³⁶⁰ The contest between the California and Idaho approaches is symptomatic of the variability of the doctrine among U.S. jurisdictions, but more importantly, it exposes this core underlying dilemma of legal theory:

Is [the public trust doctrine] a constitutive element of sovereign authority that cannot be casually dissolved by the one wielding that sovereign authority at any given moment in time? Or is it an expression of the state's conventional police power to protect the public welfare, which can always be revisited by future legislative decisionmakers? If we assume that the public trust doctrine in every state evolved from a single, unified principle, then the contrary approaches taken by these states pose a thorny legal problem, because it would seem that they cannot both be right. Either the doctrine originated as a modifiable expression of conventional state authority, or it has always been a less negotiable constraint on sovereign power.

If California is right, then unlike the conventional common law, the public trust doctrine represents a quasi-constitutional limit on sovereign authority that cannot be so easily legislated away. But if Idaho is right, then the doctrine is just another common law rule that is forever subject to new sovereign consensus. Neither of these principles can reduce to the other without constitutional change. The Idaho approach could not legitimately evolve from the California model, nor could the California approach evolve from the Idaho model—because either path threatens conventional rule of law principles. At least in the United States, sovereign authority cannot free itself of constitutional constraints, nor does ordinary common law assume constitutive status through conventional common law processes.³⁶¹

At the level of legal theory, then, the California and Idaho approaches are mutually exclusive, and indeed, “neither can reduce to the other

³⁵⁸ See Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 57.

³⁵⁹ *Id.*

³⁶⁰ *Id.*

³⁶¹ Ryan, *From Mono Lake to the Atmospheric Trust*, *supra* note 1, at 57.

without constitutional change.”³⁶² But if both states cannot be right about the underlying theory of the public trust, then which one got it wrong—California, or Idaho?

It bears noting that even now, we may not know the end of the story. In Idaho, the last serious move was made by the legislature, in a separation-of-powers struggle for interpretive supremacy that could yet be revisited in court. A plaintiff with standing could still challenge the legality of the Idaho statute as *ultra vires*—just like the statute in *Illinois Central*—and the high court could decide to hear the case, although that seems both judicially and politically unlikely at this point in time. And in California, though the Mono Lake doctrine authorizes the unsettling of appropriative rights, that power has been virtually unused outside the Mono Basin, manifesting today much more powerfully in prospective administrative process than retrospective adjudication.³⁶³

In the meanwhile, other states managing the same conflict between the public trust and prior appropriations doctrines continue to wrestle with the dilemma in new contexts. In fact, just as this piece goes to press, a neighboring western state has weighed in with a decision that declines to cleanly pick one side over the other in the unfolding theoretical fray.

3. Nevada: Mixed Messages in the Walker Lake Basin.

The battle over the underlying legal theory of the public trust was recently joined by another prior appropriations state, Nevada, in a decision that draws elements from both the California and Idaho approaches. The litigation arose over appropriative withdrawals from the agriculturally important Walker River and their negative impact on Walker Lake at its terminus, another rare Great Basin lake not far from Mono Lake across the state line.³⁶⁴ The farming community in Western Nevada depends on these diversions, but they have caused Walker Lake to drop 160 vertical feet, increasing salinity and sedimentation, killing off its fish population, and destroying many of its public recreational and aesthetic values.³⁶⁵ Ever since the California decision protecting Mono Lake, local environmentalists and indigenous people have attempted to apply the same legal logic to save Walker Lake by curbing upstream

³⁶² *Id.*

³⁶³ See Dave Owen, *The Mono Lake Case, the Public Trust Doctrine, and the Administrative State*, 45 U.C. DAVIS L. REV. 1099, 1104–05 (2012).

³⁶⁴ *Mineral Cnty. v. Lyon Cnty.*, No. 75917, 2020 WL 5849506 (Nev. Sept. 17, 2020).

³⁶⁵ Kyle Roerink, *Can Walker River and Walker Lake Live in Harmony*, THE SIERRA NEVADA ALLY (Sep. 29, 2020), <https://sierranevadaally.org/2020/09/29/can-walker-river-and-walker-lake-live-in-harmony/> (describing three decades of litigation over conflicting water uses in the Walker River Basin).

appropriative rights to the Walker River.³⁶⁶ Their hopes had been raised when the Nevada Supreme Court previously recognized the doctrine as an inherent constraint on the state's sovereign authority over protected trust resources, following the first few footholds of the California approach.³⁶⁷

In *Mineral County v. Lyon County*, decided late in 2020, the closely divided court dashed the hopes of these plaintiffs while also confusing analysts, by a decision with a clearly favorable outcome for appropriators but a somewhat mixed message for the future.³⁶⁸ The Nevada Supreme Court doubled down on its Californian view of the public trust doctrine as a fundamental constraint on state authority, but it declined to follow the model to the point of unsettling appropriative rights that were clearly undermining a trust resource.³⁶⁹ Instead, it followed Idaho's lead in holding that the public trust doctrine could not dislodge previously established water rights—but not because, as the Idaho legislature had reasoned, the public trust does not apply to appropriative water rights. For the Nevada high court, it was because all water rights established by state administrative processes had already conformed to the central public trust requirement that the state manage trust resources for the public benefit.³⁷⁰

It is a surprising decision—not quite a third way, but perhaps a middle ground—in that it draws from different elements of the two seemingly exclusive approaches taken by its neighbors. The court committed to an expansive reading of state obligations under the public trust doctrine, affirming application of the doctrine to all waters in the state, including those that are the subject of prior appropriation, and characterizing the trust as a constitutive limit on state authority to preserve trust resources for the public benefit.³⁷¹ It explicitly recognized the doctrine as a sovereign constraint and a background principle of state law, writing that “the public trust doctrine applies to rights already adjudicated and settled under the doctrine of prior appropriation, such that the doctrine has always inhered in the water law of Nevada as a qualification or constraint

³⁶⁶ *Id.*; *Mineral Cnty. v. Lyon Cnty.*, No. 75917, 2020 WL 5849506, at *2-*3 (Nev. Sept. 17, 2020).

³⁶⁷ *Lawrence v. Clark Cnty.*, 254 P.3d 606, 613 (Nev. 2011) (“The final underpinning of our formal adoption of the public trust doctrine arises from the inherent limitations on the state's sovereign power.”).

³⁶⁸ *Mineral Cnty. v. Lyon Cnty.*, No. 75917, 2020 WL 5849506 (Nev. Sept. 17, 2020); *see also* Roerink, *supra* note 366 (discussing local uncertainty following the decision).

³⁶⁹ *Mineral Cnty. v. Lyon Cnty.*, No. 75917, 2020 WL 5849506, at *3-*5, *9 (Nev. Sept. 17, 2020).

³⁷⁰ *Id.* at *6, *9.

³⁷¹ *Id.* at *3-*5.

in every appropriated right.”³⁷² Its sweeping endorsement of public trust principles provides potential fodder for future environmental litigation, both to fortify challenges against new appropriative rights that threaten trust values and to defend environmental regulations against takings challenges by invoking the trust as a background principle of state law.

Nevertheless, the court declined to second-guess the challenged appropriative rights in the Walker Lake basin on grounds that they were allocated under water statutes that are already consistent with the public trust doctrine, and so everything that follows from them must also be so.³⁷³ In a three-two split, the majority held that Nevada’s comprehensive system of water laws satisfy the state’s public trust obligations because they were carefully designed to “constrain water allocations based on the public interest,” and they meet all criteria for “the dispensation of public trust property” that the court had previously established.³⁷⁴ Over a lively dissent, the justices in the majority acknowledged the grave threats to trust values at Walker Lake, but concluded that they could not grant the relief the plaintiffs sought:

[W]hile we are sympathetic to the plight of Walker Lake and the resulting negative impacts on the wildlife, resources, and economy in Mineral County, we cannot use the public trust doctrine as a tool to uproot an entire water system, particularly where finality is firmly rooted in our statutes. We cannot read into the statutes any authority to permit reallocation when the Legislature has already declared that adjudicated water rights are final, nor can we substitute our own policy judgments for the Legislature’s.³⁷⁵

While recognizing “the tragic decline of Walker Lake” and the associated environmental and economic harms to the surrounding community,³⁷⁶ these justices reasoned that all established water rights satisfy the public trust doctrine by definition, because consideration of public trust values is built into the water allocation system itself.³⁷⁷ If the rights were granted, goes the logic, the public trust must have been adequately considered, and values of finality must prevail.

Though finality is a legitimately important value in dispute resolution, the majority’s reasoning here is confusing, given that the modern public trust doctrine was not given clear consideration in Nevada until this very

³⁷² *Id.* at *5.

³⁷³ *Id.* at *6, *9.

³⁷⁴ *Id.* at *9.

³⁷⁵ *Id.* at *10.

³⁷⁶ *Id.* at *10.

³⁷⁷ *Id.* at *6, *9.

Walker Lake dispute first arose thirty years ago—when the appropriative rights at issue had already been granted.³⁷⁸ Indeed, although it recognized the public trust as an inherent limitation on state sovereign power predating its holding, the Nevada Supreme Court only formally adopted the doctrine in 2011,³⁷⁹ nine years before holding here that all established water rights satisfy the state’s trust obligations because the obliged considerations are built into the state’s administrative process. The timing alone makes this proposition troubling. It is one thing to hold that trust values are accounted for on the front end through an administrative process designed to do so—as, for example, California’s process arguably does today.³⁸⁰ But the majority’s argument here seems conveniently disinterested in genuine consideration of whether Nevada’s administrative process matches the gravity that the rest of its decision places on the state’s public trust obligations—especially administrative process that took place before the these obligations were formally recognized. The decline of Walker Lake may not be determinative of such a failing, but it is at the very least suggestive of it.

To that end, and writing for the remaining members of the court, the Chief Justice concurred in the parts of the decision expansively interpreting the Nevada public trust doctrine, but dissented vigorously from the conclusion that appropriative rights threatening trust resources could not be revisited.³⁸¹ He contended that the majority “fundamentally misapprehends the public trust doctrine and its constitutional and sovereign dimensions,” invoking the California view of the constitutive nature of the doctrine while supporting his argument with references to the Nevada State Constitution and other expressions of state law.³⁸² He repeatedly referenced the Mono Lake decision in arguing that the public trust doctrine and private water allocation laws must be understood as independently functioning parts of the state’s comprehensive water management system that must be balanced against one another.³⁸³ In his view, and following the California approach, both the public trust and

³⁷⁸ *Mineral Cnty. v. State*, 20 P.3d 800, 807 (Nev. 2001) (en banc) (Rose, J., concurring) (in an earlier iteration of the Walker Lake dispute, urging the Nevada Supreme Court to clarify the scope of the doctrine in Nevada); see also Jason L. DeForest, *Lawrence v. Clark County and Nevada’s Public Trust Doctrine: Reconsidering Water Rights in the Desert*, 13 NEVADA L.J. 290, 297-99 (2012) (discussing the early history of the public trust doctrine in Nevada).

³⁷⁹ *Lawrence v. Clark Cnty.*, 254 P.3d 606, 613 (Nev. 2011) (“The final underpinning of our formal adoption of the public trust doctrine arises from the inherent limitations on the state’s sovereign power.”).

³⁸⁰ See generally Owen, *supra* note 364 (considering the role of the public trust doctrine in the administration of California water rights).

³⁸¹ *Id.* at *12-*14 (Pickering, C.J., concurring in part and dissenting in part).

³⁸² *Id.* at *14.

³⁸³ *Id.* at *14-*17.

prior appropriations doctrines provide independent sources of regulatory value, both more important than finality, and neither doctrine can subsume or replace the contributions of the other.³⁸⁴

If the battle over Walker Lake continues after this decision, it will certainly be an uphill one for these plaintiffs. Nevertheless, while the court rejected the remedy they sought, its affirmation that public trust principles must undergird the state's water allocation laws may provide legal impetus for the State Engineer to act to protect threatened trust resources like Walker Lake through administrative means—perhaps by encouraging state actors to free up additional water resources through conservation, where possible, or other means that do not disrupt established appropriations. That's no small task in a state as dry as Nevada, but the parts of the decision that reinforce the breadth of state obligations under the doctrine provide greater legal and political cover for such moves than was available beforehand.

These fascinating doctrinal developments from Nevada highlight the ongoing debate in the western United States about the nature of the public trust doctrine and its relationship to the prior appropriations doctrine in the administration of water resources. The Walker Lake decision is newly released as this Article goes to press, but it has already received criticism by neutral commentators for failing to clarify the law.³⁸⁵ The decision confirms the constitutive nature of the public trust and its foundational role in the state's water management system, but disempowers it by holding it subsumed into statutory allocation laws, on a shaky presumption that all allocations were made faithfully to the state's trust obligations. In this regard, the Nevada approach seems to occupy a mushy midpoint between the warmer embrace of the doctrine in California and the colder renunciation of its force in Idaho.

The Walker Lake decision further highlights the difficulty of navigating the conflicting values in these cases—the environmental values that the California Supreme Court defended at Mono Lake, the economic interests that the legislature championed in Idaho, and the issues of finality, state obligations, and separation of powers with which the members of the Nevada Supreme Court so passionately wrestled. As the majority warned, securing finality in the assignment of rights is a critical value in implementing a regulatory system founded on scarcity,

³⁸⁴ *Id.* at *15.

³⁸⁵ Kyle Roerink, *Can Walker River and Walker Lake Live in Harmony*, THE SIERRA NEVADA ALLY (Sep. 29, 2020), at <https://sierranevadaally.org/2020/09/29/can-walker-river-and-walker-lake-live-in-harmony/> (noting that “the State Supreme Court’s majority opinion has left considerable uncertainty for communities and more paperwork for water attorneys”).

like the prior appropriations doctrine.³⁸⁶ And yet as the dissent intoned, “it cannot be that this state’s affirmative fiduciary obligations over certain water sources—obligations supervised by the judiciary and founded on a century of common law, inherent sovereign authority, and the state constitution—are entirely subsumed by a handful of statutes governing the specific duties of an administrative agent.”³⁸⁷

Each of the cases from these states distills the conflict set in motion by the independent development of these two separate aspects of water law: the public trust doctrine’s affirmation of public rights in waterways and the prior appropriations doctrine’s affirmation of private rights to use of the water in those waterways.³⁸⁸ Writ large, these stories also represent the conflict between environmental protection and economic development.³⁸⁹ And the clash between biocentric and anthropocentric environmental ethics, raised by the conflict between in-basin environmental values and the utilitarian needs of vast urban publics in distant places, and agricultural enterprises that feed the nation.³⁹⁰ And the separation of powers among the three branches of government, and doubtlessly others as well. These stories show how these two doctrines continue to create legal friction—but perhaps necessary friction, as we continue to struggle toward the uneasy, perhaps constantly shifting equipoise between legitimately conflicting values.

CONCLUSION

Understanding the history of the public trust doctrine provides important foundation for using the doctrine today to respond to contemporary legal conflicts and, better still, prevent them in the first place. It also enables us to better analyze the unresolved relationship between the public trust doctrine and adjacent doctrines of private water

³⁸⁶ *Id.* at *9.

³⁸⁷ *Id.* at *15.

³⁸⁸ See Stevens, *supra* note 225, at 612–14 (discussing the relationship between the public trust and prior appropriations doctrines); Timothy J. Conway, National Audubon Society v. Superior Court: *The Expanding Public Trust Doctrine*, 14 ENVTL. L. 617, 630–33 (1984) (analyzing the state court’s reconciliation of the public trust and prior appropriations doctrines in *Mono Lake*); Craig Anthony (Tony) Arnold & Leigh A. Jewel, *Litigation’s Bounded Effectiveness and the Real Public Trust Doctrine: The Aftermath of the Mono Lake Case*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 1177, 1188–95 (2008) (same).

³⁸⁹ See Brian E. Gray, *Ensuring the Public Trust*, 45 U.C. DAVIS L. REV. 973, 974 (2012) (discussing *Mono Lake*’s establishment of an environmental baseline in the management of public resources that exists in tension with continuing “economic and political pressures to expand existing water projects or to develop new sources.”).

³⁹⁰ Cynthia L. Koehler, *Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy*, 22 ECOLOGY L.Q. 541, 577–82 (1995) (discussing competing interests in the Water Board’s reallocation decision-making process following the *Mono Lake* decision).

allocation—riparian rights and prior appropriations—that complicates modern water management in the United States. This Article has traced the development of public trust principles from the progenitors of western law to the present United States, showing the evolution of the doctrine from an affirmation of sovereign authority over public natural resource commons to a recognition of sovereign responsibility to protect them for present and future generations.

Nevertheless, it is worth noting that similar public trust principles appear in legal systems throughout the world, including India, South Africa, Pakistan, Kenya, Brazil, and Canada.³⁹¹ Variations on the idea that people hold rights in natural resource commons have developed in numerous ancient legal systems simultaneously and independently. For example, the Ottoman Civil Code, known as the Mejlle, details a related list of public commons resources that are free and open to all, including not only water, seas and large lakes, and certain rivers, but also fire, grasses, certain trees and mushrooms, and all wild game.³⁹² At the same time, related principles are developing in parallel ethical frameworks, such as the Rights of Nature movement that locates environmental rights directly in the natural systems that would benefit from protection, rather than the people who benefit from those natural systems.³⁹³ In contrast to

³⁹¹ See e.g., M.C. Mehta v. Kamal Nath, (1997) 1 S.C.C. 388 (1996) (India), in 1 UNITED NATIONS ENVIRONMENT PROJECT COMPENDIUM OF JUDICIAL DECISIONS IN MATTERS RELATED TO THE ENVIRONMENT, NATIONAL DECISIONS 259, 269-70 (1998), <https://wedocs.unep.org/handle/20.500.11822/25379> (citing *Illinois Central*, *Mono Lake*, and Joseph Sax in establishing the public trust doctrine as “the law of the land”); see also Michael C. Blumm & Rachel D. Guthrie, *Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxion Vision*, 45 CAL. DAVIS L. REV. 742, 760 (2012) (reviewing the impact of the public trust doctrine internationally); ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY*, Chapter VIII (Cambridge University Press, forthcoming, 2021) (discussing examples of public trust principles in operation around the globe).

³⁹² See AL-MAJALLA AL AHKAM AL ADALIYYAH (The Ottoman Courts Manual (Hanafi)), Book X: Joint Ownership; Chapter IV: Jointly Owned Property Which Is Free, art. 1234 *et seq.*, https://www.iium.edu.my/deed/lawbase/al_majalle/al_majalleb10.html. In 1962, an Israeli court drew on the Mejlle to apply public trust-like principles in a case affirming public rights to access beaches, overturning the conviction of Moshe Puterman for trespassing on a public beach. CrimA (TA) 851/60 Puterman v. AG, PM 30, 7 (1962). For discussion of the case and the role of Ottoman law in the court’s decision, see David Schor, *The Israeli (and Ottoman and Islamic) Public Trust Doctrine*, ENVIRONMENT, LAW, AND HISTORY (July 13, 2016), <https://environmentlawhistory.blogspot.com/2016/07/the-israeli-and-ottoman-and-islamic.html> (discussing the case and the role of Article 1234, *et seq.*, of the Ottoman Civil Code); Zafirir Rinat, *Thanks to This Man, You Don’t Have to Pay to Go to the Beach in Israel*, HAARETZ (Oct. 4, 2018), <https://www.haaretz.com/israel-news/.premium.MAGAZINE-this-man-is-the-reason-why-israeli-beach-entry-is-free-1.5387797> (describing the case and the Mejlle doctrine it applied).

³⁹³ See, e.g., Craig Kauffman, *Constructing Rights of Nature Norms in the US, Ecuador, and New Zealand*, 18 Global Env’tl. Politics 43 (2018); Meredith N. Healy, *Fluid Standing:*

the public trust doctrine, which effectively creates positive environmental rights in citizens, the Rights of Nature approach deprivileges human needs in asserting the independent rights of ecosystems and their components to exist and to thrive.³⁹⁴ The Rights of Nature movement thus provides an unapologetically biocentric alternative to the inherent anthropocentrism of both the public trust doctrine and U.S. water allocation laws, which both locate rights to environmental protection and natural resource commons in the people who benefit from them.³⁹⁵

Even as the public trust doctrine requires the state to protect navigable waterways in trust for the public, however, the doctrines of private water allocation—especially Western prior appropriations—govern how the state gives away the waters within them. Unlike the correlative, indeterminate rights associated with eastern riparian rights, the perpetual, excludable use rights associated with western prior appropriations system are theoretically absolute. A conflict between the public trust doctrine and private water allocation law was perhaps inevitable, especially in the arid West, because states there apply a privatization model to allocating rights to take water from waterways at the very same time that they apply a public commons approach to protect the underlying waterways. Different states, such as California, and Idaho, have taken distinct legal paths in reconciling these conflicts, while others, such as Nevada, are still charting a clear course.

Conflicts between public and private claims on water resources and other natural resource commons will doubtlessly continue to drive the evolution of all relevant systems of law, just as new principles of environmental rights, such as the Rights of Nature movement, emerge to challenge the dominant theoretical models of both systems. The dynamic co-evolution of public trust principles and rules of private allocation, resource conservation and resource exploitation, environmental protection and natural resource management, will surely continue—not only in substance but at the level of legal theory, where there is clearly much work left to do.

Incorporating the Indigenous Rights of Nature Concept into Collaborative Management of the Colorado River Ecosystem, 30 Colo. Nat. Resources, Energy & Envtl. L. Rev. 327 (2019).

³⁹⁴ See Erin Ryan, Holly Curry, & Hayes Rule, *Environmental Rights, the Public Trust Doctrine and the Rights of Nature Movement*, 42 CARDOZO L. REV. (forthcoming 2021) (discussing constitutional, statutory, and local provisions conferring legal personhood on ecosystems, rivers, and even wild rice); see also ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND THE MONO LAKE STORY*, Chapter VIII (Cambridge University Press, forthcoming, 2021).

³⁹⁵ See sources cited *supra* note 394.