



The Public Trust Doctrine: A Primer

**A White Paper of the University of Oregon School of Law
Environmental and Natural Resources Law Center**

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About this Paper

This white paper was created through the University of Oregon Environmental and Natural Resources Law (ENR) Center's Conservation Trust Project, an interdisciplinary research project focused on public trust theory and private property law as tools to protect natural resources. This white paper was produced to assist government trustees in fulfilling their trust responsibilities, and citizen beneficiaries in holding government trustees accountable for fulfilling these responsibilities. With permission from Mary Christina Wood, this paper relies heavily on the structure, content, and research presented in *MARY CHRISTINA WOOD, NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE* (Cambridge University Press 2013). Professor Wood reserves all rights to that material for republication.

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The author of this white paper is ENR Research Associate Douglas Quirke. This white paper traces its roots to a draft collaboratively written by former ENR Research Associate Jared Margolis, UO Law David Brower Fellow Nathan Bellinger, UO Law Conservation Trust Fellow Gordon Levitt, and UO Law ENR Fellow Rance Shaw. That draft led directly to not only this paper, but to this paper's companion piece "The Public Trust Doctrine and Environmental Decision Making."

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About the ENR Center

As part of the ENR Center's mission of "engaging the law to support sustainability on earth," the ENR Center administers seven theme-based, interdisciplinary research projects that team law student enthusiasm with faculty expertise in an effort to bring intellectual energy to bear on some

of the most challenging and cutting-edge environmental issues of our day. The seven interdisciplinary research projects include the Conservation Trust Project; the Energy Law and Policy Project; the Food Resiliency Project; the Global Environmental Democracy Project; the Native Environmental Sovereignty Project; the Oceans Coasts and Watersheds Project; and the Sustainable Land Use Project. Each academic year, the Center awards one-year fellowships to a select group of University of Oregon School of Law students to work with ENR faculty members on specific research projects within each of the theme-based, interdisciplinary research projects.

About the Conservation Trust Project

The Conservation Trust Project is one of seven theme-based, interdisciplinary research projects administered by the University of Oregon ENR Center. The Project is led by faculty leader Mary Christina Wood. The mission of the Conservation Trust Project is to utilize public trust theory and private property tools to achieve landscape conservation. Through student and faculty-led research, the Project explores innovative private and market mechanisms such as conservation easements and trust acquisitions to protect natural resources. Important issues the Project has recently explored include incorporation of the public trust doctrine in local, state and federal regulatory codes, legal and policy initiatives for natural resource damages, and use of natural resource damages to restore atmospheric equilibrium to stem climate change.

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I. Introduction

Distilled to its essence, the public trust doctrine (PTD) is a concept that is both simple and intuitive: the PTD requires government stewardship of the natural resources upon which society (and, by extension, our economy and government) depends for continued existence. The PTD has been called “the oldest expression of environmental law,”¹ and its roots extend at least as far back as sixth century Rome.² Roman law influenced English common law, which in turn influenced American law, and the PTD “survives in the United States as ‘one of the most important and far-reaching doctrines of American property law,’”³ and has been described as “a

fundamental doctrine in American property law.”⁴

In addition to deep temporal roots, the PTD has broad geographic and cultural breadth:

Trust-like stewardship concepts have been central to indigenous governance back to time immemorial. The public trust is manifest in the legal systems of many nations throughout the world. Professor Charles Wilkinson has traced the doctrine to the ancient societies of Europe, Asia, Africa, Moslem Countries, and Native America.⁵

The PTD borrows from private trust law for its basic framework, and for many (but not all) of its tenets. Therefore, a basic understanding of the concept of a private trust is helpful for understanding the PTD. In property law, a trust is a basic type of ownership in which one party manages

¹ 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, 69 (2009).

² The origins of the PTD are often traced to sixth century Rome’s “Institutes of Justinian,” which recognized certain natural resources (“the air, running water, the sea . . . the shores of the sea”) as owned “in common.” The Institutes were likely regarded by sixth century Romans as “the re-codification of ancient law,” perhaps dating back to second century Rome and “the natural law of Greek philosophers.” DAVID C. SLADE ET AL., *PUTTING THE PUBLIC TRUST DOCTRINE TO WORK* 4 (2nd ed. 1997).

³ *Id.* (quoting Glenn J. MacGrady, *The Navigability Concept in the Civil and Common Law: Historical Development, Current Importance, and Some Doctrines That Don’t Hold Water*, 3 FLA. ST. U. L. REV. 511, 546 (1975).

⁴ Harrison C. Dunning, *The Public Trust: A Fundamental Doctrine of American Property Law*, 19 ENVTL. L. 515, 516 (1989)

⁵ See Wood, *supra* note 2, at 69 (citations omitted). The PTD also finds expression in the world’s major religions. See MARY CHRISTINA WOOD, *NATURE’S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE* (Cambridge University Press 2013) [hereinafter *NATURE’S TRUST*] *NATURE’S TRUST* at 279-80 (tracing PTD-like concepts through Christianity, Catholicism, Judaism, Islam, Buddhism, and Hinduism).

property for the benefit of another party. A trust involves three elements:⁶

1. a *trustee*, who holds the trust property and is subject to *fiduciary duties* to deal with it for the benefit of another;
2. a *beneficiary*, to whom the trustee owes *fiduciary duties* to deal with the trust property for his or her benefit; and
3. *trust property*, which is held by the trustee for the beneficiary.⁷

The “fiduciary duties” referred to above include “[a] duty of utmost good faith, trust, confidence, and candor owed by a fiduciary . . . to the beneficiary” and “a duty to act with the highest degree of honesty and loyalty toward another person and in the best interests of the other person.”⁹

Under the PTD, the trust property consists of natural resources. The government is the

⁶ RESTATEMENT (SECOND) OF TRUSTS § 2 cmt. h (1959).

⁷ *Id.* In the private trust law context, the property in a trust usually consists of financial assets. “Throughout history, trusts have been created almost exclusively by and for the wealthy. Trusts are most common in well-established financial centers where wealthy elites, advised by skilled lawyers, seek to secure their economic and social position.” KERMIT H. HALL (ED.), *THE OXFORD COMPANION TO AMERICAN LAW* 813 (2002). The PTD is decidedly populist compared to private trust law.
⁸ “Fiduciary” is defined as “1. One who owes to another the duties of good faith, trust, confidence, and candor” and “2. One who must exercise a high standard of care in managing another’s money or property.” BLACK’S LAW DICTIONARY 640 (7th ed. 1999).

⁹ *Id.* at 523.

trustee of these natural resources and must manage them subject to fiduciary duties,¹⁰ for the benefit of both present and future generations, who are the beneficiaries of the public trust. Subsequent sections elaborate on legal underpinnings of the PTD; the natural resources encompassed by the trust; the roles of federal and state governments and of the three branches of government (legislative, executive, judicial) in administering the trust; and the substantive and procedural fiduciary duties imposed on government trustees.

II. Legal Underpinnings

A. Pre-constitutional Underpinnings: The PTD as Inherent to Humankind

While the PTD in the United States has constitutional underpinnings in what is known at the “reserved powers doctrine” (see following section), many courts and legal scholars recognize that the public trust doctrine is a defining characteristic of democratic government itself,¹¹ and that it is therefore pre-constitutional. The PTD has been described both as “the law’s DNA”¹²

¹⁰ This paper applies the fiduciary duties of private trust law to the public trust realm, as discussed at length in *NATURE’S TRUST*, *supra* note 5, at 165-207, and as discussed in the Section VI below.

¹¹ In other words, the PTD is part and parcel of what democratic government must include in order to be recognized as legitimate democratic government in the first instance. This aspect of the PTD is often expressed in legal writing by describing the PTD as an “inherent attribute of sovereignty.”

¹² See Gerald Torres & Nathan Bellinger, *The Public Trust: The Law’s DNA*, 4 WAKE FOREST J.L. & POL’Y 281 (2014)

and as “the slate upon which all constitutions are written.”¹³ The first American public trust doctrine case (from 1821) traces the PTD to “the law of nature, which is the only true foundation of all the social rights.”¹⁴ Much more recently, the Supreme Court of Pennsylvania characterized the environmental rights protected by the PTD as among those rights that are “inherent to mankind.”¹⁵ The Supreme Court of the Philippines summed up the pre-constitutional nature of the PTD as follows:

[T]he right to a balanced and healthful ecology . . . concerns nothing less than self-preservation and self-perpetuation . . . the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, these basic rights need not even be written in the Constitution for they are assumed to exist from the inception of humankind.¹⁶

While recognizing the pre-constitutional nature of the PTD, the Supreme Court of the

¹³ *Id.* at 294, n. 51 (citing NATURE’S TRUST, *supra* note 5, at 129).

¹⁴ *Arnold v. Mundy*, 6 N.J.L. 1, 11, (N.J.1821).

¹⁵ *Robinson Twp. v. Commonwealth*, 83 A.3d 916, 948, n. 36 (Pa. 2013) (citations omitted). In a previous PTD case, the court characterized “maintenance of the environment” as “a fundamental objective of state power.” *National Wood Preservers, Inc. v. Commonwealth*, 414 A.2d 37, 45 (Pa. 1980) (citations omitted).

¹⁶ *Oposa v. Factoran*, 224 S.C.R.A. 792 (Phil. 1993), *available at* http://www.lawphil.net/judjuris/juri1993/jul1993/gr_101083_1993.html.

Philippines at the same time somewhat chillingly recognized the potential danger of not explicitly enshrining the PTD constitutionally:

[U]nless the rights to a balanced and healthful ecology and to health are mandated as state policies by the Constitution itself, thereby highlighting their continuing importance and imposing upon the state a solemn obligation to preserve the first and protect and advance the second, the day would not be too far when all else would be lost not only for the present generation, but also for those to come — generations which stand to inherit nothing but parched earth incapable of sustaining life.¹⁷

This is not to say that the lack of explicit constitutional expression of the PTD indicates its absence, but rather that the failure to make it explicit puts the trust at risk of becoming forgotten and dormant, which is unfortunately the situation across many jurisdictions today. It is important to understand that this overlooked doctrine may be revived after long periods of dormancy, for it remains embedded in any sovereign government. As one federal court put it, “The trust is of such a nature that it can be held only by the sovereign, and can only be destroyed by the destruction of the sovereign.”¹⁸

¹⁷ *Id.*

¹⁸ *United States v. 1.58 Acres of Land*, 523 F.Supp. 120, 124 (D. Mass. 1981).

B. Constitutional Underpinnings: The PTD as an Application of the Reserved Powers Doctrine

While at least five U.S. states have explicit constitutional expressions of the PTD,¹⁹ the constitutions of most of the states and the U.S. Constitution contain no such explicit expression. In these states without constitutional expressions of the PTD, and in the case of the federal government, the “reserved powers doctrine” serves as an implicit constitutional basis for the PTD. In the seminal *Illinois Central* case (which held that the PTD prohibited a state legislative grant of a significant portion of Chicago’s harbor to a private company), the U.S. Supreme Court indicated that the PTD has its basis in the reserved powers doctrine.²⁰ That principle “limits the ability of any one legislature to take action that will bind a future legislature in any crucial sphere of government concern.”²¹ It stems from the

¹⁹ See PA. CONST. art. I, § 27; MONT. CONST. art. IX, § 1; HAW. CONST. art. IX, § 1; R.I. CONST. art. I, § 17; and ILL. CONST. art XI, § 1. In the context of wildlife, Oliver Houck has traced the interests of every U.S. state in wildlife to the PTD, whether that interest is expressed constitutionally, statutorily, or judicially. Oliver A. Houck, *Why Do We Protect Endangered Species, and What Does that Say About Whether Restrictions on Private Property to Protect them Constitute “Takings?”*, 80 IOWA L. REV. 297, 310-311 (1995).

²⁰ *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 459-60 (1892). See Douglas Grant, *Underpinnings of the Public Trust Doctrine: Lessons from Illinois Central Railroad*, 33 ARIZ. ST. L.J. 849, 874-79 (2001) (the PTD is grounded in reserved powers principles).

²¹ NATURE’S TRUST, *supra* note 5, at 130. “The most serious possible constraint of future legislatures involves the loss of resources that sustain citizen survival.” Brief of Law Professor

proposition that “[e]ach sitting legislature derives its legitimate authority from the particular public that elects it. Recognizing the rights and powers of later legislatures secures the rights and powers of the later citizens who elect those later legislatures.”²² The Court in *Illinois Central* explained the reserved powers doctrine as follows, noting that the Court had previously observed

[E]very succeeding legislature possesses the same jurisdiction and power as its predecessor; that the latter have the same power of repeal and modification which the former had of enactment,-neither more nor less; that all occupy in this respect a footing of perfect equality; that this is necessarily so, in the nature of things; that it is vital to the public welfare that each one should be able at all times to do whatever the varying circumstances and present exigencies attending the subject may

Amicus Group at 21, *Alec L. v. Gina McCarthy*, No. 13-5192 (D.C. Cir. Nov. 12, 2013) [hereinafter Amicus Brief] (overlength version, available at <http://ssrn.com/abstract=2361780>) (citations omitted).

²² Amicus Brief, *supra* note 21, at 8. E.g., at the federal level, the current Congress is the 114th United States Congress, and is scheduled to meet from January 3, 2015 to January 3, 2017. Pursuant to the reserved powers doctrine, the 114th Congress is prohibited from taking actions that bind future Congresses “in any crucial sphere of government concern.”

require; and that a different result would be fraught with evil.²³

The core concern of the reserved powers doctrine as applied through the PTD to the realm of natural resources is simply that the legislature might otherwise allow the destruction of vital resources needed by future citizens. The reserved powers doctrine has been tied to at least five express clauses in the U.S. Constitution: the “Posterity Clause” of the Preamble to the Constitution; the Title of Nobility Clause; Article I’s Vesting Clause (which confers power to the legislature); the Equal Protection Clause; and the Due Process Clause.²⁴ Because the PTD is an application of the reserved powers doctrine, these same constitutional underpinnings apply equally to the PTD. The precise constitutional linkage for the reserved powers doctrine in each state will differ due to variable judicial interpretation.

Both the reserved powers doctrine and its application to natural resources through the PTD reflect the concern of the framers of the U.S. Constitution with intergenerational equity (also referred to as intergenerational justice and intergenerational sovereignty), a concern that “manifests throughout the text of the Constitution.”²⁵ Thomas Jefferson

²³ *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. at 459 (citing *Newton v. Mahoning County Comm’rs*, 100 U.S. 548, 559 (1879)).

²⁴ Amicus Brief, *supra* note 21, at 16-32.

²⁵ John Davidson, *Taking Posterity Seriously: Intergenerational Justice*, CLIMATE LEGACY INITIATIVE RESEARCH FORUM (Jan. 28, 2008), available at

expressed such concern with his pronouncement that he considered it to be “self evident” “that the earth belongs in usufruct²⁶ to the living.”²⁷ As a New York court put it in a case upholding the constitutionality of the Long Island Pine Barrens Protection Act,

In enacting environmental mandates (as in protecting the right of property), we are merely discharging our obligation under the societal contract between “Those who are dead, those who are living and those who are yet to be born.”²⁸

The Pennsylvania Supreme Court’s December, 2013 *Robinson Township*²⁹ case overturning portions of a Pennsylvania statute promoting fracking elaborates on the “societal contract” referred to by the New York court in the Pine Barrens case:

<https://vlscli.wordpress.com/2008/01/28/taking-posterity-seriously-intergenerational-justice>.

²⁶ “Usufruct” is the “right to use another’s property for a time without damaging or diminishing it.” BLACK’S LAW DICTIONARY 1542 (7th ed. 1999). (In the case of the PTD, the property used would be a natural resource).

²⁷ Letter from Thomas Jefferson to James Madison (September 6, 1789), in 15 THE PAPERS OF THOMAS JEFFERSON 392 (Julian Boyd ed., 1958).

²⁸ *W.J.F. Realty Corp. v. New York*, 672 N.Y.S.2d 1007, 1012 (N.Y. Sup. Ct. 1998) (quoting EDMUND BURKE, SELECTED WRITINGS AND SPEECHES OF EDMUND BURKE 318 (1949)).

²⁹ *Robinson Twp. v. Commonwealth*, 83 A.3d 916 (Pa. 2013).

Justice Castille's opinion explicitly lodges environmental rights in the fundamental constitutional structure that reserves the “inherent and inalienable rights” of citizens. These rights, Justice Castille emphasized, arise from the social contract between people and their government. Such rights are “of such ‘general, great and essential’ quality as to be ensconced as ‘inviolable.’” The opinion makes clear that the 1971 [Pennsylvania] Environmental Rights Amendment (art. I, § 27) did not create new rights, but rather enumerated the pre-existing rights that the people had reserved to themselves in creating government. The historic Robinson opinion holds significance . . . because many other state constitutions include the same, or similar, declarations of inherent rights forming the constitutional paradigm upon which the plurality opinion in Robinson relies. Indeed, such inalienable reserved rights rank fundamental to the democratic understandings underlying all state and federal government authority in the United States. As Professor Joseph Sax once said, the public trust demarcates a society of “citizens rather than of serfs.”³⁰

³⁰ Mary Christina Wood, *The Planet on the Docket: Atmospheric Trust Litigation to Protect Earth's Climate System and Habitability*, 9 FLA. A & M U. L. REV. 259, 262-63 (2014) (footnotes omitted). See also Torres & Bellinger, *supra* note 12, at 289-90.

In sum, there are both pre-constitutional and constitutional legal bases for the PTD, and both spring forth from the same well—that of perpetuation of society, and the necessity for present generations to properly steward natural resources so as to ensure this perpetuation.

III. The PTD's Role: A Backstop for Existing Environmental Laws

Environmental awareness in the U.S. began to rise after the publication of Rachel Carson's *Silent Spring* in 1962, and continued to do so in the ensuing years. Touchstone events such as the 1969 Santa Barbara oil spill and the first Earth Day in 1970 marked the beginning of the modern environmental era. The federal government responded to increased public pressure for environmental protection by passing a “bold suite of major environmental statutes.”³¹ It created agencies (including the Environmental Protection Agency (EPA)) and charged them with administering these statutes. Many of the major federal environmental statutes also include incentives for implementation by states at the state level, giving rise to parallel growth of statutes, agencies, and regulations at the state level.³² The landmark passage of environmental laws described above certainly had the same objective as the

³¹ NATURE'S TRUST, *supra* note 5, at 51. See *id.* at 55 for partial list of environmental statutes.

³² This pattern continues to cascade down to more and more local levels (including regions within states, and municipalities), each with their own administering agencies and more locally-tailored laws.

PTD—government stewardship of natural resources on behalf of present and future generations. In fact, the National Environmental Policy Act of 1969 (NEPA) (one of the earliest of the “bold suite of major environmental statutes”) explicitly recognized a national objective to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations,”³³ which appears to be a clear statutory expression of the PTD and concern for intergenerational equity.

But despite numerous environmental statutes and their associated agencies and regulations, we are still faced with serious and worsening environmental problems. For example, a recent scientific study finds that four of nine “planetary boundaries” have been crossed (“extinction rate; deforestation; level of carbon dioxide in the atmosphere; and the flow of nitrogen and phosphorous (used on land as fertilizer) into the ocean”).³⁴ Another recent study concludes that “humans are on the verge of causing unprecedented damage to the oceans and the animals living in them.”³⁵ While many reasons are cited for the failure of government trustees to carry out their natural resource stewardship duties on behalf of present and future generations, one fairly obvious reason is the tendency of environmental laws to address the ecological

³³ 42 U.S.C. § 4331(b)(1).

³⁴ Joel Achenbach, *Scientists: Human Activity Has Pushed Earth Beyond Four of Nine ‘Planetary Boundaries,’* WASH. POST, Jan. 15, 2015.

³⁵ Carl Zimmer, *Ocean Life Faces Mass Extinction, Broad Study Says*, N.Y. TIMES, Jan. 15, 2015 at A1.

and natural resources in piecemeal fashion. There are separate federal statutes for air quality, water quality, drinking water, endangered species, forests, etc.,³⁶ and this severe fragmentation of course fails to reflect ecological reality, which presents interconnected systems of nature.

The declining state of the environment is well-documented and need not be extensively recounted here. However, it is important to note that both of the studies cited above indicate that we have not passed a point of no return, and that there is still time to reverse the current trend. This is where the PTD comes in: as a backstop to statutory environmental law and its associated regulations. Because of its constitutional nature, the PTD at all times forms the outer boundaries of duty.³⁷ Statutory/regulatory compliance cannot be the end of the inquiry as far as the environment is concerned—the proper inquiry is whether the natural resources encompassed by the trust are being managed for the benefit of both present and future generations. If they are not, then the responsible trustee or trustees are in breach of fiduciary duties owed to the beneficiaries.

This means that even if a proposed project –

³⁶ NATURE’S TRUST, *supra* note 5, at 54-57.

³⁷ See *Kootenai Env’tl. Alliance v. Panhandle Yacht Club, Inc.*, 671 P.2d 1085, 1095 (Idaho 1983) (“[M]ere compliance by [agencies] with their legislative authority is not sufficient to determine if their actions comport with the requirements of the public trust doctrine. The public trust doctrine at all times forms the outer boundaries of permissible government action with respect to public trust resources.”); *Parks v. Cooper*, 676 N.W.2d 823, 838 (S.D. 2004).

such as a new coal-fired power plant or dam – has secured all the necessary permits under statutory law, the project cannot be built if the best available science demonstrates that it would substantially impair trust resources. Furthermore, even after a permit for a project is approved, the permit would be subject to modification in the future if necessary to protect trust resources. This concept has been most clearly articulated by courts in the context of water rights. For example, in *United States v. State Water Resources Control Board*,³⁸ the court concluded that the PTD allows state water regulators to modify previously-issued water rights in permits in order to protect the water quality values of the Sacramento-San Joaquin Delta region.³⁹ This demonstrates how the PTD creates an independent basis for regulators to alter the management of trust resources, even when there is compliance with the existing regulatory framework.

IV. Natural Resources Encompassed by the PTD

The resources of a trust, whether financial assets (as in the case of a private trust) or natural resources (as in the case of the public trust) must be managed by the trustee according to strict fiduciary standards. Initially, when U.S. courts first began applying the PTD, they did so in the context

of wildlife⁴⁰ and water-related resources such as navigable waterways, submerged lands under navigable waterways, and tidelands.⁴¹ As the doctrine has developed over time, it has expanded to cover additional water-related resources (non-navigable waterways⁴² and wetlands⁴³), groundwater,⁴⁴ instream flows,⁴⁵ and all tidelands regardless of navigability⁴⁶) as well as non-water related resources (parklands,⁴⁷ the atmosphere⁴⁸). Useful

⁴⁰ See, e.g., *Geer v. Connecticut*, 161 U.S. 519, 534 (1896).

⁴¹ *Arnold v. Mundy*, 6 N.J.L. 1 (1821) (navigable waters); *Martin v. Waddell's Lessee*, 41 U.S. 367 (1842) (navigable waters and lands under them); *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387 (1892) (lands under navigable waters).

⁴² For example, both Montana and South Dakota recognize all water resources as public trust resources. See *Galt v. State*, 731 P.2d 912, 915 (Mont. 1987) (“All waters are owned by the State for the use of its people.”) (emphasis in original); *Parks v. Cooper*, 676 N.W.2d 823, 839 (S.D. 2004) (“[A]ll waters within South Dakota . . . are held in trust by the State for the public.”).

⁴³ See, e.g., *Just v. Marinette County*, 201 N.W.2d 761 (Wis. 1972)

⁴⁴ See, e.g., *In re Water Use Permit Applications (Waiāhole Ditch)*, 9 P.3d 409 (Haw. 2000).

⁴⁵ See, e.g., *Adjudication of the Existing Rights to Use of all Water in the Missouri Drainage*, 55 P.3d 396, 340 (Mont. 2002) (The PTD gives “the public . . . an instream, non-diversionary right to the recreational use of the State’s navigable surface waters.”).

⁴⁶ *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988); *Marks v. Whitney*, 491 P.2d 374 (Cal. 1971).

⁴⁷ See, e.g., *Gould v. Greylock Reservation Comm’n*, 215 N.E.2d 114 (Mass. 1966).

⁴⁸ See, e.g., *Bonser-Lain v. Texas Comm’n on Env’tl. Quality*, No. D-1-GN-11-002194, 2012 WL 2940641 (Tex. 201st Dist. Aug. 2, 2012) (“[T]he Public Trust Doctrine includes all natural resources of the State including the air and atmosphere.”); *Parks v. Cooper*, 676

³⁸ *United States v. State Water Res. Control Bd.*, 182 Cal. App. 3d 82 (Ct. App. 1986).

³⁹ See Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future*, 45 U.C. DAVIS L. REV. 665, 677 (2012).

formulations from early case law provide guidance as to what resources are subject to the PTD. The Supreme Court in *Illinois Central* used the phrases “property of a special character”⁴⁹ and property that “is a subject of concern to the whole people of the state.”⁵⁰ Legal scholars have characterized the resources encompassed by the trust in a variety of ways, such as: “central to the well-being of the community,”⁵¹ “essential to the economic and physical health of society,”⁵² and “certain crucial natural resources.”⁵³

The natural resources that meet these various judicial and scholarly formulations will necessarily change over time, as scientific knowledge and societal awareness advance. As would be expected to be the case with a doctrine having such ancient

N.W.2d 823, 838 (S.D. 2004) (“[W]e find the Public Trust Doctrine manifested in the South Dakota’s Environmental Protection Act, authorizing legal protection to protect ‘the air, water and other natural resources and the public trust therein from pollution, impairment or destruction.’”); *Robinson Twp. v. Commonwealth*, 83 A.3d 916, 955 (Pa. 2013) (ambient air is a public trust resource).

⁴⁹ *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 454 (1892).

⁵⁰ *Id.* at 455.

⁵¹ Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269, 315 (1980).

⁵² Amicus Brief, *supra* note 21, at 25.

⁵³ *Id.* at 41 (Citing Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970). While *Illinois Central* is the “lodestar” PTD court case, this article by Professor Sax is the lodestar PTD law review article.).

roots, the PTD has evolved over time and continues to do so:

Controlled evolution is inherent in the very definition of the public trust doctrine; the fundamental purpose of the doctrine is to meet the public’s changing circumstances and needs. . . the public trust doctrine [has] slowly been “molded and extended” to satisfy the needs “of the public it was created to benefit.”⁵⁴

Courts have come to similar conclusions regarding the flexibility of the PTD. Indeed, “[f]lexibility is considered one of the strengths of the PTD, and is a prerequisite of its continued effectiveness for future generations.”⁵⁵ As one court put it, “the public trust, by its very nature, does not remain fixed for all time, but must conform to changing needs and circumstances”.⁵⁶

The idea that *all* natural resources should be protected as public trust resources is recognized by several state constitutions. For example, Hawaii’s Constitution states: “All public natural resources are held in trust by the State for the benefit of the

⁵⁴ Zachary C. Kleinsasser, *The Law and Planning of Public Open Space: Boston’s Big Dig and Beyond*, 32 B.C. ENVTL. AFF. L. REV. 421, 433-34 (2005) (citation omitted).

⁵⁵ THE WILDLIFE SOCIETY, *THE PUBLIC TRUST DOCTRINE: IMPLICATIONS FOR WILDLIFE MANAGEMENT AND CONSERVATION IN THE UNITED STATES AND CANADA* 13 (2010) (citations omitted).

⁵⁶ *In re Water Use Permit Applications*, 9 P.3d 409, 447 (Haw. 2000). *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971) (PTD is “sufficiently flexible to encompass changing public needs”).

people,”⁵⁷ and the Pennsylvania Supreme Court recently interpreted that state’s constitutional PTD provision as encompassing “resources that implicate the public interest.”⁵⁸ Such a concept reflects the reality that all parts of nature are interconnected and interdependent.”⁵⁹

V. Government Trustees

A. State and Federal Governments as Trustees

While “[s]tate governments are well-established trustees under the PTD,”⁶⁰ the U.S. Department of Justice has taken the position that there is no federal PTD.⁶¹ Given the PTD’s pre-constitutional and constitutional underpinnings, as well as its repeated description as an “attribute of sovereignty” (i.e., a defining characteristic of democratic government), it flaunts logic to maintain the federal government has no role as a trustee of federal natural resources.⁶² Naturally, because most public trust cases concern trust resources managed

by states (rather than those managed by the federal government), there is limited case law that applies the PTD to the federal government. A few courts, however, have explicitly stated that the PTD applies to the federal government. For example, in a case regarding migratory birds, a federal court stated: “Under the Public Trust Doctrine, the State of Virginia *and the United States* have the right and duty to protect and preserve the public’s interest in natural wildlife resources.”⁶³ A handful of lower federal court decisions appear to apply the public trust to federal lands.⁶⁴ The most considered discussion is in a Massachusetts federal district court finding that “the trust impressed upon this property is governmental and administered jointly by the state and federal governments by virtue of their sovereignty.”⁶⁵ Many scholars hold the view that the public trust binds the federal government and is a federal doctrine of constitutional character that forms a restriction on all states.⁶⁶

⁵⁷ HAW. CONST. art. XI, § 1.

⁵⁸ *Robinson Twp. v. Commonwealth*, 83 A.3d 916, 955 (Pa. 2013).

⁵⁹ See NATURE’S TRUST, *supra* note 5, at Chapter 7 (analyzing scope of PTD and advancing inclusive concept of ecological resources protected by the PTD).

⁶⁰ MICHAEL C. BLUMM & MARY CHRISTINA WOOD, *THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW* 6 (2013).

⁶¹ *Id.* at 338 (“[T]he Department of Justice, representing the federal government, resists mightily any public trust duty in litigation.”).

⁶² See Michael C. Blumm & Lynn S. Schaeffer, *The Federal Public Trust Doctrine: Misinterpreting Justice Kennedy and Illinois Central Railroad*, 45 ENVTL. L. 399, 421-22 (2015).

⁶³ *In Re Steuart Transp. Co.* 495 F.Supp. 38, 40 (E.D. Va. 1980) (emphasis added).

⁶⁴ See, e.g., *Sierra Club v. Dep’t of the Interior*, 398 F.Supp. 284 (N.D. 1975); *Sierra Club v. Dep’t of the Interior*, 376 F.Supp. 90, 95-96 (N.D. Cal. 1974).

⁶⁵ *United States v. 1.58 Acres of Land*, 523 F.Supp. 120, 124 (D. Mass. 1981).

⁶⁶ See Amicus Brief, *supra* note 21, at 12-32; Torres & Bellinger, *supra* note 12, at 294-97; See also Charles Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425, 453-55 (1989); Crystal S. Chase, *The Illinois Central Public Trust Doctrine and Federal Common Law: An Unconventional View*, 16 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 113, 116 (2010) (concluding that “federal common law provides the strongest explanation” for the Public Trust Doctrine).

Given the significant role that the federal government plays in the management of natural resources through numerous environmental statutes and agency regulations, it is critical that federal decision makers fulfill their public trust obligations.

B. Trusteeship Among the Three Branches of Government

While cases routinely refer to “government” as the trustee, it is important to explore briefly how the PTD applies to each of the three branches of government.

The legislature, as the main governing branch, is the principal trustee. As the Supreme Court stated in *Geer v. Connecticut*, “it is the duty of the legislature to enact such laws as will best preserve the subject of the trust and secure its beneficial use in the future to the people of the state.”⁶⁷ The PTD’s constitutional basis dictates that legislative action that fails to meet fiduciary standards may be overturned.⁶⁸

The executive branch, including all administrative agencies, acts as the agent of the legislature and therefore bears equal responsibility for performing the duties of a trustee. The fact that the PTD applies equally to the executive branch is important

because agencies have significant discretion when implementing statutes passed by the legislature. Agencies must consider their public trust obligations when implementing statutes, promulgating regulations, and carrying out their mandate to enforce the law.

While courts are not ordinarily considered to be trustees, the judicial branch has an important role to play in implementing the PTD. Courts have an obligation to enforce the government’s fiduciary obligations to the beneficiaries. As one court stated: “Just as private trustees are judicially accountable to their beneficiaries for dispositions of the res[ources], so the legislative and executive branches are judicially accountable for their dispositions of the public trust.”⁶⁹ Therefore, when the legislative and executive branches fail to carry out their trust duties, the beneficiaries may call upon the courts to compel the other branches of government to fulfill their fiduciary obligations pursuant to the PTD.⁷⁰ Appropriate judicial relief may consist of 1) declaring public trust rights and obligations and/or 2) ordering injunctive relief to stop damaging action; and/or 3)

⁶⁷ *Geer v. Connecticut*, 161 U.S. 519, 534 (1896); *see also* *Arnold v. Mundy*, 6 N.J.L. 1, 78 (1821) (explaining that the legislature is the “rightful representative” of the trust resources).

⁶⁸ *See, e.g.,* *Robinson Twp. v. Commonwealth*, 83 A.3d 916 (Pa. 2013) (overturning portions of a Pennsylvania statute promoting fracking); *Kootenai Env’tl. Alliance v. Panhandle Yacht Club, Inc.*, 671 P.2d 1085, 1095 (1983) (PTD “forms the outer boundaries of permissible government action”).

⁶⁹ *Arizona Center for Law in the Public Interest v. Hassell*, 837 P.2d 158, 168-69 (Az. Ct. App. 1991); *see also* *Lake Michigan Fed’n. v. U.S. Army Corps of Engineers*, 742 F.Supp. 441, 446 (N.D. Ill. 1990).

⁷⁰ It is beyond the scope of this primer to fully explore the role of the judiciary in the Public Trust Doctrine. For more information on the judiciary and the Public Trust Doctrine *see* Sax, *supra* note 53, and *NATURE’S TRUST*, *supra* note 5, at 230-57.

ordering implementation of a plan to protect and restore trust assets.⁷¹

The various levels and branches of government therefore act as co-trustees over the trust resources, with an obligation to work together to protect trust resources. Similarly, states (and tribes) that share resources act as co-trustees with each other and the federal government (where a national interest is present). It is worth noting that international governments should also be considered co-trustees (along with the U.S. federal government) of global trust resources such as the atmosphere and ocean fisheries.

VI. Fiduciary Duties of Trustees

Private trust law imposes various substantive and procedural fiduciary duties on trustees. Courts have imported these private trust law fiduciary duties to the public trust context to varying degrees, and public trust scholar Professor Mary Wood has drawn from private trust law and PTD cases to weave the various fiduciary duties into a coherent whole.⁷² As in the private trust context, there are both substantive and procedural fiduciary duties. Drawing from case law, treatises, and secondary sources, at least five substantive duties and five procedural duties are identified. These duties have been most elaborated upon in the context of groundwater and surface water

management⁷³ but, logically, the same duties and standards must also apply to the regulation of other natural resources if we are going to achieve a sustainable paradigm for environmental decision making.

The five substantive duties are:

1. the duty of protection;
2. the duty against waste;
3. the duty to maximize the value of trust resources;
4. the duty to restore trust resources when damaged; and
5. the duty against privatizing trust resources.

The five procedural duties are:

1. the duty of loyalty;
2. the duty to supervise agents;
3. the duty of good faith and reasonable skill;
4. the duty of (pre)caution; and
5. the duty of furnishing information to beneficiaries (accounting).

The contours and specifics of these duties and what they require of government trustees are explained in more detail below. The procedural duties are intended to “keep the eyes of officials on their substantive trust obligations” while it is the substantive duties, because of their bottom-line protection of viable ecosystems, that

⁷¹ See NATURE’S TRUST, *supra* note 5, at Chapter 13 (discussing judicial relief for violations of the public trust).

⁷² NATURE’S TRUST, *supra* note 5, at 165-207.

⁷³ The standards have been most specifically defined by the Hawaii Supreme Court in *In re Water Use Permit Applications*, 9 P.3d 409, 447 (Haw. 2000).

“determine the destiny of the planet and humanity’s future.”⁷⁴

A. Substantive Duties

1. The Duty of Protection⁷⁵

The first substantive duty, the duty of protection, has been referred to as the “heart of trust law,” and is well-established in both private trust law and public trust law.⁷⁶ Pursuant to this duty, the trustee has an obligation to take the steps required to protect and preserve trust resources from “substantial impairment.”⁷⁷ This includes protecting the trust as a whole and conforming the law with ecological reality. For example, it is foolhardy to endeavor protecting fish and wildlife without also protecting the rivers and forests that those fish and wildlife rely on for their survival. The substantial impairment standard is not an absolute prohibition on the use of trust resources. Just as with a financial trust, some use of the resources is acceptable. Whether a proposed use would cause a substantial impairment requires a factual determination, and should be guided by the best available science (as opposed to politics or private economic interests).

Ensuring that there is no substantial impairment of trust resources requires environmental decision makers to rely on experts with relevant expertise to determine whether the duty of protection is being met.

⁷⁴ *Id.* at 167.

⁷⁵ *Id.* at 167-169.

⁷⁶ *Id.* at 167.

⁷⁷ *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 453 (1892); *see also* *In re Water Use Permit Applications*, 9 P.3d 409, 451 (Haw. 2000).

Those experts must be retained and furnished with an accounting of the trust (see Section VI.B.5. below), and use the best available science to determine what level of use can be maintained consistent with preventing substantial impairment.

Importantly, the duty of protection imposes an *active* duty, not a passive duty. This means that a trustee cannot sit idly by while trust resources are damaged. As the Supreme Court stated in *Geer v. Connecticut*, “it is the duty of the legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use in the future to the people of the state.”⁷⁸ As another court said, “The trust reposed in the state is not a passive trust; it is governmental, active, and administrative [and] requires the lawmaking body to act in all cases where action is necessary, not only to preserve the trust, but to promote it.”⁷⁹ Because the duty of protection is an active duty, the legislature and executive branch must take affirmative actions to protect trust resources. When they fail to protect trust resources, beneficiaries can seek remedies in court. When permits have been granted, the

⁷⁸ *Geer v. Connecticut*, 161 U.S. 519, 534 (1896); *see also* *In re Water Use Permit Applications* 9 P.3d 409, 453 (Haw. 2000) (“Under the public trust, the state has both the authority and duty to preserve the rights of present and future generations in the waters of the state.”).

⁷⁹ *City of Milwaukee v. State*, 214 N.W. 820, 830 (Wis. 1927); *see* *Just v. Marinette County*, 201 N.W.2d at 768-70 (Wis. 1972) (emphasizing “active public trust duty” on the part of the state that requires the eradication of pollution and the preservation of the natural resource held in trust).

trustees have a duty of “continuing supervision” over such permits and must revoke them if they become contrary to the public interest.⁸⁰

2. The Duty Against Waste⁸¹

The duty against waste obligates trustees to ensure that the current generation does not use more than its share of the trust resources or cause irreparable damage to the resources, either of which would infringe on the rights of future generations. Put differently, the trustee cannot raid the trust inheritance and leave nothing for future generations.⁸² The Hawaii Supreme Court articulated this principle when it stated that the state has a “duty to ensure the continued availability and existence of its water resources for present and future generations.”⁸³

Analogizing the public trust to a private trust, the duty against waste dictates that the “interest” of natural resources may be utilized, but the “principal” cannot be spent. In other words the natural systems that provide ecological services to current-generation beneficiaries may be utilized, but use is limited to the extent that these natural

systems can replenish of their own accord without diminishing their basic functions and values, so that they will not be substantially impaired for future generations.⁸⁴ Trees can be cut, fish caught, and water used, but the extent of that use must be limited, such that there is no substantial impairment of the resource for future generations.

For non-renewable resources, income from their sale—which may only occur if there is a demonstrable public benefit—should go into an account and be treated by the trustee as principle rather than income that present beneficiaries may consume.⁸⁵ These funds should be used to ensure that the benefit from using those resources continues in perpetuity for future generations. Additionally, rationing/budgeting should be the norm with non-renewable resources, and use of non-renewable resources should not cause damage to other trust resources.⁸⁶

Applying the duty against waste to agency decision making would require a reworking of permit systems that presently allow private entities to use the commons to dispose of pollutants, thereby harming natural resources, such as soil, air and water. To comply with the duty against waste, permits must limit pollution, extraction, and use of natural resources to the scope of what can be utilized for public purposes without substantial impairment. Fully embracing the PTD would require agencies to restructure permit systems to allocate only the *interest*

⁸⁰ See National Audubon Soc’y, 658 P.2d at 723 (citation omitted) (noting “continuing power of the state as administrator of the public trust, a power which extends to the revocation of previously granted rights”); In re Water Use Permit Applications, 9 P.3d 409, 453 (citation omitted) (state empowered “to revisit prior diversions and allocations, even those made with due consideration of their effect on the public trust”).

⁸¹ NATURE’S TRUST, *supra* note 5, at 169-175.

⁸² *Id.* at 170.

⁸³ In re Water Use Permit Applications, 9 P.3d 409, 451 (Haw. 2000).

⁸⁴ NATURE’S TRUST, *supra* note 5, at 170.

⁸⁵ *Id.* at 174.

⁸⁶ *Id.*

portion of renewable resources to the present generation.⁸⁷

3. The Duty to Maximize the Value of Trust Resources for Beneficiaries⁸⁸

Pursuant to this duty, trust resources are to be used for the highest public purpose, and public purposes are given priority over private purposes.⁸⁹ This means that when there are competing public and private demands for scarce trust resources, public uses must prevail. What this requires of government trustees is a scheme to prioritize various uses in order to ensure that natural resources are utilized to meet the most urgent needs of society. Moreover, leading cases state that trust resources must not be managed for the primary benefit of a private party.⁹⁰ This search for the “highest and best” use of a trust resource requires that the trustee consider alternatives to activities that harm trust resources.

Vermont (where groundwater has been statutorily designated as a public trust resource) provides a good example of fulfilling this fiduciary duty.⁹¹ Looking at

⁸⁷ *Id.* at 172.

⁸⁸ *Id.* at 175-181.

⁸⁹ *See, e.g.,* *Geer v. Connecticut*, 161 U.S. at 529 (the trust is “for the benefit of the people, and not . . . for the benefit of private individuals as distinguished from the public good”); *In re Water Use Permit Applications*, 9 P.3d 409, 451 (Haw. 2000) (government trustee must manage trust resources to “maximize their social and economic benefits to the people”).

⁹⁰ *See, e.g.,* *In re Water Use Permit Applications*, 9 P.3d 409, 450 (finding PTD “must recognize enduring public rights in trust resources separate from, and superior to, the prevailing private interests”).

⁹¹ Vt. Stat. Ann. tit. 10, § 1390(5) (West 2008).

the plain meaning of the public trust language in the statute, the Vermont Supreme Court found that the Vermont Agency of Natural Resources (ANR) needed to protect both quantity and quality of groundwater with a dynamic set of rules designed to react to changes in public needs.⁹² Activities that impact groundwater are categorized into two tiers, recognizing that some activities are more harmful to groundwater than others. Tier I activities are high-risk activities that require a more stringent permitting process and a showing of public benefit.⁹³ Through the trust framework, Vermont balances the public interest with individual property rights so as to promote sustainable resource use.

4. The Duty to Restore the Trust When Damaged⁹⁴

The fourth substantive duty a trustee owes to beneficiaries is to restore the trust if it is damaged due to a breach of trust or third-party damage. In the private trust context, when there is a breach of trust a beneficiary can pursue options that “put him in the position in which he was before the trustee committed the breach of trust.”⁹⁵ In the public trust context, this translates to a

⁹² *In re Omya Solid Waste Facility Final Certification*, 2011 WL 1055575, (Vt. Feb. 28, 2011).

⁹³ In making that determination, the ANR is to consider whether the activity is located in a suitable area under any applicable municipal plan; is consistent with a regional plan for the area; is consistent with a source protection plan for a public water supply; and whether it is consistent with any municipal groundwater protection overlay district. *See id.*

⁹⁴ NATURE’S TRUST, *supra* note 5, at 182-186.

⁹⁵ RESTATEMENT (SECOND) OF TRUSTS § 205 (1959).

government duty to restore damaged natural resources. For example, the best available science tells us that in order to protect against the worst effects of climate change, the concentration of carbon dioxide in the atmosphere must be reduced from the current level exceeding 400 parts per million (ppm) to 350 ppm (the long-term “substantial impairment” line for climate-related impacts) by the end of the century.⁹⁶ Government therefore has a duty to restore the level of carbon dioxide in the atmosphere to 350 ppm—the level deemed necessary to restore climate balance.⁹⁷

The duty to restore also requires recovery of natural resource damages (NRDs) whenever there is undue harm to trust resources (i.e., any action that causes substantial impairment). For example, if hazardous waste leaked from a storage facility and polluted a river, harming fish and other wildlife, the duty to restore the trust requires government trustees to seek the requisite

⁹⁶ Hansen, James, et al., *Target Atmospheric CO₂: Where Should Humanity Aim?* 2 OPEN ATMOS. SCI. J., 217 (2008), available at <http://350.org/about/science/>; see also James Hansen et al., *Assessing “Dangerous Climate Change”: Required Reduction of Carbon Emissions to Protect Young People, Future Generations, and Nature*, 8 PLOS ONE 1 (2013), available at <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0081648>.

⁹⁷ For a discussion of “a legal strategy of Atmospheric Recovery Litigation to hold the major fossil fuel corporations liable for funding [carbon drawdown projects],” see Mary Christina Wood & Dan Galpern, *Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay to Restore A Viable Climate System*, 45 ENVTL. L. 259 (2015).

damages from the operator of the facility in order to restore the river, as well as the fish and wildlife. If a trustee fails to seek damages from third parties, trust law allows beneficiaries to sue the recalcitrant trustee for neglecting to bring a suit against the third-party wrongdoer.⁹⁸ Applied to the climate context, scholars have suggested a sovereign duty to seek compensation from the fossil fuel industry (“carbon majors”) for natural resource damages to the atmosphere and climate system.⁹⁹

While several environmental laws reflect a restoration duty,¹⁰⁰ many do not embody trust principles, because they do not *require* the recovery of natural resource damages. This is central to the duty to restore the trust, and the government must not only seek NRDs, but must actually use funds recovered to restore lost ecological services and natural resource values. Moreover, many federal statutory provisions immunize polluters from liability for actions authorized by federal permit. When granting a permit, federal law essentially shields damaging activities from liability, regardless of how devastating the

⁹⁸ RESTATEMENT (SECOND) OF TRUSTS § 205 (1959).

⁹⁹ See Wood & Galpern, *supra* note 97.

¹⁰⁰ The Oil Pollution Act and the Comprehensive Environmental Response, Cleanup, Liability Act provide for the recovery of natural resource damages, with the government acting as a trustee of those resources. The Endangered Species Act calls for recovering imperiled species; the Clean Water Act announces the goal of restoring the nation’s waters; and parts of the Resource Conservation Recovery Act promote the cleanup of hazardous waste—a form of land restoration.

consequences to trust resources. This is inconsistent with PTD fiduciary duties.

5. The Duty Against Privatizing of Trust Resources¹⁰¹

The final substantive duty is the duty against privatizing trust resources. This duty against privatization traces back to the earliest PTD cases. In the first American PTD case, the New Jersey Supreme Court characterized the privatization of state waters as “a grievance which never could be long borne by a free people.”¹⁰² In the same vein, the U.S. Supreme Court has stated that “[t]he State can no more abdicate its trust over property in which the whole people are interested . . . than it can abdicate its police powers in the administration of government and the preservation of peace”¹⁰³ Only when the privatization of trust resources is done to serve the public interest and will not substantially impair remaining resources will it be acceptable.¹⁰⁴

¹⁰¹ NATURE’S TRUST, *supra* note 5, at 186-187.

¹⁰² *Arnold v. Mundy*, 6 N.J.L. 1, 78 (1821); *see also Parks v. Cooper*, 676 N.W.2d 823, 841 (S.D. 2004) (“[T]he Public Trust Doctrine imposes an obligation on the State to preserve water for public use. It provides that the people of the State own the water themselves and that the State, not as a proprietor, but a trustee, controls the water for the benefit of the public.”).

¹⁰³ *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 453 (1892).

¹⁰⁴ *Id.* at 455-56 (“The trust . . . cannot be alienated, except in those instances mentioned, 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.”).

B. Procedural Duties

In addition to the aforementioned substantive duties, there are procedural duties that should inform trustees’ administration of the trust.

1. The Duty of Loyalty¹⁰⁵

The first (and paramount) procedural duty is the duty of loyalty. This is the duty the trustee owes to the beneficiaries to administer the affairs of the trust solely for the interests of the beneficiaries, and not for the trustee’s own benefit or for the benefit of third parties.¹⁰⁶ This requires the trustee to not only resist temptation and influence from private interests, but to *eliminate* temptation because it is assumed that trustees cannot resist temptation.¹⁰⁷

The Supreme Court recognized the duty of loyalty in the public trust context in *Geer v. Connecticut*, where it stated: “[T]he power or control lodged in the state . . . is to be exercised, like all other powers of government, as a trust for the benefit of the people, and not as a prerogative for the

¹⁰⁵ NATURE’S TRUST, *supra* note 5, at 189-197.

¹⁰⁶ GEORGE T. BOGERT, TRUSTS § 95 (West 6th ed. 1987).

¹⁰⁷ Karen E. Boxx, *Of Punctilios and Paybacks: The Duty of Loyalty Under the Uniform Trust Code*, 67 MO. L. REV., 279, 280 (2002) (“The duty of loyalty is, therefore, not the duty to resist temptation but to eliminate temptation, as the former is assumed to be impossible. The trustee is at the pinnacle of fiduciary duty and is held to the highest standards . . . the trustee’s duty of loyalty will be paramount and unforgiving, at least one hundred percent.”); *see also Meinhard v. Salmon*, 164 N.E. 545, 546 (N.Y. 1928) (referring to the duty of loyalty as: “Not honesty alone, but the punctilio of an honor the most sensitive.”).

advantage of the government as distinct from the people.”¹⁰⁸ The duty was underscored in a recent case, *Robinson Township*, where Pennsylvania’s Chief Justice wrote, “As a fiduciary, the Commonwealth has a duty to act . . . with prudence, loyalty, and impartiality.”¹⁰⁹

In the legislative context, meeting the duty of loyalty would “prohibit a legislator from voting on a particular resource issue if he or she accepted significant campaign contributions from an industry that had a tangible stake in the outcome of that issue.”¹¹⁰ The duty would likewise prohibit legislative “vote trading” (agreeing to vote a particular way on an issue if a fellow legislator agrees to vote a particular way on a separate issue).¹¹¹ The duty of loyalty in the legislative context would be advanced through implementation of disclosure and recusal principles, whereby legislators disclose financial contributions by those who stand to benefit from a particular decision, and legislators recuse themselves from voting on such issues where there may be a conflict of interest.¹¹² Existing rules that apply to elected judges provide a model for legislative disclosure and recusal.¹¹³ In the private trust law context, “a court will set aside a decision stained by breach of loyalty.”¹¹⁴ Courts should “invalidate

legislative action that violates the trust duty of loyalty” and remand the matter back to the legislature for reconsideration while removing the bias that infected the initial action.¹¹⁵ Such a remedy is known as a legislative remand.

In the administrative context, suggested reforms for ensuring that agencies fulfill the duty of loyalty include agency restructuring, stronger “revolving door” provisions (which apply when government employees move from government service to the private sector and vice versa), and stronger personnel standards aimed at preventing breaches of the duty of loyalty (including penalties and termination for offending employees, as well as consequences for regulated parties attempting to wield inappropriate influence).¹¹⁶ Additional agency reforms that would facilitate fulfillment of the duty of loyalty include greater public access to agency decision-making documents, public disclosure of agency contacts made in the course of decision making, requirements that agency staff must report breaches of loyalty (and protection from retribution when they do so), clear and concise presentation of agency information to the public, and a legal means for the public to address agency breaches of fiduciary duties.¹¹⁷ As in the legislative context, agency action infected by bias should be held invalid and remanded.

¹⁰⁸ *Geer v. Connecticut*, 161 U.S. 519, 529 (1896).

¹⁰⁹ *Robinson Twp. v. Commonwealth*, 83 A.3d 916, 957 (Pa. 2013).

¹¹⁰ *NATURE’S TRUST*, *supra* note 5, at 191.

¹¹¹ *Id.*

¹¹² *Id.* at 192.

¹¹³ *Id.*

¹¹⁴ *Id.* at 196.

¹¹⁵ *Id.* at 193.

¹¹⁶ *Id.* at 193-195. Note that in the private trust law context, trustees can be held personally (and sometimes criminally) liable for breaches of duty, and those aiding them in such breaches can also be liable.

¹¹⁷ *Id.* at 195-196.

2. The Duty to Adequately Supervise Agents¹¹⁸

While the legislature is the primary trustee, the executive branch of government (at both the state and federal levels) acts as the agent of the legislature through various administrative agencies created by legislation to implement laws passed by the legislature. The legislature does not (and cannot) shed its fiduciary duties as a trustee as a result of delegating authority to executive agencies. In the private trust law context, trustees “may not abdicate their own responsibilities toward the beneficiaries,”¹¹⁹ and “[a] trustee owes his beneficiary the duty of using reasonable care in employing, instructing, and supervising [an] . . . agent.”¹²⁰ Legislatures must therefore exercise effective oversight of administrative agencies in order to meet their fiduciary duties.

Each member of a legislative body is a co-trustee, and co-trustees have a duty to protect the trust from malfeasance by other co-trustees. A court finding a breach of co-trustee duties could remand legislation back to the legislature for proper consideration.¹²¹

3. The Duty of Good Faith and Reasonable Skill¹²²

Private trust law imposes “basic standards of competence” for management of trust resources. Trustees have a duty to “act in good faith and employ such vigilance,

sagacity, diligence and prudence’ as people would in managing their own affairs.”¹²³ Trustees with special expertise must use that expertise in fulfilling trust responsibilities. (This rule applies to all agency trustees given the fact that administrative agencies have expertise in the areas that they are charged with administering.)

Various non-governmental organizations have discussed reform measures aimed at ensuring the scientific integrity of administrative agencies (thus enabling them to fulfill their duty of good faith and reasonable skill). These suggested reform measures include the following:

1. strengthening whistle-blowing protections for scientists;
2. requiring disclosure of industry ties and contacts in government-funded science;
3. eliminating conflicts of interest among members of scientific advisory boards;
4. ensuring robust, unbiased scientific input into federal policymaking;
5. protecting the freedom of scientists to communicate with the media and the public;
6. revealing political interference with scientific documents before they become subject to political review;
7. disclosing a record of all meetings between agency staff and outside entities on proposed regulations or decisions; and
8. preventing the Office of Management and Budget from tampering with scientific work in the agencies.¹²⁴

¹¹⁸ *Id.* at 197-199.

¹¹⁹ *Id.* at 197 (citation omitted).

¹²⁰ GEORGE T. BOGERT, TRUSTS 328-30 (West 6th ed. 1997).

¹²¹ *Id.* at 199.

¹²² *Id.* at 199-200.

¹²³ *Id.* at 199 (citations omitted).

¹²⁴ *Id.* at 199-200.

Implementation of these measures would also help trustees fulfill their duty of loyalty (discussed above).

4. The Duty of (Pre)Caution¹²⁵

In the private trust law context, trustees have a duty to manage the trust with reasonable caution, which translates in practice to avoiding risky investments (even if these investments have the potential of high yields for the trust). As is the case with private trusts, failure to exercise reasonable caution in managing the trust may result in irreversible harm to the trust. With a private trust, this could result in financial ruin, whereas with the public trust this could result in devastating environmental consequences, such as species extinction or runaway climate change. The impacts of trust mismanagement to humanity can hardly be overstated.

The private trust law duty of caution translates to the use of the “precautionary principle” (also referred to as the “precautionary approach”) in the public trust context, “which requires erring on the side of caution where uncertainty exists.”¹²⁶ The precautionary principle has been adopted by the European Union, and appears in both the 1992 Rio Declaration of the United Nations Conference on Environment and Development, and in the United Nations Framework Convention on Climate Change.¹²⁷ It would seem to be axiomatic that as uncertainty increases, the level of precaution should likewise increase. One

¹²⁵ *Id.* 200-203.

¹²⁶ *Id.* at 201.

¹²⁷ *Id.* at 202.

suggested way that agency trustees can fulfill their duty of caution through the precautionary principle is by “halting new permits through moratoria and by suspending permits that allow ultrahazardous activity.”¹²⁸

As the Hawaii Supreme Court has said: “Where there are present or potential threats of serious damage, lack of full scientific certainty should not be a basis for postponing effective measures to prevent environmental degradation. . . . where uncertainty exists, a trustee’s duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource.”¹²⁹

5. The Duty of Furnishing Information to Beneficiaries (Duty of Accounting)¹³⁰

In the private trust law context, trustees have a duty to furnish trust beneficiaries with information regarding the financial health of the trust—information such as income, expenses, balances, location of accounts, etc.¹³¹ In the public trust law context, this equates to information about the health of the natural resources protected by the trust. As in the private trust law context, the accounting information furnished to trustees must be presented in such a way that it is understandable to the beneficiaries, because the duty is otherwise meaningless. While the duty of accounting may at first glance appear to be different in character and

¹²⁸ *Id.* at 203.

¹²⁹ *In re Water Use Permit Applications* 9 P.3d 409, 466 (Haw. 2000).

¹³⁰ NATURE’S TRUST, *supra* note 5, at 203-04.

¹³¹ *Id.* at 203.

distinct from the other fiduciary duties, it plays a crucial reinforcing role. Fulfillment of the duty of accounting is nothing short of crucial to fulfillment of many of the other fiduciary duties. For example, without an accurate accounting of trust resources, it is impossible for trustees to fulfill the duty of protection, because trustees must be apprised of the condition of the resources they are charged with protecting in order to ensure that they are in fact adequately protecting these resources; without an accounting, it is impossible for trustees to gauge whether the trust resources are being protected or imperiled. Similarly, the duty against waste, duty of restoration, the duty to supervise agents, and the duty of caution all require an accurate accounting as a prerequisite, because a trustee cannot fulfill those separate duties absent accurate information regarding the health of trust resources. While trustees depend on an accurate accounting in order to fulfill their fiduciary duties, the duty of accounting is ultimately owed to beneficiaries in order to provide them with information crucial to determining whether the trustees are fulfilling their fiduciary duties. Given the complexity and urgency of many environmental problems, “citizen-beneficiary advisory groups” are suggested as a means of policing trustees.¹³² The idea is that members of these groups would be given stipends for serving and would be provided with scientific expertise and other resources necessary to fulfill their duty of monitoring trustees.

¹³² *Id.* at 204.

VII. Conclusion

In sum, while the public trust doctrine has ancient roots, it also has continued relevance and vitality, and requires government stewardship of the natural resources upon which society depends for continued existence. Because of its vital role in the perpetuation of society, the PTD has been described as “inherent to mankind” and as “predat[ing] all governments and constitutions,” and it has also been linked to numerous constitutional bases. The PTD imposes substantive and procedural fiduciary duties on state and federal government trustees, with legislatures as primary trustees, executive agencies serving as agents of legislatures, and the judiciary serving to hold the other two branches of government accountable in their fulfillment of trust responsibilities. The PTD acts as a baseline or backstop to statutory and regulatory environmental law, and necessarily flexible and evolves over time in terms of what natural resources are encompassed by the trust in order to account for changing societal needs and scientific understanding. See the accompanying appendix for “Talking Points for Public Trust Advocates.”

Appendix: Talking Points for Public Trust Advocates

- The Public Trust Doctrine is not a new legal concept; it can be traced back to Roman law. The Public Trust Doctrine takes an existing legal framework, and applies it to the management of natural resources to ensure that those resources are managed sustainably.
- Just as in private trust law, the public trust framework involves trustees and beneficiaries. In the public trust context, government is the trustee, while present and future generations are the beneficiaries.
- If the legislative and executive branches fail to carry out their trust duties, the beneficiaries can call upon the courts to compel the other branches of government to fulfill their fiduciary obligations.
- Government's public trust obligations apply to natural resources that have an inherently public character and are not owned in the same ways as traditional property.
- Trust resources have historically included navigable waterways, the submerged lands under navigable waterways, tidelands, non-navigable waterways, groundwater, instream flows, dry sand beaches, wildlife, and parklands. Courts have declared that the public trust must be "sufficiently flexible to encompass changing public needs," and recently, courts have suggested that the atmosphere is a public trust asset.
- Because trust beneficiaries need access to essential natural resources including water, air, oceans, and wildlife, among others, the Public Trust Doctrine rightfully applies to all vital natural resources, and environmental decision makers should begin to embrace their obligation as trustee of *all* natural resources.
- Fundamentally, the Public Trust Doctrine requires the government to manage public trust resources in a sustainable manner, pursuant to the basic standards of competence in asset management that trust law imposes on a trustee.
- The Public Trust Doctrine provides a roadmap for a paradigm of sustainability based on existing law. Very few other policy proposals provide realistic means for achieving sustainability with a solid legal backing.
- The Public Trust Doctrine provides the basic framework for the sustainable management of natural resources based on an existing framework of trusteeship with specific duties that are all aimed at sustainable management of the trust resources.
- The Public Trust Doctrine imposes an active duty of protection. Government may not simply allow the trust property to deteriorate. Rather, it must confront and control ongoing environmental harm for issues such as climate change and ocean acidification.
- Just as in the private trust context, in the public trust context trustees must adhere to both substantive and procedural duties. The five substantive duties are: 1) the duty of protection;

2) the duty against waste; 3) the duty to maximize the societal value of natural resources; 4) the duty to restore trust resources when damaged; and 5) the duty against privatizing trust resources. The five procedural duties are: 1) the duty of loyalty; 2) the duty to adequately supervise agents; 3) the duty of good faith and reasonable skill 4) the duty of precaution; and 5) the duty of accounting.

- Government must prevent substantial impairment of trust resources. Permits must confine pollution, extraction, and use of natural resources to the scope of what can be utilized for public purposes without substantial impairment to trust resources, based on the best available science.
- Government must adhere to the duty of loyalty by preventing private economic interests and politics from influencing natural resource management.
- Trust resources must be used according to their highest public purpose, because they are limited. Trustees may not allocate public resources primarily to serve private purposes – i.e. using public resources as a free repository for pollution.
- Government has a duty to restore damaged natural resources. The duty demands recovery of natural resource damages (NRDs), and the use of funds recovered to restore the functions and values of lost ecological services and natural resource values when a third party substantially impairs trust resources.