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Abstract

The Public Trust Doctrine (PTD) is a fundamental precursor to modern environmental law and continues to be an integral principle of natural resource management. The doctrine has often been characterized as an attribute of sovereignty that carries constitutional force. As such, courts have held both legislatures and agencies accountable to fiduciary standards. As a doctrine of property law, the PTD limits privatization, exclusive use, and degradation of trust assets. It imposes a range of obligations on trustees, including the duty to exercise uncompromised loyalty to the public beneficiaries. Courts have underscored the importance of the judiciary in safeguarding trust assets from political pressures. With the emergence of modern environmental problems, courts have expanded the scope of the doctrine to protect a wide range of public resources that are crucial to public welfare. Globally, the doctrine is increasingly offered as a paradigm for protecting planetary assets such as the atmosphere.

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Bibliography

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I. Introduction

This chapter summarizes the Public Trust Doctrine's role in environmental decision-making worldwide and describes modern efforts to expand the doctrine and enforce its protection with respect to global trust assets.

The Public Trust Doctrine (PTD) is the oldest principle of environmental law, pre-existing all statutory environmental laws across the world. It has been described as "the law's DNA." With roots in natural law, the doctrine springs from public property rights in natural resources recognized since Roman times. The principle speaks to one of the most essential purposes of government: protecting crucial ecology for the continuing survival and welfare of citizens. It designates government as a trustee of natural assets "in which the whole people are interested." The public, both present and future generations of citizens, stand as the beneficiaries of this trust, holding an enduring common property right in the natural resources comprising the trust *res*. Both legislatures and agencies are held to a quintessential fiduciary duty to protect the trust assets (the "*res*") to sustain future generations of citizen beneficiaries.

Many nations, including the U.S., the Philippines, India, and South Africa, embrace the doctrine as a central principle in their legal systems.⁷ The landmark *Oposa* opinion from the Philippines expressed the intergenerational duty implicit in the doctrine:

[E]very generation has a responsibility to the next to preserve that rhythm and harmony for the full enjoyment of a balanced and healthful ecology [This] belongs to a different category of rights [than civil and political rights] altogether for it concerns nothing less than self-preservation and self-perpetuation . . . the advancement of which may even be said to predate all governments and constitutions.⁸

The overarching position of the public trust in political and legal traditions around the world reflects the character of the doctrine as a fundamental attribute of sovereignty – a constitutive principle that government cannot shed. Derived from "inherent and indefeasible rights" that the citizens reserve and retain against their government, the trust remains fundamentally ensconced in the original social contract. Public trust rights are secured, rather than granted, by any constitution. As the Philippines Supreme Court declared: "[T]hese basic rights need not

² Torres & Bellinger (2014).

³ See Locke (1689); See also Arnold v. Mundy (1821) 11.

⁴ Justinian (1876).

⁵ Illinois Cent. R.R. v. Illinois (1892) 456.

⁶ Geer v. Conn. (1896) 534.

⁷ See Blumm & Wood (2013) 305-332; see also Blumm & Guthrie (2012).

⁸ See Oposa v. Factoran, (S.C. Phil. 1993).

⁹ United States v. 1.58 Acres of Land (1981) 124.

¹⁰ See Robinson Twp. v. Commonwealth (2013) 948, 1016.

¹¹See id.; see also Blumm & Schaffer (2014) 19.

even be written in the Constitution for they are assumed to exist from the inception of humankind." Public trust rights are often described as encompassing fundamental human rights. 13

By embracing rights retained by the people against their governments, the public trust comes "twin-born with democracy," distinguishing a society of "citizens rather than of serfs." Conveyance of crucial public resources in violation of the trust would be "a grievance which never could be long borne by a free people."

II. Constitutional Basis of the Public Trust Doctrine

As a basic attribute of sovereignty,¹⁷ the trust represents, in effect, the slate "upon which all laws and constitutions are written." It logically rests embedded in national and state constitutions.¹⁹ As a federal U.S. court stated, "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."

In U.S. case law, the public trust finds a forceful rationale and underpinning in the constitutional reserved powers doctrine, which restricts any one legislature from acting to impair the sovereignty of later legislature in matters of crucial public concern.²¹ As *Illinois Central Railroad v. Illinois* stated:

The legislature could not give away nor sell the discretion of its successors in respect to matters, the government of which, from the very nature of things, must vary with varying circumstances. . . . Every legislature must, at the time of its existence, exercise the power of the State in the execution of the trust devolved upon it.²²

Several nations, as well as some states in the United States, have taken the step of expressly enumerating the public trust in their constitutions or statutes. Such explicit reference does not suggest a previous absence of the trust, but rather reflects a legislative urge to codify basic rights. For example, the Supreme Court of Hawaii in the United States made clear that the public trust

¹⁴ Wood (2014) 128.

¹⁶ Illinois Cent. R.R. v. Illinois (1892) 456.

¹² *Oposa v. Factoran*, (S.C. Phil. 1993).

¹³ Takacs (2008).

¹⁵ Sax (1970) 484.

¹⁷ See Coplan (2010) 311; see also Parks v. Cooper (2004) 837.

¹⁸ Wood (2014) 129 (quoting Gerald Torres).

¹⁹ Davidson (2013) 23-31.

²⁰ United States v. 1.58 Acres of Land (1981) 124.

²¹ Grant (2001).

²² Illinois Cent. R.R. v. Illinois (1892) 460.

doctrine exists independently of legislative expression, because it represents "an inherent attribute of sovereign authority that the government '... cannot surrender."²³

The PTD, whether explicitly enumerated or implicitly implied, acts as a constitutional check on the power of both the legislature (the primary trustee) and executive branch agencies (the agents of the trustee). ²⁴ Without this supervisory doctrine, the essence of sovereignty – the ability and duty to exercise power for the benefit of the citizenry – comes under threat. Present legislatures and agencies otherwise may squander assets needed by future citizens to serve shortterm political interests, causing harm that is "likely to be objectionable to a future legislature but not reparable by it within a reasonable time."²⁵ Recently, a plurality of the Pennsylvania Supreme Court invoked the trust to overturn a statute that promoted fracking, finding that "for communities and property owners affected by [the statute] . . . the General Assembly . . . has sanctioned a direct and harmful degradation of the environmental quality of life in these communities...."26

III. Trustees and Co-Trustees

As a fundamental attribute of sovereignty, the trust binds both national governments and their political subdivisions.²⁷ Several cases have also found the trust applicable to local agencies as subdivisions of states.²⁸ In many nations, courts have manifestly applied the trust to national governments.²⁹ In the U.S., where states have traditionally managed natural assets, the bulk of public trust cases have been decided in the state context.³⁰ But, with an increasing federal role over the environment, the federal trust obligation gains crucial importance. While the U.S. Department of Justice currently disclaims any federal trust responsibility, a federal trust obligation finds support in established precedent, weighty scholarship, and compelling logic.³¹ Federal statutory law also recognizes the federal public trust.³²

One considered analysis from a federal court characterizes the federal and state governments as "co-trustees," each bound by a public trust obligation carried out according to their respective constitutional roles.³³ Discerning the federal role in the submerged lands context, the district court in In Re 1.58 Acres of Land declared, "Since the trust impressed upon this property is

²³ In re Water Use Permit Applications (2000) 443.

²⁴ Robinson Twp. v. Commonwealth (2013) 954-57.

²⁵ Grant (2001) 880.

²⁶ Robinson Twp. v. Commonwealth (2013) 980.

²⁷ Blumm & Wood (2013) 305-32.

²⁸ See Ctr. for Biological Diversity, Inc. v. FPL Group (2008) 602-03; see also Robinson Twp. v. Commonwealth (2013) 956-57.

²⁹ Blumm & Wood (2013), chapter 10.

³⁰ See PPL Montana v. Montana, 132 S. Ct. 1215 (2012) (dicta, referring in passing to the state public trust doctrine).

31 See Rodgers, et. al. (2014); Wood (2014) 133-36.

³² See 42 U.S.C. § 9607(f)(1) (CERCLA); see also 33 U.S.C. § 2706 (Oil Pollution Act).

³³ United States v. 1.58 Acres of Land (1981) 123-24.

governmental and administered jointly by the state and federal governments by virtue of their sovereignty, neither sovereign may alienate this land free and clear of the public trust."³⁴

IV. Role of the Public Trust Doctrine in Modern Environmental Law

Despite its initial promise, modern environmental law fails to protect vital resources. Under the current system of environmental statutory law, agencies allow destruction of ecology through permit systems that favor private interests. The broad discretion agencies enjoy draws unrelenting political pressure from industry interests, often leading to agency capture. These systems perpetuate a dysfunctional, fragmented approach that fails to stem aggregate resource decline.³⁵

The PTD provides a macro approach that evaluates the management of natural resources in their entirety. Fundamentally, the trust focuses on the bottom-line functionality and health of resources. Courts make clear that the PTD is not subsumed by statutory law but forms a separate set of standards – called fiduciary duties – apart from any statutory law.³⁶ These duties set a measure of performance for both legislative trustees in enacting statutes and for agency trustees implementing them: "The public trust doctrine at all times forms the outer boundaries of permissible government action with respect to public resources." "³⁷

Trust standards gain their force through stringent judicial enforcement. Unlike common law standards (such as those arising from nuisance law), which can be displaced if the statute "speak[s] directly to [the] question' at issue," the defense of displacement is not properly applicable in lawsuits to enforce the trust responsibility. As an inherent attribute of sovereignty with constitutional force, the public trust doctrine can overcome statutes, unlike a standard common law claim. The fundamental inquiry of the trust focuses on the adequacy and legitimacy of the trustee's action – whether it serves present and future generations of citizen beneficiaries – and that question cannot be answered by reference to the parameters of the action itself. Thus, a statute (or action under it) can never "speak directly" to the question the lies at the core of a trust challenge.

The public trust imposes a "duty to exercise continued supervision" over trust resources even after private rights to such resources have been allocated under statutory law. ⁴⁰ Invoking logic applicable to the full realm of natural resources and pollution law, the California Supreme Court declared: "parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust."

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³⁴ *Id.* at 124.

³⁵ Speth (2008) 83; Wood (2014) at Part I.

³⁶ Parks v. Cooper (2004) 837.

³⁷ Kootenai Envtl. Alliance v. Panhandle Yacht Club (1983) 1095.

³⁸ Am. Elec. Power Co. v. Connecticut (2011) 2537.

³⁹ *See* Schaffer (2015).

⁴⁰ Nat'l Audubon Soc'y v. Superior Court (1983) 721-23.

⁴¹ *Id.* at 721.

Agencies must reconsider past resource allocations that "may be incorrect in light of current knowledge or inconsistent with current needs" and must revoke permits that were impermissibly granted or that become inconsistent with trust purposes.⁴²

V. Trust Assets and Public Interests Served

The trust arises out of recognition that some resources stand so crucial to society that they must be "protected by distinctive, judge-made principles." Where a natural resource is a "subject of public concern to the whole people," it warrants protection as an asset in the people's trust. 44 The scope of the trust is inextricably related to the public uses and interests to be protected. The early cases recognized navigable waters, streambeds, sea shores, and wildlife as assets comprising the "res" of the public trust, 45 but few courts now limit the trust to those categories. Most courts emphasize that the trust remains "sufficiently flexible to encompass changing public needs,"46 and modern courts have greatly expanded the "res" to include, variously, dry sand beaches, parklands, air and atmosphere, groundwater, forests, natural gas, and other resources.⁴⁷ Courts tend to extend trust protection to individual resources based on any one, or a combination of, six factors: (1) public need; (2) scarcity; (3) customary use and reasonable public expectation; (4) unique and irreplaceable common heritage; (5) suitability for common use; and (6) ancillary support of other trust resources. 48 Increasingly, the jurisprudence and constitutional iterations move towards an inclusive concept of a full "ecological res" that includes all natural resources.⁴⁹ As courts recognize the hazards of ecological collapse, climate protection is likely to become recognized as a paramount public trust purpose.⁵⁰ authorities authorizing recovery of natural resource damages to the trust iterate a full scope of resources.

VI. Fiduciary Obligations⁵¹

A trust frame centers on fiduciary obligation rather than political discretion. Trustees have both substantive and procedural obligations comprised of specific duties.⁵² Courts frequently

⁴² *Id.* at 728.

⁴³ Wilkinson (1980) 315.

⁴⁴ Illinois Cent. R.R. v. Illinois (1892) 455.

⁴⁵ Blumm & Wood (2013) 7.

⁴⁶Marks v. Whitney (1971) 380.

⁴⁷Blumm & Wood (2013) 155-284; see also Robinson Twp. v. Commonwealth (2013) 954-55.

⁴⁸ Wood (2014) 157-161.

⁴⁹ *Id.* at chapter 7.

⁵⁰ See Oposa v. Factoran, (S.C. Phil. 1993) (extending trust protection to forests, recognizing their impact in climate balance and stating that, without such protection, "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.").
⁵¹ The duties summarized in this section are explained in more detail in Wood (2014), chapters 8

The duties summarized in this section are explained in more detail in Wood (2014), chapters 8 & 9.

⁵² Wood (2014) 165-207.

refer to standards of private trust law to derive fiduciary obligations incumbent on public trustees.⁵³

The substantive fiduciary duties require a public trustee to:

- (1) Protect the *res* from "substantial impairment."⁵⁴ This is an active duty incumbent on all public trustees. A trustee may not sit idle and allow the trust property to "fall into ruin on his watch."⁵⁵
- (2) Conserve the natural inheritance of future generations. This duty is expressed as the duty against allowing waste. Because "the beneficiaries of the public trust are not just present generations but those to come," a trustee must manage the property to protect the corpus for future beneficiaries. For renewable resources, this generally means allowing present generations to use the "yield" of the resource rather than depleting the natural "capital" that sustains the yield. For non-renewable resources, it may mean rationing the resource between present and future classes of citizens.
- (3) Maximize the societal value of natural resources. This duty involves three core precepts: a) a trustee may not allow squander of the asset; b) the asset must be used for its highest public purpose; and c) trustees may not allocate public resources primarily to serve the interests of private parties.⁵⁷ Notably, polluting uses of public trust assets often violate one or more of these mandates.
- (4) Restore the trust *res* where it has been damaged.⁵⁸ This principle requires the trustee to restore the rightful wealth belonging to the beneficiaries.
- (5) Affirmatively seek to recover natural resource damages (NRDs) from third parties that harm or destroy public trust assets.⁵⁹ This principle provides a financing mechanism for restoration. NRDs are available in common law as well as through some statutory provisions.
- (6) Refrain from alienating (that is, privatizing) the trust, except in limited circumstances. A trustee may not privatize trust assets except where doing so furthers the "primary purpose" of

⁵³ Robinson Twp. v. Commonwealth (2013) 957.

⁵⁴ See Bogert (1980) 346; see also In re Water Use Permit Applications (2000) 451–53.

⁵⁵ U.S. v. White Mt. Apache Tribe (2002) 475.

⁵⁶ See In re Water Use Permit Applications (2000) 455; see also Reliance Natural Res. Ltd. v. Reliance Indus. Ltd. (India 2010) pt. I, ¶11.

⁵⁷ In re Water Use Permit Applications (2000) 450-51.

⁵⁸ For restoration duty in private trust context, *see* Restatement (Second) of Trusts § 205(a), (c) (1959).

⁵⁹ Md. Dep't of Nat. Resources v. Amerada Hess Corp. (1972) 1067.

benefitting the public interest.⁶⁰ Privatization may not occur where the "primary purpose" is to benefit a private party or where alienation substantially impairs the public's interest in remaining trust assets.⁶¹

Procedural duties include:

- (1) Maintain uncompromised loyalty to the beneficiaries.⁶² Courts require trustees to avoid all conflicts of interest so as to eliminate even the *possibility* for any temptation towards self-dealing. Courts invalidate trust transactions tainted by conflicts of interest regardless of whether the trustee acted in good faith.⁶³ Logically, this duty would bar legislative trustees from deciding matters on which campaign contributions from industry may instill self-interest in their decision-making.
- (2) Do not favor one class of beneficiaries over the other. As one court opinion states, "The trust's beneficiary designation has two obvious implications: first, the trustee has an obligation to deal impartially with all beneficiaries and, second, the trustee has an obligation to balance the interests of present and future beneficiaries."
- (3) Adequately supervise agents. A trustee must use "reasonable care in . . . supervising [an agent] to whom he legally delegates the use of a trust power." In the public trust context, this duty requires legislative oversight of executive branch agencies delegated with the power and duty of trust management.
- (4) Exercise good faith and reasonable skill in managing the assets. A trustee must employ "such vigilance, sagacity, diligence and prudence" as people would in managing their own affairs. 66 This duty requires agencies to strictly apply their expertise and authority to further the public's interest. Decisions made on political grounds violate this duty.
- (5) Use caution in managing the assets.⁶⁷ Trust law does not allow trustees to enter risky ventures. Applied to the public trust context, this standard invokes the precautionary principle in managing natural assets.
- (6) Provide a trust accounting. Trustees must furnish information to the beneficiaries regarding trust management and asset health.⁶⁸

⁶² See Geer v. Conn. (1896) 529; see also Robinson Twp. v. Commonwealth (2013) 957.

⁶⁰ See Illinois Cent. R.R. v. Illinois (1892) 453; see also Lake Mich. Fed'n v. U.S. Army Corp. of Eng'rs (1990) 445.

 $^{^{61}}$ Id

⁶³ Bogert (1987) 341-47.

⁶⁴ Robinson Twp. v. Commonwealth (2013) 959.

⁶⁵ Bogert (1987) 328–30.

⁶⁶ See Restatement (Third) of Trusts (2007) § 77(2),(3); see also Bogert (1987) 334.

⁶⁷ See Bogert (1987) 366–67; see also In re Water Use Permit Applications (2000) 450-53.

VII. Judicial Enforcement

The cornerstone of any trust lies in judicial enforcement: "The check and balance of judicial review provides a level of protection against improvident dissipation of an irreplaceable res." Citizen beneficiaries have standing to bring public trust claims against government officials, and courts have broad injunctive powers to enforce the public trust obligations of both legislatures and agencies. A court may overturn a statute as constitutionally invalid under the public trust. As one court stated, "The very purpose of the public trust doctrine is to police the legislature's disposition of public lands." The political question defense has no legitimate role in most public trust actions, because it would eviscerate review of the trustee's performance. While courts sometimes show deference to a legislature in balancing trust concerns, judicial invalidation or veto should occur when damage to a trust resource is "irreparable or not reparable within a reasonable time." Where a court finds a statute inconsistent with the trust, a legislative remand may be appropriate.

Arising outside of statutory law, substantive trust claims may demand a macro-level analysis as to the functional health of the asset as a whole. Automatic judicial deference to agencies is not appropriate, and courts may have to rely on outside experts to determine whether the agency trustee met its obligations. The remedy in macro-scale trust cases may (unlike most statutory cases) address multiple defendant agencies, each having different jurisdictional mandates. In other contexts of institutional litigation, such as those involving prison reform, land use, treaty rights, and civil rights, courts have developed effective ways of supervising recalcitrant agencies and requiring affirmative action.⁷⁴ Courts begin by defining the agency obligations through a declaratory judgment. They invoke broad injunctive powers to require a plan for restoring a damaged trust asset. Courts may retain continuing supervision to ensure full implementation of the plan and may hold both agency and legislative trustees in contempt of court for failing to carry out their duties.⁷⁵

Litigation forcing the cleanup of Manila Bay provides a leading example of modern judicial trust enforcement. There, the Philippines Supreme Court ordered a dozen separate agencies to clean up Manila Bay pursuant to a plan supervised by the court under its continuing

⁶⁸ See Restatement (Third) of Trusts (2007) § 82(1); see also 76 Am. Jur. 2d Trusts (2014) § 371.

⁶⁹ Ariz. Ctr. for Law in the Pub. Interest v. Hassell (1991) 169.

⁷⁰ Ctr. for Biological Diversity, Inc. v. FPL Group (2008) 600.

⁷¹ See Robinson Twp. v. Commonwealth (2013) 985; Lake Mich. Fed'n v. U.S. Army Corps of Eng'rs (1990) 446.

⁷² Lake Mich. Fed'n v. U.S. Army Corp. of Eng'rs (1990) 446. See also Robinson Twp. v. Commonwealth (2013) 929-30 (rejecting political question defense).

⁷³ Grant (2001) 880.

⁷⁴ Wood (2014) 282-306.

⁷⁵ See Cobell v. Salazar (2009); See also McCleary v. State (2012) 262.

jurisdiction.⁷⁶ The court invoked a mandamus remedy, making clear that agencies had a "ministerial duty," rather than agency discretion, to protect the bay, and that such duty "would not be set to naught by administrative inaction or indifference."77

VIII. Private Property and the Public Trust

The PTD presents an accommodation between reserved public property rights and acquired private property rights.⁷⁸ A parcel granted in violation of the trust is subject to revocation without compensation, and the state may enforce the trust against "lands long thought free of the trust."⁷⁹ Antecedent public trust rights continue to encumber parcels conveyed into private ownership. The public rights (called jus publicum) combine with the private rights (called jus privatum) to form full title.80

The jus publicum may take the form of an easement allowing public access over the property (for example, areas along waterways below the high water mark and, in some cases, dry sand beaches) or a servitude protecting ecology. 81 Because the jus publicum forms a pre-existing and inalienable right that "inhere[s] in the title itself," a private property owner will not be entitled to compensation under the American takings clause when the public exercises its right.⁸²

IX. International Reach and Applicability to Global Resources

Recognizing that some of the most urgent ecological crises involve planetary life systems that span national jurisdictional boundaries, some scholars urge a global co-trustee model for the atmosphere, oceans, and other planetary assets. 83 The approach recognizes that the public trust doctrine is perhaps the only principle (absent a treaty) with pan-global recognition that can provide a common global platform of fiduciary duty enforceable by domestic courts.⁸⁴ Under this construct, all sovereigns (and their subdivision states) stand as co-tenant trustees with universal fiduciary obligations towards the shared global assets. A broad duty of protection can

⁷⁸ Blumm (2010) 651; see also Blumm & Wood (2013) 285-304.

⁷⁶ See Metro. Manila Dev. Auth. v. Concerned Residents of Manila Bay, G.R. No. 171947–48 (S.C., Dec. 18, 2008) (Phil.).

⁷⁹ Nat'l Audubon Soc'v v. Superior Court (1983) 723; see also Illinois Cent. R.R. v. Illinois (1892) 453.

80 Marks v. Whitney (1971) 379.

⁸¹ See Esplanade Properties, LLC v. City of Seattle (2002) 985-86; see also Matthews v. Bay Head Imp. Ass'n (1984) 323-24.

⁸² Stevens v. City of Cannon Beach (1993) 456 (citing Lucas v. S. Carolina Coastal Council, 505) US 1003(USSC 1992)).

⁸³ Using the Public Trust Doctrine to Achieve Ocean Stewardship, chapter in Rule of Law for Nature (Christina Voight & Hans-Christian Bugge, eds) (2013); Atmospheric Trust Litigation, chapter in Adjudicating Climate Change: Sub-National, National, And Supra-National Approaches (William C.G. Burns & Hari M. Osofsky, eds.) (2009). 84 See id.

be scaled from the global to the national level and enforced in domestic judicial forums worldwide.

This approach has inspired a global Atmospheric Trust Litigation (ATL) campaign on behalf of youth to address climate crisis. Asserting a fiduciary obligation to protect the atmosphere as a common public trust asset, the campaign seeks to force carbon emissions reduction by invoking authority in the domestic judicial systems of states and nations. Cases and petitions launched by the organization Our Children's Trust (OCT) seek enforceable carbon reduction plans to implement a prescription for annual carbon reduction developed by some of the world's leading climate scientists.⁸⁵

X. Conclusion

Statutory law has dominated the environmental field for 40 years. Its permitting systems have allowed colossal damage to life-sustaining resources. In face of looming ecological calamities to which the political branches have not responded, the judiciary's ability to apply the PTD could prove crucial to the welfare of current and future generations. Public trust jurisprudence already shows inherent capacity and inclination to expand to meet modern concerns. The PTD embraces principles outside of statutory law that lie constitutionally embedded in government sovereignty.

Courts may find it difficult to imagine a legal mandate outside of statutory law, particularly since governments have systematically ignored their trust obligation for a very long time. However, no area of law should be defined by its violation. As it has in the past, the Public Trust Doctrine surfaces again to protect the interests of citizens and their posterity in crucial natural resources.

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⁸⁵ Hansen, *et. al.* (2013). For litigation materials, see Our Children's Trust (http://ourchildrenstrust.org/).

Bibliography

Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011).

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

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

Blumm, Michael C. & Schaffer, Lynn, *The Federal Public Trust Doctrine: A Law Professors' Amicus Brief*, pg. 19, 2014.

Blumm, Michael C. & Wood, Mary C., *The Public Trust Doctrine in Environmental and Natural Resources Law*, Carolina Academic Press, Durham, N.C., 2013.

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

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

Bogert, George T., ET AL., Trusts and Trustees (West rev. 2d ed. 1980).

Bogert, George T., Trusts (West 6th ed. 1987).

Cobell v. Salazar, 573 F.3d 808 (D.C. Cir. 2009).

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

Costello v. Costello, 209 N.Y. 252 (1913).

Ctr. for Biological Diversity, Inc. v. FPL Grp., Inc., 83 Cal Rptr 3d 588 (2008).

Davidson, John Edward, *Draft Atmospheric Trust Litigation Amicus Brief*, (Nov. 30, 2013), *available at* SSRN:http://ssrn.com/abstract=2361780.

Esplanade Properties, LLC v. City of Seattle, 307 F3d 978 (9th Cir 2002).

Geer v. Conn., 161 U.S. 519 (1896).

Grant, Douglas L., Underpinnings of the Public Trust doctrine: Lessons from Illinois Central Railroad, 33 Ariz. St. L. J. 849 (2001).

Hansen, James, Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature (2013); PLOS One, http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0081648.

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

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

Justinian, The Institutes, 1.2.1, 2.1.1 (T. Sandars trans. 1st Am. Ed. 1876).

Kootenai Envtl. Alliance. v. Panhandle Yacht Club, 671 P.2d 1085 (1983).

Lake Mich. Fed'n v. U.S. Army Corp. of Eng'rs, 742 F. Supp. 441 (N.D. Ill. 1990).

Locke, John, Second Treatise of Civil Government, Chapter XIII, § 149 (1689).

Marks v. Whitney, 491 P.2d 374 (1971).

Matthews v. Bay Head Imp. Ass'n, 95 NJ 306 (1984).

McCleary v. State, 269 P3d 227 (2012).

Md. Dep't of Nat. Resources v. Amerada Hess Corp., 350 F. Supp. 1060 (D. Md. 1972).

Metro. Manila Dev. Auth. v. Concerned Residents of Manila Bay, G.R. No. 171947–48 (S.C., Dec. 18, 2008) (Phil.).

Nat'l Audubon Soc'y v. Superior Court, 658 P.2d 709 (1983).

Oposa v. Factoran, G.R. No. 101083 (S.C. Phil. 1993), reprinted (excerpt) in Jan G. Laitos, et. al. Natural Resources Law 2d. 668-72 (2012).

Parks v. Cooper, 676 N.W.2d 823 (S. D. 2004).

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

Reliance Natural Res. Ltd. v. Reliance Indus. Ltd., 7 S.C.C. 129 pt. I, ¶11 (India 2010).

Restatement (Second) of Trusts (1959).

Restatement (Third) of Trusts (2007).

Rodgers, William H., Amicus Curiae Brief of Law Professors in Support of Granting Writ of Certiorari (2014),

http://ourchildrenstrust.org/sites/default/files/LawProfAmicusBrief.14.11.06.pdf.

Robinson Twp. v. Commonwealth, 83 A.3d 901 (Pa. 2013).

Sax, Joseph L., The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471 (1970).

Schaffer, Lynn S., Pulled from Thin Air: The (Mis)Application of Statutory Displacement to a Public Trust Claim in Alec L. v. Jackson, 19 Lewis & Clark L. Rev. ___ (2015).

Speth, James Gustave, The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability (Yale U. Press 2008).

Stevens v. City of Cannon Beach, 854 P2d 449(1993).

Takacs, David, *The Public Trust Doctrine, Environmental Human Rights, and the Future of Private Property*, 16 N.Y.U. Envtl. L.J. 711 (2008).

Torres, Gerald, & Bellinger, Nathan, *The Public Trust: The Law's DNA*, 4 Wake Forest Journal of Law & Policy 281 (2014):

Wilkinson, Charles F., The Public Trust Doctrine in Public Lands Law, 14 UC Davis L. Rev. 269 (1980).

Wood, Mary Christina, *Nature's Trust: Environmental Law for a New Ecological Age*, (Cambridge U. Press 2014).

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

United States v. White Mt. Apache Tribe, 537 U.S. 465 (2002).

33 U.S.C. § 2706 (1990).

42 U.S.C. § 9607 (1980).

76 Am. Jur. 2d *Trusts* § 371 (2014).