DRAFT VERSION

The Nature's Trust Paradigm for a Sustaining Economy, by Mary Christina Wood¹ Chapter in LAW FOR THE NEW ECONOMY, forthcoming Edward Elgar (2016)(edited by Prof. Melissa Scanlan)

Abstract

The current environmental regulatory system promotes a destructive and unsustainable economy. While environmental statutes supposedly aim to control harm inflicted by the industrial economy, in fact they perpetuate destructive economic activity by regularly authorizing permits to pollute and destroy. Corporations and profiteers controlling the bureaucratic apparatus use the law to drain the natural wealth of communities for their own profit. On those rare occasions when environmental regulation successfully halts destruction, the resulting narrative presents an impossible "jobs v. environment" conflict that undermines environmental law in the broader political milieu.

This chapter sets forth a legal paradigm called Nature's Trust that draws upon the public trust principle to support both economic prosperity and ecological integrity. The public trust is an ancient doctrine, manifest in every state in the United States and in many countries throughout the world, including India, Kenya, and the Philippines, to name a few. It requires government to act as a trustee with respect to the natural world and its elements. A fundamental component of democracy, the trust empowers citizens to hold government accountable for ecological protection. It also forms an inherent constraint on a private property regime that empowers colossal destruction. Finally, the Nature's Trust paradigm reformulates the role of the corporation in modern society, recognizing imbued fiduciary limitations arising from state charters.

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¹ Parts of this chapter are adapted from the author's book: MARY CHRISTINA WOOD, NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE (Cambridge University Press 2013).

I. Introduction: How Environmental Law Destroys Nature and Enables a Ruinous Economy

The commonly invoked "jobs versus environment" rhetoric over-simplifies a complex problem: our current environmental regulatory system lacks an economic approach that offers hope of prosperity consistent with ecological protection. Though it purportedly aims to control harm inflicted by the industrial economy, environmental statutes actually prop up that same economy by authorizing permits to pollute and destroy. When resources reach the point of collapse, the regulatory hammer finally comes down without an opportunity for planned economic transition towards benign productive enterprise.

Serious endemic flaws exist across the system as a whole. Developers, industrialists, and huge corporations exert relentless pressure on governmental officials to allow exploitation of natural resources, calculated to bring them enormous profit while diminishing the community commons. This pressure, constantly applied, erodes the will on the part of government officials to carry out the protective mandates of the law. Agencies fall prey to political capture and continue to issue permits until resources reach the point of near collapse. A new economy requires a new legal paradigm.

This chapter discusses the climate emergency and how the law must respond with a legal framework called Nature's Trust, conceived to reconstitute environmental law in countries throughout the world in response to the exigencies of the modern ecological age. It builds from an ancient duty embodied in the public trust doctrine, a legal principle that, in some form, has flowed through countless forms of government since time immemorial and remains vibrant in legal systems throughout the world. At its core, the doctrine declares public rights originally and inherently reserved to the people through their social contract with government. The trust remains an attribute of popular sovereignty that cannot be alienated by any legislature. This principle designates government as trustee of crucial natural resources and obligates it to act in a fiduciary capacity to protect and restore natural commonwealth for the beneficiaries of the trust, which are present and future generations of citizens. The public trust already exists in the law, "on the shelf," ready to be used. It offers the possibility of a new pressure point in climate crisis.

II. How the Law Must Respond to the Climate Emergency

Any effort to bring about a new economy must first respond to the climate imperative—a planetary emergency in which only a narrow window of time remains to prevent catastrophic climate disruption. The global challenge of CO2 emissions reduction finds unprecedented urgency due to Nature's own "tipping points"— dangerous feedback loops capable of unleashing uncontrollable, irreversible, "runaway" heating. The opportunity for slow, progressive change has long since closed, since already some feedback loops are underway. The challenge is to find leverage points in the law that respond to this short-term urgency while at the same time moving society and its legal systems forward towards a full paradigm shift that ripples across law, politics, culture, and the economy.

The search for levers will be aimless without a clear understanding of the ecological reality facing the world, as explained by the best available science. Restoring

climate equilibrium requires reducing atmospheric carbon dioxide levels to 350 parts per million (ppm). A global prescription developed by NASA's then chief climate scientist, Dr. James Hansen (in collaboration with an international team) aims to achieve atmospheric balance at 350 ppm by the end of the century. It presents two core requirements: emissions reduction and atmospheric drawdown of carbon dioxide.

A. Emissions Reduction

The prescription presents a "glidepath," of global annual CO2 emissions reduction towards an ultimate goal of near-zero emissions. If reduction begins in 2016, the amount annually necessary is 8 percent. However, if reduction is delayed until 2020, the required emissions reduction jumps to 15 percent a year – which may be too drastic for global society to accomplish. Leading scientists emphasize that the future survival of humanity hangs in the balance of rapid CO2 reduction, stating: "[D]elay in undertaking sharp reductions in emissions will undermine any realistic chance of preserving a habitable climate system. . . ."

To confront this climate emergency, a legal strategy must aim to both force governments worldwide to immediately reduce carbon dioxide emissions according to the prescription (or best available science) and divest corporations of their existing property rights to fossil fuel reserves. The strategy, called Atmospheric Trust Litigation (ATL), is underway and described below.

B. Atmospheric Carbon Dioxide Drawdown

Emissions reduction alone is no longer adequate to restore climate equilibrium. The Hansen team made clear a need to remove much of the carbon dioxide that has already accumulated in the atmosphere. Accordingly, the second part of the team's prescription calls for natural "drawdown" of 100 Gigatons of carbon dioxide through massive reforestation, improved agricultural measures, and mangrove and wetlands restoration.

Such drawdown becomes feasible through a global Atmospheric Recovery Plan (ARP) that would coordinate restoration projects around the world. Such projects would have co-benefits boosting employment, supporting food supplies, and creating resilience against climate catastrophes. A legal strategy is underway to develop a cooperative sovereign framework of global restoration and financing through natural resource damage actions brought against the "carbon majors" -- dominant fossil fuel companies that are both culpable for the planetary emergency and capable of funding its relief.⁴

The measures described above address only climate mitigation to stave off runaway heating from which there is no plausible recovery. In a world under ecological siege, all remaining natural resources carry a premium for human survival and welfare.

² 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, 4 (2013) [hereinafter Climate Prescription], http://www.plosone.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pone. 0081648&representation=PDF.

³ Amici Curiae Scientists Brief at 15–16, Alec L. *ex rel*. Loorz v. McCarthy, 561 Fed. Appx. 7, No. 13–5192, 2014 WL 3013301 (D.C. Cir. June 5, 2014).

⁴ Mary Christina Wood, & Daniel Galpern, *Atmospheric Recovery Litigation: Making the Fossil Fuel Industry Pay for Damages to the Atmosphere from Carbon Emissions*, 45 ENVTL. L. 259, 306 (2015).

A legal strategy, then, must be versatile and broad enough to protect the functioning of all remaining ecosystems.

III. The Need for a Paradigm Shift: the Nature's Trust Bridge from the Industrial Economy to a Sustaining Economy

Beyond responding to the climate emergency, a new legal paradigm must accomplish four main objectives if democracy and civilization have a chance of surviving into the future. First, in an era of collapsing ecosystems brought on by climate chaos, government must allocate crucial resources to the public rather than to private corporations – that is to say, the law must prevent monopolization. The current trend, however, is otherwise, as multinational corporations increasingly gain property rights to scarce water supplies. Second, the legal system must free democratic governments from corporate coercion exerted through campaign contributions. Absent that, leaders will continue to make decisions out of their own self interest to benefit their corporate funders rather than citizens. Third, the law must re-envision the character and decision-making latitude of corporations. Fourth, and most fundamentally, environmental law must re-orient to the non-negotiable laws of Nature. These laws determine, for example, climate tipping points and extinction vortexes. Modern environmental law has drifted far from Nature's reality.

Speth writes, "[W]e now approach the fork ahead.... Beyond the fork, down either path, is the end of the world as we have known it. One path beyond the fork continues us on our current trajectory... the abyss.... But there is the other path, and it leads to a *bridge across the abyss*."

A bridge presents the right image for our task. New paradigms do not magically materialize. They build from established footings in the law recognizable to society and its institutions. A leap too large will not be attempted by a legal system defined by adherence to precedent. At the same time, constructing a bridge towards a new paradigm does not mean merely reforming the law around the edges.

The public trust doctrine compels sovereign stewardship of crucial natural resources. Characterizing such resources as a trust for present and future generations of citizens, it designates government as a fiduciary charged with obligations to protect the resources from damage as well as monopolistic privatization. Roots of the trust are found in the Justinian Code of Roman Law, which declared that there can be no private exclusionary rights to *res communes*: "By the law of nature these things are common to

all mankind—the air, running water, the sea, and consequently the shores of the sea."

The doctrine rests on a civic and judicial understanding that some natural resources remain so vital to public welfare and human survival that they should not fall exclusively to private property ownership and control. The public trust doctrine reserves such resources to the people as a whole as a common endowment to be sustained by government through the ages. Even in the United States, with its highly libertarian private property rights culture, the public trust sets limits on human activities affecting

⁵ JAMES GUSTAVE SPETH, THE BRIDGE AT THE EDGE OF THE WORLD: CAPITALISM, THE ENVIRONMENT, AND CROSSING FROM CRISIS TO SUSTAINABILITY 236–37 (Yale U. Press 2008).

⁶ J. INST., 2.1.1. (T. Sandars trans., 4th ed. 1867).

ecology. The concern of the public trust is both intra-generational and intergenerational.⁷ It poses an anti-monopolization mandate, keeping crucial resources open for access to the public. It also secures ecological rights for children and future generations, aiming towards intergenerational justice.

Deriving from property law, the trust forms a counterweight to existing private property rights and government's discretionary police power, both of which now drive much natural resource destruction. As trustee, government must promote the interests of the citizen beneficiaries and ensure sustained resource abundance necessary for society's endurance. The U.S. Supreme Court declared in *Geer v. Connecticut*: "[I]t 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." This duty arises as a limitation on government, an expectation embedded in the popular sovereignty held by the people. Long predating any statutory law, these public rights ranks so fundamental that some scholars describe them as natural rights or human rights.

Although longstanding in a variety of countries, advocates have largely overlooked the doctrine in favor of environmental statutes. Passed in the 1970s in the US, these statutes produced thousands of implementing regulations that obfuscate the public trust. Most agency regulators have never heard of the public trust, familiar only with their statutory discretion to allow ecological damage through the permit system.

Recently, lawyers, citizens, judges, and regulators have begun to unearth these principles and apply them to environmental controversies. Revived in modern bureaucracy, the trust would introduce an old-but-new limitation on government as it acts through statutory structures. The legal force of the public trust occurs through the fiduciary standards to which government trustees are held to account for their actions.

A. Res Communes

The trust *res* consists of natural bounty protected by restrictions designed to serve the trust's purpose. The trust "*res*" consists of "*res communes*," which are, in their Roman law origins, "things owned by no one and subject to use by all: things (as light, air, the sea, running water) incapable of exclusive ownership." Subject to government fiduciary duties of protection and restoration, the *res communes* must sustain future generations. Courts consistently look to the needs of the public when defining the scope of the trust *res*, applying a "public concern" test from the landmark US Supreme Court case, *Illinois Central Railroad v. Illinois*. That 1892 case involved a legislative conveyance of Chicago's waterfront along Lake Michigan to a private railroad company. At the time, lakebeds served a vital role for fishing, navigation, and commerce. The Supreme Court declared the grant void, stating: "The ownership of the navigable waters of the harbor and of the lands under them is a subject of public concern to the whole people of the State."

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⁷ John Davidson, Address at Vermont Law School Climate Legacy Initiative Research Forum: *Taking Posterity Seriously: Intergenerational Justice*, (Jan. 2008).

⁸ Geer v. Connecticut, 161 U.S. 519, 534 (1896).

⁹ Res Communes, MERRIAM WEBSTER DICTIONARY, http://www.merriam-webster.com/dictionary/res%20communes (last visited July 26, 2016).

¹⁰ Ill. Cent. R.R. Co. v. Ill., 146 U.S. 387, 455 (1892).

The "public concern" rationale has led courts to greatly expand the scope of the trust to meet modern exigencies. As the New Jersey Supreme Court observed, "we perceive the public trust doctrine not to be 'fixed or static,' but one to 'be molded and extended to meet changing conditions and needs of the public it was created to benefit." Various courts now recognize biodiversity, wildlife habitat, aesthetics, and recreation as purposes of the trust. Aimed toward protecting these modern concerns, the doctrine now reaches well beyond its traditional scope to assets such as groundwater, wetlands, dry sand beaches, parks, non-navigable waterways, and most recently, air and atmosphere.

Leading public trust cases have recognized the intrinsic connections between different parts of Nature and have expanded the trust *res* to protect ecological function. The Hawaii Supreme Court, for example, held that groundwater must be considered part of the trust *res* because of its inseparability from surface water, stating, "Modern science and technology have discredited the surface–ground dichotomy." While a few courts still cling to an antiquated notion of navigability to define the scope of the public trust *res*, a recent court in Washington state held that the air and atmosphere were part of the public trust, noting that to separate air from recognized streambed trust resources would be "nonsensical."

A Nature's Trust paradigm extends the rationale of these cases to recognize public rights in protecting the full tapestry of Nature. The paradigm rejects the conceptual fracturing of resources that typifies environmental law, instead building from the recognition that Nature's various systems and elements operate in constant interaction to support life, welfare, and community prosperity. A Nature's Trust paradigm moves the existing public trust from a state-by-state iteration of public trust assets to the concept of a full "ecological res," encompassing waters, wildlife, soils, vegetation, forests, air, atmosphere, oceans, streambeds, wetlands, aquifers, and natural landscapes -- no matter where or in what jurisdiction they happened to be located. The Nature's Trust paradigm strives to match the reality of Nature's laws. Building on public trust jurisprudence that already recognizes human survival and welfare as dependent on Nature, the Nature's Trust paradigm expands the trust's legal sanctuary to the entire ecological web of life.

B. The Fiduciary Duties

Fiduciary duties form the core of any trust construct. The public trust imposes restrictions and obligations on government actors when managing trust resources. Environmental statutes give agencies tremendous authority to allow damage to natural resources, and they provide few (if any) enforceable mandates to act affirmatively in face of threats. The trust, by contrast, imposes duties on government trustees apart from statutory standards. As the Idaho Supreme Court stated in *Kootenai Environmental Alliance v. Panhandle Yacht Club, Inc.*, "[M]ere compliance by [agencies] with their

¹¹ Matthews v. Bay Head Improvement Ass'n, 471 A.2d 355, 365 (N.J. 1984). *See also* Melissa Scanlan, *Shifting Sands: A Meta-Theory for Public Access and Private Property Along the Coast*, 65 S.C. L. REV. 295, 325–27 (2013).

¹² In re Water Use Permit Applications, 9 P.3d 409, 447 (Haw. 2000). See also id. at 457 (the trust demands "the maintenance of ecological balance").

¹³ Foster v. Wash. State Dep't of Ecology, No. 14-2-25295-1 SEA, slip. op. at 8 (Wash. Nov. 19, 2015).

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 resources."14

The fiduciary duties are both substantive and procedural. ¹⁵ The substantive duties below have received frequent mention in public trust cases. However, the procedural duties have been largely overlooked until recently when a plurality of the Pennsylvania Supreme Court comprehensively iterated them in Robinson Township v. Pennsylvania. 16 The substantive fiduciary duties require a public trustee to:

- (1) Protect the subject of the trust (the res) from "substantial impairment." This is an active duty applicable to both direct and indirect action. Such duty therefore includes adaptive management.¹⁷
- (2) Conserve resources for future generations. Because "the beneficiaries of the public trust are not just present generations but those to come," a trustee must protect the *res* to sustain future beneficiaries.¹⁸
- (3) Maximize the societal value of natural resources by following three principles: a) do not allow squander of the resource; b) dedicate the resource to its highest public purpose; and c) do not allocate public resources primarily to serve the interests of private parties.¹⁹ Polluting uses of public trust assets characteristically violate one or more of these mandates.
- (4) Restore the trust res where it has been damaged.
- (5) Affirmatively seek to recover natural resource damages (NRDs) from third parties that harm or destroy public trust assets and use the financing for restoration.
- (6) Refrain from alienating (that is, privatizing) the trust, except when doing so furthers the "primary purpose" of the trust and does not "substantially impair" the public's interest in remaining trust assets.²⁰ Privatization may not occur where the primary purpose is to benefit a private party.

The procedural fiduciary duties require a public trustee to:

(1) Maintain uncompromised loyalty to the beneficiaries and avoid all conflicts of interest that give rise to even the *possibility* for any temptation towards self-dealing.

¹⁴ Kootenai Envtl. All., Inc. v. Panhandle Yacht Club, Inc., 671 P.2d 1085, 1095 (Idaho 1983).

¹⁵ For a full discussion of these duties, with supporting citations, see Mary Christina Wood, & Gordon Levitt, The Public Trust Doctrine in Environmental Decision Making, in Environmental Decision MAKING (2015).

¹⁶ Robinson Twp. v. Commonwealth of Pa., 83 A.3d 901, 957 (Pa. 2013) (plurality opinion).

¹⁷ See, e.g., Melissa K. Scanlan, Implementing the Public Trust Doctrine: A Lakeside View into the Trustees' World, 39 ECOLOGY L.Q. 123, 135-37 (2012).

¹⁸ In re Water Use Permit Applications, 9 P.3d 409, 455 (Haw. 2000).

¹⁹ Id. at 450–51.

²⁰ Ill. Cent. R.R. Co. v. Ill., 146 U.S. 387, 453 (1892).

Enforced against government trustees, this principle could counter the corruptive influence of campaign contributions from industries that expect favorable regulatory treatment in return. While the Citizens United decision would still allow massive campaign contributions, courts enforcing this trust duty could void and remand tainted decisions, thereby draining the incentive behind campaign financing.

- (2) Do not favor one class of beneficiaries over the other: "[T]he trustee has an obligation to deal impartially with all beneficiaries."²¹
- (3) Adequately supervise agents. In the public trust context, this duty requires legislative oversight of executive branch agencies delegated with the power of trust management.
- (4) Exercise good faith and reasonable skill in managing the assets. A trustee must employ the same vigilance that they would in managing their own affairs. This duty requires agencies to 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 and avoid entering into risky ventures. This standard would invoke the precautionary principle in managing natural systems.
- (6) Provide a trust accounting and furnish information on trust management and asset health to the beneficiaries.

Viewed in aggregate, these obligations present a necessary paradigm shift for environmental law, forcing a phase-out of legalized destruction through permits and compelling a full-scale restoration program financed by industries that have polluted or destroyed resources. The challenge becomes injecting these obligatory duties of a trustee into a bureaucratic structure imbued with statutory permission to destroy Nature. A constitutional underpinning becomes necessary.

C. Constitutional in Nature

Modern scholars and judges increasingly recognize the constitutional force of the public trust doctrine.²² In *Robinson Township*, a plurality of the Pennsylvania Supreme Court described the trust as embodying the "inherent and indefeasible" rights of citizens reserved though their social contract with government.²³ A similar approach was taken in a Washington case, leading that court to declare a constitutional right to a healthy climate system. Most recently, a magistrate judge in a pending federal atmospheric trust case in Oregon found a federal constitutional public trust duty embodied in the Due Process Clause of the Fourteenth Amendment of the US Constitution, stating: "The doctrine is

Robinson, 83 A.3d at 959.
 See, e.g., Gerald Torres & Nate Bellinger, The Public Trust: The Law's DNA, 4 WAKE FOREST J.L. & PoL'Y 281, 288 (2014) (suggesting the public trust doctrine laid the foundation for the Constitution).

²³ Robinson, 83 A.3d at 948.

deeply rooted in our nation's history and indeed predates it."²⁴ The constitutional nature of the public trust empowers courts to overturn statutory provisions that violate a legislature's fiduciary obligations towards its present and future citizens.

D. Macro in Focus

Statutory law splinters management of natural resources among a multitude of agencies, designating each with a particular facet of responsibility. Statutory enforcement typically amounts to micro claims directed at just one agency and just one type of violation – often a procedural violation. Judicial remedies for these statutory transgressions fail to solve problems that have reached systemic levels of dysfunction across several agencies. Public trust claims allow a macro approach to modern ecological problems by focusing on the natural system (or element) as a whole and its core functioning needs. This may mean holding a multitude of agencies accountable to their fiduciary responsibilities in one enforcement action. In the pending federal case against the Obama administration challenging the US fossil fuel regime, youth plaintiffs named nearly a dozen federal agencies as defendants. In these cases, courts must innovate systems-wide, macro-scale remedies in order to address trust mismanagement on a systemic level.

E. A Pan-sovereign Global Instruction

Because trust duties infuse sovereignty, citizens may summon fiduciary obligations against government actors without reinventing statutory law (an impossible task given the urgency of a climate response and ecological restoration). The public trust exists in every state in the United States and is manifest in many nations world-wide. A growing number of legal thinkers urge the application of public trust principles to unprecedented problems of global ecology. As Ved Nanda and William Ris observe: "The principles of public trust are such that they can be understood and embraced by most countries of the world."²⁵

Nature's Trust characterizes global environmental syndromes as matters of property law in which a set of discernable rules can promote a common, civilized plan to protect planetary life-systems such as the atmosphere and oceans – even in a world governed by multiple sovereigns with fragmented jurisdiction over the planet. The trust framework regards nations as sovereign trustees of natural resources, co-tenants with reciprocal and correlative duties towards each other in the conduct affecting the common Earth Endowment. By packaging problems of planetary ecology in property terms, the trust framework enables domestic courts of various nations to summon clear and enforceable fiduciary standards to hold political leaders accountable for global ecological duties. In theory, such standards could be enforced on the domestic level using principles that remain relatively uniform across jurisdictional sovereign borders.

²⁴ Juliana v. U.S., No. 6:15-cv-1517-TC, 2016 WL 1442435, at *11 (Or. Apr. 8, 2016).

²⁵ Ved P. Nanda & William K. Ris, Jr., *The Public Trust Doctrine: A Viable Approach to International Environmental Protection*, 5 ECOLOGY L.Q. 291, 306 (1976).

IV. Atmospheric Trust Litigation (ATL) as an Application of the Nature's Trust Framework

To recap, the Nature's Trust paradigm would extend the public trust duty of protection to all life systems on Earth, and hold all governments, as trustees of shared resources, accountable for preventing "substantial impairment" to the function of such systems. The legal framework connects directly to Nature's laws by seeking the best available science to determine appropriate actions.

The atmospheric trust litigation (ATL) campaign presently underway shows how the law can allocate collective responsibility calibrated directly to Nature's requirements for the atmosphere. In 2011, the non-profit, Our Children's Trust, launched a global campaign to force urgent carbon emissions reduction around the world. Originally, this consisted of lawsuits and administrative petitions lawyers filed on behalf of children against all fifty states and the federal government. In September 2015, the children brought another federal lawsuit against the Obama Administration challenging the federal government's entire fossil fuel regime. The children's lawyers are bringing further actions and coordinating actions with partners in other countries as well. The campaign represents an unprecedented effort at forcing a coherent approach to a global crisis using the judicial system.

Invoking the public trust doctrine, all of the actions declare a uniform sovereign trust duty to protect the atmosphere needed by the youth and future generations for their long-term survival. They seek enforceable Climate Recovery Plans from government trustees to reduce carbon emissions at the rate called for by the scientific prescription formulated by the Hansen team of scientists (or best available science). Unlike prior climate litigation brought under statutory law or nuisance law -- suits geared towards isolated parts of the climate problem -- ATL presents a macro approach to the climate crisis by focusing on the atmosphere as a single public trust resource. As Dr. James Hansen declared in an amicus brief in one atmospheric trust case, judicial relief in these cases "may be the best, the last, and, at this late stage, the only real chance to preserve a habitable planet for young people and future generations."²⁷

The youth plaintiffs in the pending federal Oregon case (which combines a public trust claim with Constitutional due process and equal protection claims) gained a strong initial victory on April 8, 2016 when Magistrate Judge Thomas Coffin recommended denial of the government's and fossil fuel interveners' motions to dismiss in all aspects.²⁸ The court stated: "Given the allegations of direct or threatened direct harm, albeit shared by most of the population or future population, the court should be loath to decline standing to persons suffering an alleged concrete injury of a constitutional magnitude."²⁹

V. The Fiduciary Corporation

²⁶ Gabriel Nelson, *Young Activists Sue U.S.*, *States Over Greenhouse Gas Emissions*, N.Y. TIMES (May 5, 2011), http://www.nytimes.com/gwire/2011/05/05/05greenwire-young-activists-sue-us-states-over-greenhouse-64366.html?pagewanted=all.

²⁷ Amicus Brief for Dr. James Hansen at 7, Alec L. v. Jackson, No. C-11-2203 EMC, (Cal. Nov. 14, 2011), 2011 WL 8583134.

²⁸ Juliana, supra note 24, at *7.

²⁹ *Id*. at *4.

The Nature's Trust paradigm re-frames the corporate identity itself. Corporations, having no *actual personhood*, are legal entities created by state-issued charters, thus bound by the same public fiduciary responsibilities as the governments that created them. When the state enables a corporation through charter, its public trust duty to the citizens necessarily flows through the charter as a fiduciary limit, an inherent encumbrance, to constrain the acts of the corporation. It would be difficult to imagine otherwise, as the state cannot constitutionally abrogate its trust responsibility to the people. The state can give no more power to a corporation – a creature of the state – than it gained from the people. A Nature's Trust paradigm recognizes an embedded public trust limitation on the otherwise internally unconstrained power of corporations to destroy public resources. Out of this concept arises a transformational characterization: the fiduciary corporation.

In Speth's earlier chapter, he urges a transformation of corporations to orient them towards benefiting stakeholders and not just shareholders. Revealing the corporation as a state-creature born within the cradle of sovereign fiduciary responsibility suggests an internal corporate obligation (already present but unrecognized) to protect Nature's trust for future generations. Activating this fiduciary duty would change the decision-making equation to incorporate environmental responsibility that corporations have been content to ignore in a single-minded pursuit of profit. Violation of public fiduciary duties should provide cause for corporate charter revocation.

VI. Re-orientation of Property Law

American property law is characteristically described as a highly individualistic regime giving landowners almost unfettered liberty to: 1) exert full dominion over all parts of Nature found within boundaries described on a deed; 2) destroy natural bounty with no concern for what remains for later landowners or future generations; and 3) assert monopolistic exclusion of others despite community need for resources such as water. In a climate-chaotic future with scarce resources, these features of private property law will threaten community welfare.

Private property rights remain inadequately limited by regulatory law (deriving from statutes) due to the political power that vested interests hold over regulatory agencies. A paradigm for a sustaining economy must include a formidable counterweight to private property rights – one that situates ownership in balance with the needs of the community (both the natural and human community) and protects vital resources for future generations. This counterweight must hold the force of a superior law, because once property rights have vested, governments such as the U.S. cannot extinguish them without monetary compensation.³⁰

The public trust doctrine represents the other, lesser known, side of property law – seemingly the only established legal doctrine that can adequately temper established private property rights. The *Illinois Central* test allows privatization of public trust assets only where: (1) the grant promotes the interests of the public; and (2) the grant does not *substantially impair* the public interest in the lands and waters remaining.³¹ Even when trust lands and resources are properly alienated under this test, private property

³⁰ U.S. CONST. amend. IV.

³¹ Ill. Cent. R.R. Co. v. Ill., 146 U.S. 387, 452 (1892).

owners remain subject to the superior, antecedent rights of the public in such resources. The public rights (called *jus publicum*) combine with the private rights (called *jus privatum*) to form full title,³² and the two sets of rights operate together within a frame of accommodation. 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) or a servitude protecting ecology.³³ 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.³⁴

When government conveys property rights to a resource in violation of the alienation test above, the private property owner never legitimately acquires full private property rights to the trust property, because the legislature had no authority to alienate such property out of the trust. Therefore, the *Illinois Central* Court held that the railroad's title to the lakebed could be revoked without compensation where the private title conflicted with the purpose of the trust. This revocation authority finds modern affirmation in the American *Mono Lake* case, where the California Supreme Court declared that "the continuing power of the state as administrator of the public trust . . . extends to the revocation of previously granted rights." Such public trust jurisprudence may prove indispensible to divesting fossil fuel corporations of their claimed rights to coal, oil, and natural gas reserves.

In sum, the public trust principle presents a powerful and necessary accommodation between reserved public property rights and acquired private property rights by 1) limiting privatization of crucial resources; 2) empowering government to revoke, without compensation, private property rights to wrongfully alienated trust property (when doing so proves necessary for resource protection); 3) imposing a continuing restraint on private landowners to protect the public's interest in trust resources. It is vital to understand that the public trust principle holds its remarkable legal force precisely because it operates *within* the property rights framework. It is the only existing, anciently established doctrine that sets supreme, recognized limits on private property rights affecting ecology. And by presenting public property rights to protect natural ecosystems, the doctrine broadcasts the importance of ecology to human survival and community welfare.

The key mistake of the industrial legal tradition lies in the assumption that privatization could extend to the natural world as it does to any material object – allowing owners to alter and destroy Nature's parts at their whim. Operating within this realm of property law, the *ecological res* concept overrides industrial dominion in its totality, while still recognizing private rights to quiet enjoyment and usafructory occupation of titled land. A Nature's Trust concept presents a fiduciary construct of private property ownership, subjecting the owner's use and privacy rights on boundary-defined land to superior community and generational rights to protect the *ecological res* within the claimed private lot. Nature's Trust broadly views all "property rights" to crucial ecology

³² Marks v. Whitney, 491 P.2d 374, 379 (1971).

³³ See, e.g., Esplanade Properties, L.L.C. v. City of Seattle, 307 F.3d 978, 985–86 (9th Cir. 2002).

³⁴ Stevens v. City of Cannon Beach, 854 P.2d 449, 456 (Or. 1993).

³⁵ Nat'l Audubon Soc'y v. Superior Court of Alpine Co., 658 P.2d 709, 723 (1983); see also Illinois Cent. R.R., 146 U.S. at 453.

as usufruct rights or life-tenancies only, encumbered with the duty not to waste or cause substantial impairment to the rhythms of Nature, its life-systems, its communities, or its landscapes. Justice Christopher Weeramantry, former judge on the International Court of Justice, articulated this construct when he wrote, "[L]and is never the subject of human ownership, but is only held in trust, with all the connotations that follow of due care, wise management, and custody for future generations." The India Supreme Court similarly stated in a leading public trust opinion: "[E]very person exercising his or her right to use the air, water, or land and associated natural ecosystems has the obligation to secure for the rest of us the right to live or otherwise use that same resource or property for the long term and enjoyment by future generations." ³⁷

VII. Bridge Terminology

The language traditionally invoked in public trust cases has both benefits and drawbacks. Because courts often use terms such as public trust "assets" or "resources" – terms that have no ready substitute in the English language — to indicate the coverage of trust protection, some may perceive the doctrine as anthropogenic. The critique is too simplistic. The trust construct deals not with the relationship of humans to Nature, but rather the relationship of citizens to the government they empower. The principle arises out of sovereignty, democracy, and concern for human rights — all of which are presumably "anthropocentric" (dealing with human relations), but nevertheless legitimate and inspirational ideals of human society. The principle secures inalienable rights of citizens to force the government they empower to protect crucial resources for their survival and for future generations. As one justice of the Massachusetts Supreme Court explained in a tidelands case, "[T]he public trust doctrine stands as a covenant between the people of the Commonwealth and their government, a covenant to safeguard our tidelands *for all generations* for the use of the people."

As a bridge towards a post-industrial law of stewardship, the public trust may reframe divisive ecological conflicts precisely because it brings human-held values (such as liberty, equality, human rights, and democracy) into the discussion of environmental policy. For those many Americans who remain openly hostile to the environmental movement, having been fully alienated from its objectives by the fracturing narrative of "environment versus jobs," the description of ecological resources as public trust "assets" yielding "ecosystem services" may be a gateway towards recognizing ecological stability as both essential to economic security and a linchpin to other values they cherish.

Nature's Trust moves beyond transition terminology, using the term *ecological* res to signify a full natural world beyond the grasp of private property exploitation and dominion. A Nature's Trust approach characterizes Earth as a full community of balance with both human and natural communities as beneficiaries of the trust. The holistic conception of an *ecological* res within Nature's Trust finds compelling synergy with an approach known as Earth Jurisprudence, which aims towards "expanding the legal

³⁶ Gabčíkovo-Nagymaros Project (Hung v. Slovk), Judgment, 1997 I.C.J. Rep. 7, 108 (Sept. 25) (separate opinion by Weeramantry, J.).

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³⁷ Fomento Resorts and Hotels Ltd. v. Minguel Martins, (2009) Civ. App. No. 4154 of 2000 (India).

³⁸ All. to Protect Nantucket Sound v. Energy Facilities Siting Bd., 932 N.E.2d 787, 816 (Mass. 2010).

consideration of nature."³⁹ Professor Judith Koons explains, "In this [Earth Jurisprudence] ethic, the role of humanity changes 'from conqueror of the land-community to plain member and citizen of it."⁴⁰ A proposed public trust ordinance drafted (not enacted) for Portland, Oregon forges such ground by identifying both citizens and natural communities as beneficiaries of the public trust to which the sovereign duty of protection is owed, underscoring the "right of local ecology to exist and flourish."⁴¹

VIII. Cultural Enlightenment: Synergy with Moral, Spiritual, and Religious Approaches

Law has the most powerful effect when it reflects deep moral and/or religious understandings in society. Indeed, one of the great weaknesses of environmental statutory law is its wholesale reliance on techno-jargon and procedural requirements that fail to inspire human protection of Nature. The Nature's Trust paradigm dovetails with powerful religious and moral conceptions of the duty to protect the natural world.

The paradigm taps the impulse of human beings to protect a natural legacy for children and the coming generations. As the Philippines Supreme Court stated in a landmark public trust decision, *Oposa v. Factoran*: "[E]very generation has a responsibility to the next to preserve that . . . harmony [of Nature] [The] right [to a balanced ecology] concerns nothing less than self-preservation and self-perpetuation[,] . . . the advancement of which may even be said to predate all governments and constitutions. . . ."⁴²

The world's major religions appear to observe a sacred trusteeship running parallel to the legal trust concept. In a Creation Address, Catholic Pope Benedict XVI declared that God's grant of "dominion" to humankind came entrusted with strong stewardship obligations:

[N]ature is a gift of the Creator Everything that exists belongs to God, who has *entrusted it to man*, albeit not for his arbitrary use. . . . Man thus has a duty to

exercise responsible stewardship over creation, to care for it and to cultivate it. Justice Weeramantry points to a similar trusteeship paradigm operating in Islam, Buddhism, and Hinduism religions. Describing Islamic notions of trust, he writes:

[A] reason why, in Islam, humans are expected to protect the environment is that no other creature is able to perform this task. Humans are the only beings that God has "entrusted" with the responsibility of looking after the earth. . . . The planet was inherited by all humankind and all its posterity from generation to generation Each generation is only the trustee.⁴⁴

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³⁹ Patricia Siemen, Earth Jurisprudence: Toward Law in Nature's Balance, 11 BARRY L. REV. 1, 2–3 (2008).

⁴⁰ Judith Koons, *Earth Jurisprudence*, 25 PACE ENVTL. L. REV. 263, 265, 339 (2008) (quoting Aldo Leopold, *The Land Ethic*, *in* A SAND COUNTY ALMANAC 204 (1949)).

⁴¹ Portland Or., Draft Ordinance to Create the People's Water Trust (Oct. 28, 2013), https://www.portlandoregon.gov/auditor/59271?a=474699.

⁴² Oposa v. Factoran, G.R. No. 101083 (S.C., July 30, 1993) (Phil.).

⁴³ MARY CHRISTINA WOOD, *supra* note 1, at 279 (citing Pope Benedict XVI, Address For the Celebration of the World Day of Peace, *If You Want to Cultivate Peace*, *Protect Creation* (January 1, 2010) (transcript available at https://www.pope2you.net/download/messaggio%20pace%20ENG.pdf).

⁴⁴ *Id.* at 279–80 (quoting Justice Weeramantry).

A lengthy edict issued by Pope Francis, *Laudato Si*, describes a sacred trust by pronouncing Earth "a common home" that God "entrusted" to humans.⁴⁵ Focusing on the restraint imposed by a trust, Pope Francis writes: "A fragile world, *entrusted by God to human care*, challenges us to devise intelligent ways of directing, developing and limiting our power."⁴⁶ Iterating the same concern for future generations found in the public trust, he writes: "Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who will follow us."⁴⁷

Ultimately, the Nature's Trust paradigm strives towards an indigenous concept. Traditional native cultures, while by no means generic, characteristically show reverence towards the Creator's gifts, concern for future generations, and an orientation towards the laws of Nature. But the native worldview is complex, refined by millennia of human experience and traditional ecological knowledge, passed down through oral history. In many native societies, law remains inseparable from religion, such that community restraints find inherent reinforcement with the spiritual and moral understandings of the community. This seamless fusion between law and religion forms a worldview utterly foreign to modern industrial society, which has detached humans from Nature, divorced environmental law from the moral pulse of humanity, and embarked on a wholly secular and technocratic course in dealing with the catastrophic environmental syndromes it has caused.

The Nature's Trust construct recognizes tribes as sovereigns having a legitimate and central co-trustee role in ecological management. In the Pacific Northwest, where Indian people have lived for 10,000 years in dependence on salmon, the tribes now assert sovereign co-leadership in major ecological disputes of the region. Often voicing values and visions far outside the rhetoric of state and federal agents, tribal leaders have played a crucial role in bringing wolves back to the mountains and keeping salmon alive in the rivers. By recognizing a tribal co-trusteeship, the Nature's Trust paradigm may help society strive towards a new land ethic. As Indian law author Rennard Strickland once wrote, "If there is to be a post-Columbian future - a future for any of us - it will be an Indian future . . . a world in which this time, . . . the superior world view . . . might even hope to compete with, if not triumph over, technology."

IX. Conclusion

The statutory law that has dominated the environmental field for 40 years has legalized colossal damage to life-sustaining resources. In face of looming ecological calamity to which the political branches have not responded, the judiciary's willingness to enforce the public trust doctrine could prove crucial to the endurance of society. The public trust may provide a bridge "across the abyss" towards a Nature's Trust paradigm that would re-orient law towards balanced and sustaining interactions with the natural world.

⁴⁵ POPE FRANCIS, LAUDATO SI: ON CARE FOR OUR COMMON HOME ¶¶ 5, 13 (2015).

 $^{^{46}}$ Id. \P 232.

⁴⁷ *Id*. ¶ 159.

⁴⁸ RENNARD STRICKLAND, *Afterward* to TONTO'S REVENGE: REFLECTIONS ON AMERICAN INDIAN CULTURE AND POLICY 130 (1997).