STUDENT NOTE



The Public Trust as an International Solution to Climate Inaction

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Abstract

The public trust doctrine holds promise as a tool for combatting international climate inaction. A global public trust in the Earth's atmosphere may be a feasible avenue for generating international cooperation in this issue. The public trust doctrine is a viable and underutilized mechanism of understanding our collaborative obligations with respect to natural resources. This Article looks to the historical origins and current presentations of public trusts to extract features which indicate its effectiveness and appeal for modern climate change applications. Additionally, it presents two circumstances under which a global public trust in the atmosphere could eventually develop.

Keywords: Public trust doctrine; atmospheric trust; climate change; climate action; international environmental law

Introduction

Like the earth and sea, the atmosphere is a resource with immeasurable value and potential for destruction. Recent developments in international environmental law focus on the atmosphere as a venue for advocacy. Many nations have known about the effects of climate change since the 1970s. In the time since, there has been little progress to create a cohesive international agenda on this issue. Treaties have formed, among other initiatives, but none have resulted in any serious, effective obligations. Differences in national priorities and weak enforcement mechanisms have stood in the way of action on climate change. Many current initiatives dance around questions of collective ownership in the resources which combine to form our current climate predicament.²

¹See generally NATHANIEL RICH, LOSING EARTH: A RECENT HISTORY (2019) (arguing the United States government had a comprehensive understanding of climate change as early as 1979).

²For an example of an international initiative describing its purposes in similar terms to a public trust, see U.N. Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397, 398:

[[]T]he area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, as well as its resources, are the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States.

Similarly, for references to climate change as the "common concern of humankind", see United Nations Framework Convention on Climate Change, May 9, 1992, S. Treaty Doc. No. 102-38, 1 (stating that parties to the United Nations Framework Convention on Climate Change acknowledge "change in the Earth's climate and its adverse effects are a common concern of humankind") (emphasis added), and Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104, 2 ("Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights ") (emphasis added).

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The concept of common ownership in nature draws its origins in the early articulations of rights within Roman civil law and English common law. The public trust doctrine is the idea that certain resources are held in a trust by a sovereign, to be protected for the public's collective benefit. A public trust is distinct from a sovereign's general obligation to act in the public's benefit with respect to natural resources. Rather, it is a demand for the sovereign to serve as a trustee of certain resources for the public's use and enjoyment, subject to enforcement by its citizens. In tandem with recent concerns about international climate inaction, the public trust doctrine may hold promise in preserving the public's rights in the atmosphere.

A. Origins of the Public Trust

The earliest records of public trusts reveal common values shared with contemporary applications of the doctrine. Further, they demonstrate the versatility of the public trust doctrine in molding to the shifting priorities of human civilizations. If this history provides a glimpse into the future of public trust doctrines, then perhaps the development of a global public trust system centered on the atmosphere is a feasible, or at least conceivable, solution to climate inaction.

As early as the 6th century A.D., Roman law conceptualized early forms of a public trust in shared resources. The *Institutes* of the emperor Justinian's *Corpus Juris Civilis* provides a prominent example. It codified rights of public access and use to natural resources, stating:

[T]he following things are by natural law common to all—the air, running water, the sea, and consequently the seashore. No one therefore is forbidden access to the seashore, provided he abstains from injury to houses, monuments, and buildings generally; for these are not, like the sea itself, subject to the law of nations.³

This demonstrates the initial concern public trusts were intended to address: Reasonable access to elements necessary for survival. Access to these described resources provided Romans with the ability to engage freely in essential activities like navigation and fishing.⁴

Early English laws reflected a continuation of the Roman public trust, drawing from Justinian's values while shifting the role of trustee and the geography of its public trust doctrine. The Magna Carta offered a similar codification of a public trust in the monarchical recognition of the public's legal interest in common resources. The Magna Carta, first issued in 1215, served as an agreement between King John and the English nobility. It granted the public certain liberties and subjected

³J. INST. 2.1.1.

⁴Some scholars argue Roman roots of the public trust doctrine provide limited support for modern trust issues, like atmospheric trust litigation. See J.B. Ruhl & Thomas A.J. McGinn, The Roman Public Trust Doctrine: What Was It, and Does It Support an Atmospheric Trust?, 47 ECOLOGY L.Q. 117, 126 (2020) (arguing modern applications of public trust doctrines should rely on American foundations rather than Roman roots); See also infra Part B.III. (explaining atmospheric trust litigation). They believe early conceptions found in Roman law, like the Institutes, provide a sufficient historical basis for the traditional public trust but cannot be applied to advance the doctrine towards causes like climate change due to the Roman public trust's limited record of its scope and practical use. Id. This article does not adopt a "Roman roots narrative"—that there exists an unbroken chain of precedent from Justinian's fleeting description of "things common to all" to modern conceptions of an atmospheric trust. It does not seek to advance explicitly Roman values to bolster an argument for a global public trust solution to climate change. Rather, Roman values in the "ideological timeline" of this doctrine—and those found in other ancient public trusts—provide support for the argument that the public trust is malleable with the times yet enduring in its core philosophy. The ancient Roman public trust is significant for commencing this ideological timeline of the public trust for developments within domestic law and international treaties. Later public trusts may not follow the Roman model in a linear fashion, and the chain of Roman influence on nations and organizations may be fragmented, but the same values are reflected in today's arguments for a trust encompassing climate change.

⁵See Nicholas A. Robinson, *The Public Trust Doctrine in the 21st Century*, 10 GEO. WASH. J. ENERGY & ENV'T. L. 83, 83 (2020). ⁶Doris Mary Stenton, *Magna Carta*, ENCYCLOPEDIA BRITANNICA, https://www.britannica.com/topic/Magna-Carta, (last visited Dec. 15, 2023).

the sovereign to the rule of law. Traces of the modern public trust doctrine appear in provisions concerning activities like fishing and the defense of lands. Another example is the Magna Carta's development of forest law, which created a prohibition from owning or parceling of tracts of forest, ensured by the sovereign to be preserved for the public's use. However, like the *Institutes*, the Magna Carta is subject to criticism in modern public trust discussions because it did not fully relinquish the sovereign's title to land and bodies of water. While these early records are thus distinct from the modern public trust doctrine on certain principles, they reflect an enduring human interest in preserving equality of access and use of essential resources. They differ from modern public trusts by the nature of the resources protected, but this demonstrates the ability of public trusts to shift their focus over time and according to human needs, all while maintaining the same philosophies at heart.

The concept of the public trust evolved not only through institutional means but was also articulated by laypersons—those not representative of the sovereign. This may reflect the public trust as something idealized in early scholarly circles. The Dutch jurist Hugo Grotius is one example of this early articulation of the public's interest in the common use and enjoyment of resources like the sea. Grotius' Mare Liberum ["The Free Sea"] was published in 1609 for the East India Company as a method of refuting English and Spanish claims to the sea and its shores. Crotius' ultimate argument was that no country had sole ownership of the high seas nor certain navigation routes. In this work, he states:

[T]hose things public ... not which appertain to any one country and people but to the whole society of mankind, which in the laws are called publica juris gentium: that is, common to all and proper to none. Of this kind the air is for a double reason, both because it cannot be possessed and also because it oweth a common use to men. And for the same cause the element of the sea is common to all, to wit, so infinite that it cannot be possessed and applied to all uses, whether we respect navigation or fishing.¹⁴

This is one more example of early concern for public access and use of air, land, and sea. Note Grotius' language in referring to what appears to be a public trust in the air—it cannot be possessed and has a common use to all.

Grotius' argument resembles the current discourse and values underlying a potential trust in the Earth's atmosphere. Of course, during this time, legal scholars and institutions did not perceive phenomena like climate change, so its ability to connect with this issue is somewhat limited. However, it bears repeating that these early values and understanding of common accessibility have remained a priority since the first iterations of public trusts in these examples. Further, this draws on the influence of broader conversational works on public trusts, which is parallel to the proposition that modern changes in the doctrine could come from dialogues on climate change—rather than trade routes, like in Grotius' case—in both shifting the geography of public trust doctrines and expanding their trusteeship.

 $^{^{7}}Id$.

⁸See Magna Carta cl. 33 ("All fish-weirs are in future to be entirely removed from the Thames and the Medway, and throughout the whole of England, except on the sea-coast."); See also Myles Douglas Young, The Public Trust Doctrine: A Cracked Foundation, Geo. Env't. L. Rev. (Apr. 15, 2021), https://www.law.georgetown.edu/environmental-law-review/blog/the-public-trust-doctrine-a-cracked-foundation/ (describing provisions of the Magna Carta in relation to elements of a public trust).

⁹See Robinson, supra note 5, at 86.

¹⁰See Young, supra note 8.

¹¹H.J.M. Boukema, Grotius' Concept of Law, 69 ARCHIVES PHIL. L. & Soc. PHIL. 68, 68 (1983).

 $^{^{12}}Id.$

¹³*Id*. at 69.

¹⁴Hugo Grotius, The Free Sea 28 (David Armitage ed., Liberty Fund 2004) (1609).

Among these ancient formulations of the public trust and its applications within early laws are several key protected activities. The first public trust doctrines were created to protect activities and uses essential to human survival—navigation of the seas, fishing, and access to trade routes. The underlying philosophy is that the depletion or monopolization of core resources would be so detrimental to human existence that a public trust is a necessary oversight. These protected activities have evolved since—to recreation and broader access rights—issues not quite essential to human survival but which have become highly valued. Historical shifts in the grounds for public trust doctrines reveal two general purposes: To preserve those activities and uses which are either essential to human survival; or those which are highly valued in society.¹⁵

B. The American Public Trust

Today, public trust doctrines are recognized as a generally American legal concept.¹⁶ The modern idea of a public trust primarily comes from the American form, due to its development within individual states and the early influence of colonizing nations. Among the United States as well, public trust doctrines are commonly referred to as issues of state law, rather than federal.¹⁷ The American public trust evolved from applications within smaller state structures, particularized to state geography, then was adopted "upward" by other states and into the federal level.¹⁸ The broadening of the physical area and trusteeship in American public trusts provides a model for experimentation and development of public trust doctrines among other nations. What could be referred to as an "American model" of a global public trust reflects potential for the gradual implementation of a trust in the atmosphere—particularized to the internal needs of each country while creating an international impact through a collection of analogous domestic structures.

While substantial case law developing the American concept of a public trust occurred in state courts, ¹⁹ several federal cases affirm the principles of public trusts at the national level. ²⁰ No federal courts of last resort have affirmatively recognized the existence of a trust in the atmosphere, but similar issues have received some attention in recent climate change litigation. ²¹ Examples of American public trust doctrines again reflect the versatility and broadening scope of the trust throughout history, in its use as a political and legal tool to adapt to human needs and wants for the use of common resources.

I. The United States as Trustees

The development of American public trust doctrines demonstrates shifting trends in their priorities, with individual states acting as laboratories for experimentation in their purpose and application. This has positive implications for broader scale implementation. Like the "American model," a global public trust may mirror the same values transnationally, modeled on a macro scale. In other words, the relationship between the federal and state conceptions of a public trust could be implemented in a similar fashion with individual countries acting like the American

¹⁵See infra Part B.III. and note 52 (describing the restriction of public trusts "for certain uses").

¹⁶See Erin Ryan, *The Public Trust Doctrine, Property, and Society, in* HANDBOOK OF PROPERTY, LAW, AND SOCIETY (Nicole Graham, Margaret Davies, Lee Godden, eds., 2022) (forthcoming 2023) (manuscript at 3) ("Modern public trust principles, which assign state responsibility for natural resources held in trust for the public, are most commonly associated with American law.").

 $^{^{17}}Id.$ at 11.

¹⁸See id. at 9 (discussing the influence of the "Mono Lake decision" in California on other parts of the United States).

¹⁹See id. at 7 ("[T]he doctrine has developed differently from one state to the next. Some states protect different resources under the doctrine and some assign different levels of protection to trust resources, but, at a minimum, most share the common principle of sovereign authority over lands ... held, in trust, for the public.")

²⁰See generally Martin v. Waddell, 41 U.S. 367 (1842); Illinois Central R. Co. v. Illinois, 146 U.S. 387 (1892); Greer v. Connecticut, 161 U.S. 519 (1896); PPL Montana, LLC v. Montana, 565 U.S. 576 (2012).

²¹See infra Part B.II. (discussing the influence of Juliana v. United States, 947 F.3d 1159 (9th Cir. 2020)).

states. Prime examples of this micro to macro application of the public trust are found in Massachusetts and California: Two states which are dependent on their coast and landscape and are more likely to feel the effects of climate change as a result.²²

Massachusetts has codified a public trust doctrine in its state constitution. Chapter 91—otherwise known as The Public Waterfront Act—serves to protect public access to public waterfronts and navigable waterways.²³ The trust was formally recognized in 1866, but Massachusetts' public trust was first codified in its Colonial Ordinances of 1641–1647.²⁴ This is a result of the original colony's English heritage and inherited public trust principles. The purpose of Chapter 91 today is to "preserve and protect the rights of the public, and to guarantee that private uses of tidelands and waterways serve a proper public purpose."²⁵ Like the public trust doctrine as whole, Massachusetts's public trust is malleable. At first, the doctrine was aimed at traditional maritime uses—like facilitating navigation and fishing.²⁶ Now, the trust focuses on the management of waters, coastland, and wetlands, restricting the development of these areas with the impact of climate change in mind.²⁷ Massachusetts's public trust is also tied to national environmental objectives, as it incorporates elements of the Coastal Zone Management Act (CZMA), illustrating its ability to focus on particular state needs while considering collective obligations.²⁸

Massachusetts and California demonstrate several key features of the public trust doctrine which support one potential form of an international global public trust. Over time, the states broadened the geography and methods of stewardship in the trust—a practice which is replicated independently in other states, and has the potential to improve interstate cooperation on

²²See Climate Change Impacts in California, STATE CAL. DEP'T JUST.: OFF. ATT'Y GEN. (last visited Jan. 7, 2024), https://oag. ca.gov/environment/impact (assessing potential effects of sea level rises, erosion, and high temperatures on California's ecology); EPA, WHAT CLIMATE CHANGE MEANS FOR MASSACHUSETTS 1 (2016), https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ma.pdf (describing the effects of climate change on Massachusetts's unique coastal ecology).

²³Mass. Gen. Laws ch. 91 (1866).

²⁴Chapter 91, The Massachusetts Public Waterfront Act, MASS.GOV, https://www.mass.gov/guides/chapter-91-the-massachusetts-public-waterfront-act (last visited Nov. 18, 2022).

 $^{^{25}}Id.$

 $^{^{26}}Id.$

²⁷Id.

²⁸See MASS. GEN. LAWS ch. 91, § 18 (outlining requirements under Massachusetts's coastal zone management program, implemented according to the voluntary program created by CZMA).

²⁹Cal. Const. art. 4, § 10.

³⁰³³ Cal. 3d 419 (1983).

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⁵²Id. at 441.

³³See Ryan, supra note 16, at 9 (discussing the impact of the Mono Lake decision).

 $^{^{34}}Id$

environmental issues. Further, it eases cooperation with federal programs, like CZMA. These features of United States' public trusts support a potential solution on the international scale. It suggests a global public trust in the atmosphere could be feasible if a similar cooperative network of public trusts developed within countries, customized for individual state needs, while incorporating collective international obligations.

II. Federal Recognition of the Public Trust

A federal conception of the American public trust emerged in the late 19th century, notably in *Illinois Central Railroad Company v. Illinois*³⁵, decided by the Supreme Court in 1892. The Court in *Illinois* held states could not grant title to submerged land when it invalidated an Illinois law attempting to parcel ownership of the Chicago harbor. Most importantly, it affirmed the existence of an American public trust:

It is the settled law of this country that the ownership of and dominion and sovereignty over lands covered by tide waters, within the limits of the several states, belong to the respective states within which they are found, with the consequent right to use or dispose of any portion thereof, when that can be done without substantial impairment of the interest of the public in the waters, and subject always to the paramount right of Congress to control their navigation so far as may be necessary for the regulation of commerce with foreign nations and among the states.³⁷

Illinois also stretched the American public trust doctrine to include lands covered by freshwater, as it was previously recognized only for tidelands and open seas.³⁸ The statute at issue in the case involved Lake Michigan, yet the Court still held this body to be a part of the public trust. States, such as Massachusetts and California, have used *Illinois* to preserve public resources and avoid their privatization.³⁹

Four years later, the Supreme Court decided *Geer v. Connecticut*⁴⁰ which further expanded the perspective of the public trust doctrine to wildlife. The Court relied on a number of state cases in reaching its decision, holding "[t]he power or control lodged in the state . . . is to be exercised . . . as a trust for the benefit of the people Therefore . . . the ownership is that of the people in their united sovereignty." Further, citing the supreme courts of California and Minnesota, the Court again extended the American public trust in finding:

The wild game within a state belongs to the people in their collective sovereign capacity ... the ownership of wild animals ... is in the state not as a proprietor, but in its sovereign capacity, as the representative and for the benefit of all its people in common.⁴²

Now, the public trust included resources beyond navigational or water-related rights; wildlife became a part of the trust reserved for the public's enjoyment. The chain reaction of individualized state issues relating to the public trust affecting the federal recognition and expansion of the public trust in both its scope and ownership is a phenomenon which may be replicated on an

³⁵¹⁴⁶ U.S. 387 (1892).

 $^{^{36}}Id.$

³⁷ Id. at 435.

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³⁹Michael C. Blumm & Rachel D. Guthrie, Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxion Vision, 45 U.C. DAVIS L. REV. 741, 746 (2012).

⁴⁰161 U.S. 519.

⁴¹Id. at 529.

 $^{^{42}}Id.$

international scale. This structural potential is made even more promising by recent federal discourses on climate change.

Juliana v. United States⁴³ is a recent and prominent case attracting national attention to public trust issues. In this case, twenty-one young adults filed a lawsuit asserting that the United States government deprived them of constitutional rights and failed to protect public trust resources through its affirmative actions contributing to climate change.⁴⁴ The Ninth Circuit held in a divided panel that the remedies requested by the plaintiffs should instead be redressed by policy initiatives, implemented by the legislative or executive branches.⁴⁵ However, the Court's opinion recognized the young adults suffered concrete injuries from the effects of climate change.⁴⁶ Juliana is a major development demonstrating public trust expansion—an American court affirmatively recognizing, and thus introducing into law, the idea that the effects of climate change are recognizable injuries to the public.⁴⁷ This highlights the historical feature of public trusts as enforceable against their trustees, while incorporating the redressability of climate change effects.

III. The American Theoretical Perspective

The "story" of the public trust doctrine has not shifted through application alone. The American legal perspective of public trust doctrines also evolved through scholarly commentary. The perspective of legal theorists has shaped the affect and borders of public trust doctrines; because much of the theory on public trusts has developed in America, these perspectives touch on foremost issues of public trusts and their international implications.

Perhaps most notably, the perspective of Joseph Sax puts public trusts "on the map" of modern environmental advocacy beginning in the 1970s. ⁴⁸ The "Saxian" model of the public trust relies on the sovereign's responsibility to serve as a "steward" of natural resources. ⁴⁹ Sax imagines a successful public trust doctrine to be one that contains some concept of a legal right in the general public, is enforceable against the government, and is capable of an interpretation consistent with contemporary concerns for environmental quality. ⁵⁰ His issue with early public trust doctrines was the lack of clarity on the issue of whether the public had an enforceable right against the government—so this point is especially important to his articulation of the public trust. ⁵¹ The Saxian conception of the public trust imposes three kinds of restrictions: (1) The property subject to the trust must be used for a public purpose and held available for use by the general public, (2) the property may not be sold, and (3) the property must be maintained for certain types of uses. ⁵²

In this third restriction, the uses are expressed either through traditional uses, or the uses made of the property are related in some sense to the natural uses peculiar to that resource.⁵³ While this definition of the public trust was created with ancient and American trusts in mind, it provides a sufficient formula for assessing whether a nation would be inclined to eventually accept a global

⁴³⁹⁴⁷ F.3d 1159 (9th Cir. 2020).

⁴⁴Id.; See also Juliana v. United States—Our Children's Trust, OUR CHILD.'s Tr., https://www.ourchildrenstrust.org/juliana-v-us (last visited Nov. 18, 2022).

⁴⁵See Juliana, 947 F.3d at 1171.

⁴⁶Id. at 1169 ("These injuries are not simply 'conjectural' or 'hypothetical,' at least some of the plaintiffs have presented evidence that climate change is affecting them now in concrete ways and will continue to do so").

⁴⁷Juliana is still ongoing. On December 29, 2023, a U.S. District Judge denied the Department of Justice's motions to dismiss, allowing the 21 plaintiffs to proceed to trial in 2024. Tom Lotshaw, Feds Lose Bid to End Kids' Climate Suit, LAW360 (Jan. 2, 2024), https://www.law360.com/environmental/articles/1780787.

⁴⁸See Joseph L. Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471 (1970).

⁴⁹See Ruhl & McGinn, supra note 4.

⁵⁰See Sax, supra note 48.

⁵¹Id. at 475.

⁵²Id. at 477.

⁵³Id.

public trust, and/or a trust in the atmosphere. The Saxian framework will also be relied on here for a clear definition of a public trust doctrine, for purposes of clarity and evaluating case studies according to the same standard.

More recently, commentary on the American public trust has been disrupted by concerns relating to climate change and beyond interests in navigation and recreational use. The concept of an "atmospheric trust" has already been applied primarily in an American context.⁵⁴ The expansion of the public trust to the atmosphere has taken shape through the form of what is commonly referred to as "atmospheric trust litigation."⁵⁵ This approach is most common in the United States, where the federal government is viewed as a trustee, and each state a co–trustee, of the atmosphere. Atmospheric trust litigation imposes a cooperative obligation upon each party to protect the trust/atmosphere for citizens and posterity.⁵⁶

Mary Wood is a leader in recent conversations on the public trust doctrine and atmospheric trust litigation. So She articulates two key features of atmospheric trust litigation. First, the atmospheric trust litigation approach is a valid method of enforcing public trusts against governments for climate change accountability, despite any lack of state or federal statutory prescriptions on this topic. Wood argues many American cases make it clear that the public trust principle imposes obligations separate from statutory law; rather, the judiciary plays a crucial role to enforce public trusts in the context of climate change. Second, atmospheric trust litigation brings fundamental rights into action towards climate change because the practice "aims to set firm boundaries on political discretion through the assertion of fundamental rights of constitutional character that cannot be ignored" by any government administration. Wood highlights this as a solution to the failings of bureaucratic agency and political efforts to combat climate change. Her perspective relates to the idea that the public trust is omnipresent and transcendent of human greed and indecision—an idea which lends itself to a transnational, crosscultural public trust solution.

In tandem with developments in state and federal case law, the American legal scholarship provides other countries with mechanisms which can be translated into a variety of governments. Looking to American public trusts reveals the possibility of a similar system on the international scale, where an atmospheric trust may eventually be applied towards climate action.

C. Public Trusts in the International Sphere

Public trust doctrines have been articulated beyond American settings, both within different countries and international organizations. This background is essential to examining two potential applications of a global public trust: (1) What shall be called the "American" model, described in some detail above, where individual nations develop internal public trusts to spur innovation in external, collective climate action, and (2) a global public trust imposed upon nations by an international organization, where the collective sovereignties serve as trustees. Both possibilities will be discussed further below.

⁵⁴See Michael C. Blumm & Mary C. Wood, "No Ordinary Lawsuit": Climate Change, Due Process, and the Public Trust Doctrine, 67 AM. UNIV. L. REV. 1 (2017) (providing an extensive overview of recent climate change litigation and the development of atmospheric trust litigation within the American context).

⁵⁵Id. at 23.

⁵⁶See Global Legal Actions, Our Child. S. Tr., https://www.ourchildrenstrust.org/global-legal-actions (listing ongoing global atmospheric trust cases) (last visited Dec. 22, 2022).

⁵⁷See Blumm & Wood, supra note 55.

 $^{^{58}}Id.$

⁵⁹Id.

⁶⁰Id. at 24.

⁶¹Mary C. Wood, Atmospheric Trust Litigation: Securing a Constitutional Right to a Stable Climate System, 29 Colo. Nat. Res. Energy & Env't. L. Rev. 321, 323 (2018).

Examining public trusts within different countries and the similar values embodied in treaties and conventions supports each potential solution respectively.

I. Public Trusts within Countries

Public trust doctrines are widely in practice among other countries for diverse purposes, which highlights the flexibility of their application yet inflexibility of common principles. Germany has demonstrated values relating to the public trust in the agricultural industry, while not in explicit form. Public trust doctrines have developed more recently in African and Latin American countries. These nations tie the values of the traditional public trust to deeper, cultural beliefs about personified nature and spirituality. In terms of global public trust values interwoven into comprehensive climate action, Brazil and Uganda's case studies additionally provide an optimistic outlook for the cooperation of nations beyond the traditional, Eurocentric purview of the public trust.

1. Germany

The German concept of *Allmende* reflects a regional recognition of common ownership in lands preserved for public use.⁶⁶ *Allmende* is the German designation for common pastureland utilized for agricultural activities by a collection of village communities.⁶⁷ It traces its origins to the 5th and 6th centuries, but saw a rapid decline with industrialization.⁶⁸ The tradition of *Allmende* is common today primarily in Southern Bavaria, where the low productivity of steep and inaccessible pastures risks significant consequences if exploited for individual, private use.⁶⁹ The idea does not fit exactly within the model of a public trust—rather than being entrusted to a sovereign or the national government, a group of private stakeholders form a cooperative to manage the collective use of lands.⁷⁰ It contains more informal, perhaps even medieval, semblances of the public trust.

Allmende in Southern Bavaria is a small–scale example tangential to a public trust doctrine, but it can offer philosophical significance to this broader discussion for two primary reasons. First, while not explicitly a part of this doctrine, Allmende, and the practices associated with it, suggests the longstanding palatability of common ownership and usage of essential resources in non-traditional spaces. Second, it may demonstrate the ubiquity of the values underlying the public trust, while not presented in the explicit form of a trust. This has positive implications for a global public trust solution implemented as an initiative within international organizations or, for example, as the grounding principle of a treaty between nations with differing articulations of trusts—if at all. In other words, public trusts, or "pseudo–trusts" like Allmende systems, may be more common and practiced than what we see at face value in explicit doctrines and statutes. This

⁶²See Scholle et al., infra note 68.

⁶³See generally Erin Ryan, Holly Curry, & Hayes Rule, Environmental Rights for the 21st Century: A Comprehensive Analysis of the Public Trust Doctrine and Rights of Nature Movement, 42 CARDOZO L. REV. 2447 (2021) (providing an overview of recent public trust developments in a variety of regions, including Africa and Latin America).

 $^{^{64}}Id.$

 $^{^{65}}Id.$

⁶⁶Florian Brossette, Claudia Bieling, & Marianne Penker, Adapting Common Resource Management to Under-Use Contexts: The Case of Common Pasture Organizations in the Black Forest Biosphere Reserve, 16 INT'L. J. COMMONS 29, 30 (2022).

⁶⁸Dagmar Scholle, Christine Hofmann, Giselher Kaule, Dirk Lederbogen, Gerd Rosenthal, Ulrich Thumm, & Jürgen Trautner, Co-operative Grazing Systems ("Allmende"): An Alternative Concept for the Management of Endangered Open and Semi-Open Landscapes, in Pasture Landscapes and Nature Conservation 387, 387–98 (Bernd Redecker Wener Hardtle, Peter Finck, Uwe Riecken, & Eckhard Schroder eds., 2002).

⁶⁹Id.

 $^{^{70}}Id$.

highlights one beneficial feature of the public trust as an international solution to climate inaction: Its translatability across legal systems.

2. Brazil

Brazil, like Germany, lacks a judicial articulation of a public trust doctrine, but its constitution is entrenched with the same principles. Article 225 of the Constitution of the Federative Republic of Brazil states "all have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations."71 In comparison to Joseph Sax's framework, described above, Brazil's constitution fits within the contemporary notion of a public trust doctrine. The constitution describes the area of this public trust as the Brazilian Amazonian Forest, the Atlantic Forest, the Serra do Mar, the Pantanal Mato-Grossense and the coastal zone, along with unexploited mineral resources, which are considered under its terms as "part of the national patrimony."⁷² Unclaimed or illegally claimed lands are included in this trust as "inalienable" if those lands are "necessary to protect the natural ecosystems."⁷³ This further reflects public trust values as preserving humanity's common heritage in natural resources. Article 225 and the broader trust embodied in the constitution are aimed at protecting the Amazon as a resource of ecological and cultural significance. Article 225 does not explicitly state itself to be a part of a public trust doctrine, in the fashion of common forms found in the United States. However, it appears to fit within the Saxian definition of a public trust: (1) The constitution bestows a legal right in the general public, (2) provisions within Article 225 are intended for interpretation to address contemporary environmental concerns, and (3) shown as recently as 2022, it is enforceable against the Brazilian government.

In 2022, four Brazilian political parties filed a Direct Action of Unconstitutionality for Omission against the Federal Union, challenging the national government's failure to maintain its obligation to the Climate Fund under the Paris Agreement.⁷⁴ The parties claimed the government's inaction towards climate change violated its Article 225 duty to preserve ecology and manage protected territories, flora, and fauna.⁷⁵ The Supreme Federal Court ruled in favor of the plaintiffs, finding a violation of Article 225 in the government's failure to maintain international climate change obligations.⁷⁶ The Court's decision links a constitutional duty to preserve entrusted resources to international action on climate change:

[T]he issue pertaining to climate change is a constitutional matter. Along these lines, Article 225 ... of the Constitution expressly establishes the right to an ecologically balanced environment, imposing on the Public Power the duty to defend, preserve and restore it for present and future generations. Therefore, environmental protection is not part of the Chief Executive's political judgment of convenience and opportunity. It is an obligation which the Chief Executive is bound to fulfill.⁷⁷

If Chapter VI and Article 225 in practice codify a Brazilian public trust, this case demonstrates successful legal enforcement against a trustee government with respect to both internal and

⁷¹CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 225 (Braz.).

⁷²Id.

⁷³Id.

⁷⁴PSB et al. v. Brazil (on Climate Fund), SABIN CTR. FOR CLIMATE CHANGE L., http://climatecasechart.com/non-us-case/psb-et-al-v-federal-union/ (last visited Dec. 22, 2022) (providing a summary of the Brazilian case and an unofficial English translation of the court's decision).

⁷⁵Id.

⁷⁶Id.

⁷⁷Id.

international obligations. Brazil's case study provides optimism to the possibility of a global public trust in the atmosphere, administered by individual states or as a member of an international organization, for two reasons. First, it supports the idea that public trusts are absent in name but present within the practices of countries which promote essentially the same values. Like Germany, this could indicate a global public trust is feasible due to the familiarity of principles involving common heritage. Second, Brazil appears to recognize a broader public trust responsibility to international obligations, linking internal duties to cooperation with international action towards climate change. This has positive implications for expanding the geographical area of public trusts to the atmosphere because it implies a sovereign's external duties towards climate change are duties to members of its own trust in preserving native resources.

3. Uganda

In recent years, Uganda's legal system has benefitted from a series of reforms. The public trust found in Uganda exemplifies the intersection of the doctrine with both constitutional and cultural developments. It was first articulated in a Supreme Court opinion, where the holding issued a duty on the government as trustee to obtain consent from local communities when altering existing environmental protections.⁷⁸ At the time, a public trust was codified and enforceable against the state through its constitution.⁷⁹ Following a series of statutory and constitutional revisions, the Ugandan public trust was expanded to encompass a variety of natural resources.⁸⁰ Article 237 of its constitution today states "... the Government or a local government as determined by Parliament by law, *shall hold in trust for the people* and protect, natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens "81

Uganda also stands along with the United States on the forefront of atmospheric trust litigation. *Mbabazi and Others v. The Attorney General and National Environmental Management Authority* is an ongoing suit with striking similarities to *Juliana*.⁸² The plaintiffs alleged the Ugandan government breached its duty as the public trustee to preserve natural resources within the country and for failing to address issues relating to climate change. The case, brought on behalf of a group of Ugandan minors, raises the issue of whether the country's trust extends so far as to impose a duty on the government to mitigate climate change.⁸³ The requested remedy is injunctive relief in the form of accurate reporting of nationwide emissions and a plan to curb activities contributing to climate change.⁸⁴ As of yet, the case has not resolved in favor of either party, but it indicates a potential expansion of the area of Uganda's public trust, and perhaps shifting obligations on the part of domestic trustees towards climate change.

Uganda exemplifies how public trust doctrines continue to be formally expanded transnationally, in countries which do not have long-term history of public trusts, and in nontraditional areas, while fitting to cultural or customary needs. This shows public trust doctrines are not an outdated practice, and lends to its identity as a fluid, versatile legal tool.

⁷⁸See Ryan, Curry, & Rule, supra note 63, at 2490.

⁷⁹Id

⁸⁰Id.

⁸¹Constitution art. 237 (2010) (Uganda) (emphasis added).

⁸²Mbabazi and Others v. The Attorney General and National Environmental Management Authority, SABIN CTR. FOR CLIMATE CHANGE L., http://climatecasechart.com/non-us-case/mbabazi-et-al-v-attorney-general-et-al/ (last visited Dec. 22, 2022).

 $^{^{83}}Id.$

 $^{^{84}}Id.$

II. Public Trusts within International Organizations

As demonstrated by the early forms of public trust doctrines, access and usage of the sea has remained a priority. International organizations such as the United Nations are mechanisms for imposing obligations on member states to adhere to collective principles or responsibilities. Through the creation of treaties and conventions, international organizations may offer an effective route for creating a global public trust. The United Nations' efforts in maritime and outer space law provide insight into the feasibility of implementing a global public trust through initiatives by international organizations. International maritime law contains expressions of public trusts. It recognizes the unconfinable, immeasurable nature of the sea, and the inherent right of all nations to use it equally. Similarly, outer space is another physically vast area which many nations seek to explore without the encumbrances of private ownership. In recent years, dialogues on the reservation of outer space for common, peaceful usage draw a curious similarity to a potential public trust in the atmosphere. Furthermore, existing efforts in response to climate change by international organizations draw vaguely on public trust principles. They do not propose or suggest the existence of a global public trust, but international dialogues on climate change are girded with language insinuating a common heritage in the atmosphere.

1. The United Nations Convention on the Law of the Sea

The United Nations Convention on the Law of the Sea (UNCLOS) has been ratified by 168 states and the European Union. It governs "the area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, as well as its resources ..." and recognizes this geographical area as "the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States"

UNCLOS is fundamentally a codification of Grotius' "freedom of the seas" philosophy. Customary maritime laws have drawn from this same idea, and UNCLOS unifies these principles into one binding source of obligation for member states. This demonstrates the meshing of modern objectives and modern trustees with older formulations of trusts in the ideological timeline of the doctrine. Further, the existence and adherence to UNCLOS lends support to the concept of a public trust in the atmosphere, perhaps a hypothetical "United Nations Convention on the Law of the Atmosphere"—codifying common public trust tradition on a global scale and establishing expectations for nations as beneficiaries in an atmospheric trust, in terms of activities and contributions related to climate change rather than the sea.

2. The Outer Space Treaty

The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, known as the "Outer Space Treaty," provides a framework for international space law and a set of principles to guide nations in "using" space. 88 Article I of the treaty states "[t]he exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind." Further, Article II provides "[o]uter space, including the moon and other celestial

⁸⁵ See infra Part C.II.2 and note 88.

⁸⁶The United Nations Convention on the Law of the Sea (A Historical Perspective), DIV. FOR OCEAN AFFS. & L. SEA, https://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm#Historical%20Perspective (last visited Dec. 22, 2022).

⁸⁷U.N. Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397, 25.

⁸⁸Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies art. 1, Dec. 5, 1979, 18 U.S.T. 2410, 610 U.N.T.S. 205.

⁸⁹Id.

bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means." These themes relate not only to the concept of a public trust, but the atmosphere as an area of that trust as well. If the Outer Space Treaty were to be drafted in the form of a public trust doctrine, its trustees would include the governing member states, and the area of its protection would encompass "outer space" and the celestial bodies found within. The purpose of such a trust relates to traditional purposes, in that the preservation of outer space for common use is an essential priority of humanity.

3. In Summary: The Presence of Public Trust Philosophy in Existing Efforts Towards Climate Change

Why would international organizations and treaties coalesce on the issue of climate change in the first place? Nations recognize climate change is a collective issue—pertaining to a collective resource that cannot be bound, reasonably measured, partitioned, or distributed. Without even saying it, they have long recognized the Earth's atmosphere as a collective resource, collectively owned by the masses—under the domain of no sovereign or entity. Yet, it is used by all for both traditional and contemporary uses applied in public trust doctrines. Traditional uses are subliminally recognized, in that the public uses the atmosphere for survival: Clean air is necessary for human life. Nations have witnessed the effects of climate change in degrading and destroying human life—directly through atmospheric effects and indirectly through effects of, for example, a warming climate on food and water supplies, and the subsequent destruction of communities.

The values of a public trust *already* underlie the current international understanding of solving issues relating to climate change⁹³—the only issue is that it remains unacknowledged, and that international alliances—whatever form they may be—treaties, conventions, organizations—have yet to take advantage of the public trust as a justification, motivation, and obligation on the part of countries in those realms. At its heart, the public trust is first, an obligation for a sovereignty to ensure the trust remains in the public's domain, and second, a right intrinsic to and enforceable by the public. It may be said that a public trust already exists in the atmosphere as a collective resource; the greater question is whether its recognition spurs transnational action in response to its degradation.

D. The Public Trust as an Appeal for International Climate Action

A global public trust in the atmosphere is feasible, according to the history of the doctrine and recent developments in climate change action. To demonstrate, we first look to features of the doctrine which indicate its effectiveness thus far in civilization. Then, we must examine the methods by which a global public trust may eventually arise.

I. Features of the Public Trust Doctrine Which Make an Atmospheric Trust Feasible

The distilled values of the public trust hold promise as an effective appeal for transnational climate action. The nature of the doctrine's origin, its evolution through varied applications, and its

⁹⁰Id.

⁹¹See generally, Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 (mandating Parties must establish domestic emissions measures to achieve a global standard, characterizing climate change mitigation efforts as a collaborative and collective experience).

⁹²Climate Change and Health, WORLD HEALTH ORG. (Oct. 30, 2021), https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health (providing an overview of the health effects caused by climate change, including extreme weather events, excessive heat, and low air quality).

⁹³To illustrate this, compare the language of the UNCLOS and Outer Space Treaty with Joseph Sax's framework for defining a public trust. *See* sources cited *supra* notes 87 and 88. According to Sax, the property subject to the trust must be used for a public purpose and held available for use by the general public, the property may not be sold, and the property must be maintained for certain types of uses. *See* Sax, *supra* note 48 at 477.

continued stamina contribute to this inference. These "soft" features of public trust doctrines may lend to its effectiveness in appealing to an international audience.

First, public trust doctrines transcend the internal politics and domestic partisanship *within* countries. As Mary Wood states in the American context, public trusts serve to prevent politicians from "abusing their breathtaking authority over our natural resources to serve their own political interests at our expense." The same sentiments are expressed on the international scale. As discussed previously, Brazil's recent enforcement of trust–like obligations on its federal government emulate the same transcendent values. In the 2022 suit described above, a coalition of political parties united against a highly adversarial regime to enforce its obligation to the public's fundamental rights in natural resources and a healthy climate. Their success in this case reveals the unifying potential of public trust doctrines and their appeal to a variety of internal factions. Perhaps the ancient origins of the doctrine and its versatility in application speaks to these results. The rights inherent to the public trust are assumed to have always existed; a right vested since the beginning of mankind, not bestowed, or created by any individual or document. Therefore, it precedes politics and the will of any regime.

Second, the concept of a public trust transcends *external* constitutional and institutional differences among nations, as shown by its transcontinental presence. Public trust doctrines are applied in vastly different countries. Further, they continue to be adopted by nations in contemporary settings lacking a historical public trust. This has been shown in the cases of Uganda and Brazil, two vastly different regimes with differing histories, yet are united by their common interest in protecting natural resources for their peoples' benefit. This is also shown by the spread of atmospheric trust litigation—a primarily American development—worldwide. Beyond Uganda, citizens are bringing suits against their governments to enforce their obligations to counteract climate change. Canada, Pakistan, and India have all been subject to climate change litigation on behalf of future generations. Trusts in the atmosphere continue to be invoked in these nations along with the United States, and this practice is likely to continue as citizens recognize a geographical expansion of their public trust.

Third, the shifting applications of public trust doctrines throughout history promises broader applications as issues of common ownership continue to evolve. Public trusts continue to expand in geographical area and the scope of their trusteeship. Public trust doctrines have held up over the years because of their flexibility and ability to change along with contemporary priorities, while also retaining the inflexibility of their deeper, grounding principles. From essential activities for survival involving bodies of water, to preservation of recreational and aesthetic qualities in broader mediums—the atmosphere and the pressing and very real threat of climate change is a logical eventuality in an evolving global public trust. The development of atmospheric trust litigation is one indication of a popular will towards expanding trusts to the atmosphere. Public trust doctrines today are a function of human wants for survival, recreation, and aesthetic values. There is little doubt that climate change is a factor, if not objective, of human survival.

II. Under What Circumstances Can a Global Public Trust in the Atmosphere be Conceived?

The necessary question in response to these promising qualities is how a global public trust could possibly be implemented as a tool to combat climate change. There are two circumstances under which a global public trust doctrine may become feasible as an effective appeal for climate action.⁹⁸

⁹⁴See Wood, supra note 61.

⁹⁵See PSB et al. v. Brazil (on Climate Fund), supra note 74.

⁹⁶Public Trust Archives—Climate Change Litigation, CLIMATE CHANGE LITIG. DATABASES https://climatecasechart.com/non-us-case-category/public-trust/ (listing database search results of non-United States climate change suits against governments under the public trust).

⁹⁷Id.

⁹⁸As with many innovations in international law, it is important to ask how these principles can be effectively enforced. A logical question could be how an atmospheric trust will be maintained, or how obligations may be distributed among nations. This hypothetical discussion is better suited for more thorough analysis in separate scholarship. This article is not a

1. The "American Model" for an International System of Trusts

When considered within the context of the overarching doctrine, public trust doctrines in America are the result of rapid development. These trusts are primarily vested in individual states and developed from constitutional revision and judicial decisions in a rather short period of history. In America, a system of many individual public trust doctrines works as each is particular to states' geographical features and needs. This may also be beneficial in facilitating interstate environmental activities and dialogues with the federal government on its conception of a public trust.

A global public trust could feasibly develop if the same features were to be found on an international scale. The "American model" could be demonstrated by individual countries implementing public trust doctrines for their own needs. Within each country, legal innovation and experimentation with the doctrines could lead to growth in popularity—perhaps expanding trusts to other non-participating nations or encouraging others to expand their domestic trusts. A system of independent, nation–specific public trust doctrines would make it easier for (1) international organizations—such as the United Nations—to recognize an atmospheric trust in its own initiatives, and (2) countries themselves to recognize a global trust beyond their own. This model would not necessarily create a formal global public trust doctrine, due to the fact that it is hard to imagine a supervising trustee of the whole world. This is why a system of individual public trust doctrines and trustees could be a "first step," in a sense, laying groundwork for more concrete international applications of a public trust.

2. The Public Trust as a Grounding Principle for International Agreements

Existing international agreements draw on themes of collective ownership and heritage in natural resources. Modern developments in international environmental law discuss issues relating to climate change as "common concerns of humanity." In addition to individual countries' constructions of public trusts and like doctrines, the repetition of language relating to public trusts at such a level of significance introduces the public trust doctrine into the international vernacular on climate change. If an international organization, or parties to an international agreement, were to specifically name the public trust doctrine in such relevant settings, it could set a unifying global standard. Unifying the language of the underlying philosophy behind climate initiatives from scattered statements of collective concerns and heritage to the public trust framework may facilitate a future global atmospheric trust. This could first be implemented on a familiar scale, in relation to resources like the sea or essential tracts of land. Future climate change initiatives or conventions would then have precedent to build upon. Eventually, perhaps, this could lead to the recognition by a body like the United Nations of a global public trust in the atmosphere.

Conclusion

The costs of climate inaction will be most extreme in those areas with greatest poverty and limited resources. ¹⁰¹ Recognizing a public trust in the atmosphere not only seeks to maximize our limited

presentation of a solution to international climate inaction. Rather, it promotes the public trust doctrine as an avenue for eventually achieving cooperative transnational climate action. The conception of a global public trust in the atmosphere as discussed in this Article does not require further legitimization by proof of an effective enforcement mechanism. This analysis is limited to presenting the public trust doctrine as an avenue of generating international appeal for an atmospheric trust: An approach which finds legitimacy in the doctrine's inherent values and which holds potential for future changes in the international system of climate action.

⁹⁹See UNCLOS, supra note 87 ("The Area and its resources are the common heritage of mankind.").

¹⁰⁰See commentary and sources cited supra note 2.

¹⁰¹ See Landry Signé & Ahmadou Aly Mbaye, Renewing Global Climate Change Action for Fragile and Developing Countries (Brookings Inst., Working Paper, Paper No. 179, 2022) ("[C]limate change results in considerable loss of property, reduced water availability, and lowered agricultural productivity, which lead more people into poverty and undermine the ability of the most vulnerable countries to achieve their development goals."); See generally EPA, CLIMATE CHANGE & SOC. VULNERABILITY

time with a sustainable climate, but also secures an obligation towards those less fortunate who will bear the brunt of this collective destruction. The avenues proposed here are merely two possibilities in which a global public trust may grow from existing innovations in the public trust doctrine thus far. If history demonstrates its future potential, the public trust doctrine has a long way to go in terms of further evolution. A step towards climate change and a trust in the atmosphere may be the doctrine's logical progression.

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U.S. 5 (Sept. 2021), https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability_september-2021_508.pdf (identifying increased risks of climate change on socially vulnerable groups).