

ENVIRONMENTAL RIGHTS FOR THE 21ST CENTURY: A COMPREHENSIVE ANALYSIS OF THE PUBLIC TRUST DOCTRINE AND RIGHTS OF NATURE MOVEMENT

Erin Ryan,[†] Holly Curry[†] & Hayes Rule[†]

This Article contrasts two theoretically distinct approaches to pursuing related objectives of environmental protection: the public trust doctrine and the rights of nature movement. It reviews the development of public trust and rights of nature principles in both domestic and international legal contexts, and explores points of theoretical commonality and contrast between the two, giving special attention to the opposing systems of environmental ethics from which the anthropocentric public trust and ecocentric rights of nature principles arise. The marked jurisdictional variation associated with both approaches suggests their evolving and inchoate nature as a guarantor of environmental rights. Moreover, both are especially oriented toward the protection of waterways, suggesting the limitations of conventional environmental law to provide adequate protection, and the resulting resort to alternative means.

[†] Erin Ryan, Elizabeth C. & Clyde W. Atkinson Professor and Associate Dean for Environmental Programs, Florida State University College of Law; J.D., Harvard Law School; M.A., Wesleyan University; B.A., Harvard University. I am especially grateful to my two research assistants and co-authors, Holly Parker Curry and Hayes Rule, whose work in support of this article has formally crossed the line from mere research assistance to co-authorship. I am also thankful to Jella Roxas, Ashley Englund, and Amelia Ulmer for earlier research assistance in support of this project, and to Professor Robin Craig and the other faculty participants in the University of Utah's 2020 Water Law Works in Progress Conference for their insightful comments on an early draft. Finally, I am indebted to the students of the *Cardozo Law Review* for their invitation to contribute these ideas to the Environmental Rights Panel of their 2020 Symposium, *Fault Lines in the Constitution: A Reemerging Debate Over the Need for Affirmative Social Rights in the U.S. Constitution*. Portions of this article borrow from draft chapters of my forthcoming book, *THE PUBLIC TRUST DOCTRINE, PRIVATE RIGHTS IN WATER, AND THE MONO LAKE STORY* (Cambridge University Press, forthcoming 2022).

[†] Holly Parker Curry, J.D. 2021, Florida State University College of Law, M.S., Florida State University; B.S., Florida State University.

[†] Hayes Rule, J.D. expected 2022, Florida State University College of Law; B.A., Mercer University.

After reviewing the historical origins of the public trust doctrine in Roman and English common law, the article recounts its reception and development in U.S. law, leading to extraordinary jurisdictional diversity along the axes of the resources to which the trust applies, what values the trust protects, what mechanisms of law vindicate trust principles, and diverging legal theories in different states about the nature of the doctrine itself. It offers a snapshot of the diversity of the doctrine in sample states of California, Idaho, Pennsylvania, Michigan, Colorado, Hawaii, and Florida, and then reviews the state of public trust principles in nations beyond the United States.

It then provides an overview of the rights of nature movement, both internationally and domestically. It provides the first scholarly survey of major rights of nature laws enacted throughout the world, and then reviews a series of local rights of nature bills introduced and enacted in American municipalities and Native American tribes, as well as judicial and legislative efforts to block them. It especially focuses on unfolding disputes in Florida, where multiple local governments are experimenting with rights of nature ordinances, and Orange County voters adopted a Bill of Rights charter amendment to protect the local river system from extraction in the same year that the state legislature statutorily preempted local rights of nature ordinances from effect.

Finally, it compares and contrasts the two approaches, considering how these diverging anthropocentric and biocentric frames of reference provide different answers to basic questions of environmental management. It asks whether the doctrines can provide mutual support or are destined to undermine one another. It also considers the ways each model is used as a tool of political advocacy in legislative and administrative contexts beyond litigation. Both partner failures in litigation with more promising impacts in the political arena, where the motivating ideas can become a galvanizing force for policy change. Indeed, the enormous jurisdictional variation among both approaches—each a mosaic, rather than a monolith—signals the extent to which they are still evolving, and may long remain inchoate vessels of advocacy into which the champions of vulnerable environmental values pour both their frustrations and their hopes.

TABLE OF CONTENTS

INTRODUCTION	2451
I. OVERVIEW OF THE PUBLIC TRUST DOCTRINE	2456
A. <i>The Public Trust Doctrine from Early Roman and English Law to the United States</i>	2457
B. <i>The Evolution of the American Public Trust Across Multiple Axes</i>	2461

1.	Vindicating Public Trust Principles Through Different Forms of Law	2462
2.	Different Resources Protected by the Doctrine	2467
3.	Different Values Protected by the Doctrine.....	2470
4.	Different Legal Theories About the Nature of the Doctrine	2472
C.	<i>The Modern U.S. Public Trust Doctrine as a Protector of Environmental Rights</i>	2476
1.	The California Public Trust and Water Rights at Mono Lake	2476
2.	The Pennsylvania Constitution’s Environmental Rights Amendment	2478
3.	Michigan’s Public Trust and the Great Lakes	2479
4.	The Public Trust as a Defense of Environmental Regulation Against Takings Claims.....	2480
D.	<i>Public Trust Principles Around the World</i>	2483
1.	Oceania.....	2484
a.	New Zealand and Australia	2484
2.	Asia	2485
a.	The Philippines	2485
b.	India	2487
3.	The Greater Middle East	2488
a.	Pakistan.....	2488
b.	Israel.....	2489
4.	Africa	2490
a.	Uganda.....	2490
b.	Kenya.....	2491
c.	Nigeria.....	2491
d.	South Africa.....	2492
5.	Europe	2493
a.	England.....	2493
b.	Scotland and Wales	2494
c.	A Future British Trust?	2495
6.	Latin America	2495
a.	Brazil	2495
b.	Ecuador	2496
7.	North America.....	2497
a.	Canada	2497
b.	United States	2497
II.	OVERVIEW OF THE RIGHTS OF NATURE.....	2500

A.	<i>Historical Origins of Rights of Nature Principles</i>	2502
1.	Historical Origins: Indigenous Cultures	2502
2.	Historical Origins: Should Trees Have Standing? and <i>Sierra Club v. Morton</i>	2503
B.	<i>The Evolution of Rights of Nature Principles Across Different Axes</i> 2506	
1.	What is Protected Under the Rights of Nature Doctrine?....	2506
2.	Who Speaks for Rights-Holders?	2509
3.	What Legal Mechanism Protects Rights in Nature?	2510
4.	What Rights Are Protected?.....	2512
C.	<i>The Rights of Nature Internationally</i>	2514
1.	South America	2514
a.	Ecuador.....	2514
b.	Bolivia	2515
c.	Colombia	2516
2.	Oceania.....	2517
a.	New Zealand.....	2517
b.	Australia.....	2518
3.	Asia	2519
a.	India	2519
b.	Bangladesh.....	2520
D.	<i>The Rights of Nature in the United States</i>	2521
1.	Pennsylvania	2522
a.	Tamaqua Borough's Sewage Ordinance	2522
b.	City of Pittsburg's Anti-Fracking Ordinance	2523
c.	Anti-Fracking Home Rule Charter of Grant Township	2524
2.	Ohio	2525
a.	The Lake Erie Bill of Rights	2525
3.	California.....	2527
a.	Santa Monica's Bill of Rights for Sustainability	2527
4.	Florida.....	2527
a.	Local Initiatives in Response to Ecological Disaster..	2529
b.	Orange County, WEBOR, and Senate Bill 712.....	2532
5.	North American Tribal Nations	2536
a.	Ho-Chunk Nation and Menominee Tribe of Wisconsin	2536
b.	Ponca Nation of Oklahoma	2537
c.	White Earth Band of Ojibwe in Minnesota	2537
d.	Yurok Tribe of California	2538

e. Innu Council of Ekuanitship and Minganie County, Quebec	2538
III. COMPARING THE PUBLIC TRUST AND RIGHTS OF NATURE	2539
A. <i>Contrasting Environmental Ethics: Anthropocentrism vs. Ecocentrism</i>	2541
1. Anthropocentrism and the Public Trust	2541
2. Biocentrism, Ecocentrism, and the Rights of Nature.....	2548
B. <i>Doctrinal Similarities in the Larger Political Context</i>	2555
1. Duality or False Dichotomy?	2555
2. Mosaics, Not Monoliths	2558
3. A Special Focus on Waterways	2559
4. Arguments of Last Resort and Intuitive Appeal	2560
5. Leveraging the Political Arena.....	2561
6. The Emotional Element.....	2562
C. <i>Comparative Analysis: Florida as a Living Laboratory</i>	2563
1. Florida as a Living Laboratory to Assess Both Approaches	2564
2. The Failed Santa Fe River Bill of Rights	2565
3. What Do the Public Trust Doctrine and Rights of Nature Do Differently?.....	2570
4. Which Is Better?	2571
CONCLUSION	2575

INTRODUCTION

This Article compares two theoretically distinct approaches to pursuing related objectives of environmental protection: the public trust doctrine and the rights of nature movement. Both legal strategies are deployed to accomplish similar ends, especially regarding waterways, but they are grounded in very different frameworks of environmental ethics. The anthropocentric public trust doctrine, which privileges human interests in pursuing environmental protection, contrasts sharply against the ecocentric rights of nature movement, which locates environmental rights directly in nature itself. It would therefore seem that these approaches would operate very differently (and perhaps one day they will), but the similarities in their present stages of development are striking. The rights of nature is a much newer legal strategy than the public trust, and the trust has a much broader portfolio than simply its role in environmental protection—but as both approaches develop and differentiate across jurisdictions, they are evolving along a related set of legal axes, from the targets of their

protection to the mechanisms of their implementation. This project explores these important points of contrast and commonality as these two approaches continue to evolve, both in the United States and around the world. It provides a comprehensive review of the development of public trust principles along distinct legal axes, and the first major scholarly survey of rights of nature initiatives globally and domestically.

Among the oldest doctrines of the common law, the public trust doctrine creates a set of public rights and responsibilities with regard to certain natural resources, especially waterways.¹ The American approach assigns states responsibility to manage natural resources for the benefit of the public, but the doctrine has evolved along multiple dimensions among the different U.S. states.² Some extend doctrinal protection from waterways to other resources, some extend doctrinal protection from a limited set of navigation-related values to more fulsome environmental values, and some locate public trust principles in different areas of state law, including common law, statutory law, and constitutional law.³ Different versions of public trust principles have also appeared in legal systems throughout the world, including India, South Africa, Pakistan, Kenya, Brazil, and the Philippines.⁴ The public trust doctrine did not originate as a doctrine of environmental law, and it protects many values of natural resource commons beyond environmental values, but it has become an increasingly important complement to conventional environmental regulation of natural resource commons.⁵ Even so, similar environmental advocacy is coalescing around an entirely different idea.

Just as the public trust has been increasingly deployed toward environmentalism, the rights of nature movement has emerged as a biocentric or ecocentric alternative. While the public trust doctrine locates rights to environmental protection in the people who would benefit, the rights of nature movement assigns rights directly to the

¹ See generally Erin Ryan, *A Short History of the Public Trust Doctrine and Its Intersection with Private Water Law*, 38 VA. ENV'T L.J. 135 (2020) [hereinafter Ryan, *A Short History*]; Erin Ryan, *From Mono Lake to the Atmospheric Trust: Navigating the Public and Private Interests in Public Trust Resource Commons*, 10 GEO. WASH. J. ENERGY & ENV'T L. 39 (2019); Erin Ryan, *The Public Trust Doctrine, Private Water Allocation, and Mono Lake: The Historic Saga of National Audubon Society v. Superior Court*, 45 ENV'T L. 561 (2015) [hereinafter Ryan, *The Historic Saga*]. See also ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE RIGHTS IN WATER, AND THE MONO LAKE STORY* (forthcoming 2022).

² See *infra* Section I.B.

³ See *id.*

⁴ See *infra* Section I.D.

⁵ See *infra* Section I.C–I.D.

natural systems designated for protection. For example, New Zealand law implements an indigenous Māori principle that confers rights to protection for parks, rivers, and mountains in and of themselves,⁶ and Ecuador has instantiated rights of nature principles directly into its constitution.⁷ Bolivia continues to campaign for universal recognition of the rights of nature by the United Nations.⁸ Even in the United States, local rights of nature ordinances have been enacted coast to coast, from California to Florida, and many places in between, including midwestern efforts to protect the Great Lakes and nationwide tribal initiatives.⁹ Following competing acts of state and local lawmaking in 2020, Floridians are battling over conflicts between multiple rights of nature initiatives to protect river resources and state legislative efforts to preempt them.¹⁰

This Article explores these two approaches to environmental protection, contrasting their shared goals with the fundamentally different frames of reference from which they begin. Drawing from an array of public trust and rights of nature examples operating both domestically and internationally, we consider the distinct legal axes on which both approaches are separately differentiating as they evolve across jurisdictional lines. We then consider the opposing systems of underlying environmental ethics from which they begin—the inherent anthropocentrism that underlies the public trust doctrine, and the unapologetic biocentrism or ecocentrism that underlies the rights of nature approach.¹¹ We conclude with consideration of the relative advantages and challenges of each approach, including the vulnerability of anthropocentric ethics to short-sighted human capriciousness and the uncertainty of who speaks for nature when determining what honoring the rights of nature requires.

Indeed, environmental advocates will struggle to determine which approach is better in their own legal contexts, as both approaches are problematic in different ways. The public trust doctrine constrains short-term exploitation of natural resources to protect the public—but people can be notoriously fickle. As Professor Richard Lazarus warned after its modern ascent during the 1980s, the public trust doctrine is a dangerous foundation for environmental protection because it locates

⁶ See *infra* Section II.C.2.a.

⁷ See *infra* Section II.C.1.a.

⁸ See *infra* Section II.C.1.b.

⁹ See *infra* Section II.D.

¹⁰ See *infra* Section II.D.4.

¹¹ See *infra* Section III.A.2 (discussing the difference between biocentric and ecocentric ethics).

its moral authority in the public interest, and people can always reprioritize their needs, especially under conditions of economic stress.¹² Sometimes, people will sacrifice economic development to protect nature, and other times they will “pave[] paradise, put up a parking lot.”¹³

The biocentric rights of nature approach seemingly resolves that issue squarely on the side of environmental protection, without privileging human interests over other components of the protected ecosystem.¹⁴ It prioritizes environmental protection regardless of whether the general public has shifted its attention. Nevertheless, there remains the unsettled question of who speaks for nature in biocentric decision-making, when that which is targeted for protection cannot speak for itself.¹⁵ It can be especially hard to know who best represents the interests of nature when different human advocates make competing claims—for example, in favor of solar farms or desert habitat.¹⁶

In the end, which is better probably depends on the specific ends to which each is deployed. It may be that the question is simply a matter of path dependency on prior legal concepts; the similarity between each model and the legal culture in which it is deployed may be the most determinative reason that advocates would follow one approach or the other, as well as the best predictor of its success.¹⁷ But it is also important to recognize the ways in which both models are used as tools of political advocacy in coordination with litigation. Both approaches partner notable failures in litigation with more promising impacts in the political arena, where the underlying ideals become a galvanizing force

¹² Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 715–16 (1986). Instead of trusting the public trust doctrine as a source of environmental protection, Lazarus advocated for a stewardship approach to public commons protection modeled after the federal environmental statutes of the 1970s, such as the Clean Air and Water Acts and the Endangered Species Act. *Id.* at 675–77.

¹³ JONI MITCHELL, *Big Yellow Taxi*, on LADIES OF THE CANYON (Reprise Recs. 1970).

¹⁴ See *infra* Section III.A.2.

¹⁵ See *infra* Section III.C.4. This problem has been recognized in the United States at least since its original presentation to the United States Supreme Court in *Sierra Club v. Morton*, 405 U.S. 727 (1972), where the Supreme Court confined legal standing to raise legal claims only to persons, and not to natural systems. See *infra* Section II.A.2.

¹⁶ Sammy Roth, *Study: California Solar Farms Threaten Desert Species*, DESERT SUN (Oct. 20, 2015, 11:55 AM), <https://www.desertsun.com/story/tech/science/energy/2015/10/19/study-california-solar-farms-threaten-desert-species/74233862> [https://perma.cc/H9PK-27AJ] (“Large-scale solar development threatens natural ecosystems across California’s deserts, according to a new study.”).

¹⁷ See *infra* Section III.C.4.

for policy change.¹⁸ Both approaches speak especially powerfully to waterways—likely indicating the extent to which water resources are under-protected by conventional environmental law—but they ask for materially different forms of relief, with different legal implications for the future.¹⁹ Even so, the enormous jurisdictional variation associated with each approach signals the extent to which both are still evolving, and may long remain inchoate vessels of advocacy into which the champions of vulnerable environmental values pour their unique hopes and frustrations.

The Article proceeds as follows: Part I provides an overview of the public trust doctrine and its basic legal tenets. After reviewing its historical origins in Roman and English common law, Part I recounts its acceptance and development in U.S. law, leading to extraordinary jurisdictional diversity along the axes of the resources to which the trust applies, what values the trust protects, what mechanisms of law vindicate trust principles, and different legal theories in different states about the nature of the doctrine itself. Part I offers a snapshot of the diversity of the doctrine in such sample states as California, Idaho, Pennsylvania, Michigan, Colorado, Hawaii, and Florida, and then reviews the state of public trust principles in nations beyond the United States.

Part II provides an overview of the rights of nature movement, both internationally and domestically. It provides the first scholarly survey of major rights of nature laws enacted throughout the world, and then reviews a series of local rights of nature bills introduced and enacted in American municipalities and Native American tribes, as well as judicial and legislative efforts to block them. Part II gives special attention to the unfolding dispute in the State of Florida, where multiple local governments are experimenting with rights of nature ordinances. In early 2021, Orange County passed a Bill of Rights ordinance protecting a local river system from extraction just as the Florida State Legislature statutorily preempted any rights of nature ordinances from taking effect.

Part III compares and contrasts the two approaches, focusing on the different environmental ethical frameworks from which each begins. It reviews the anthropocentrism behind the public trust doctrine and explores its prevalence in U.S. law, and then contrasts it with the biocentrism that underlies the rights of nature movement and its comparative paucity in U.S. law. It considers how these different ethical

¹⁸ See *infra* Section III.C.4.

¹⁹ See *infra* Section III.A.

frames of reference provide different answers to basic questions of environmental management, using the example of the unfolding Florida rights of nature debate for context. Noting the focus on both doctrines on protecting waterways, it considers whether the two could provide mutual support, or whether they are destined to undermine one another. Finally, it considers which approach is most likely to bear fruit, and the significant role that each approach plays in the political contexts that include but exceed the litigation in which they are invoked. It suggests that path dependence in the overall legal context may be the most determinative indicator of success, but also considers whether there is value to be had in regulatory redundancy between the two—perhaps even a paradoxical system of environmental checks and balances.

I. OVERVIEW OF THE PUBLIC TRUST DOCTRINE

By the law of nature these things are common to mankind—the air, running water, the sea, and consequently the shores of the sea.²⁰

Among the oldest doctrines of the common law tradition, the public trust doctrine and associated legal principles provide that the state holds certain natural resource commons in trust for the public benefit, especially waterways.²¹ Every American state and many other nations have adopted some version of the doctrine,²² which has evolved considerably across these different jurisdictions to showcase notable geographical variation today. The development of the public trust has received both support²³ and critique²⁴ by legal scholars observing its

²⁰ THE INSTITUTES OF JUSTINIAN 2.1.1 (Thomas Collett Sandars trans., Longmans, Green, & Co. 4th ed. 1869).

²¹ See generally Ryan, *A Short History*, *supra* note 1.

²² See, e.g., Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PA. ST. ENV'T L. REV. 1 (2007) [hereinafter Craig, *Eastern Public Trust Doctrines*] (comparing eastern states' public trust doctrines); Robin Kundis Craig, *A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 ECOLOGY L.Q. 53 (2010) [hereinafter Craig, *Western Public Trust Doctrines*] (comparing western states' public trust doctrines); Michael C. Blumm & Rachel D. Guthrie, *Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxon Vision*, 45 U.C. DAVIS L. REV. 741, 760 (2012) (reviewing the adoption of public trust principles internationally).

²³ See Ryan, *A Short History*, *supra* note 1, at 141 n.19.

²⁴ *Id.* at 141 n.20.

gradual transformation from an anti-monopoly doctrine of sovereign authority to one of sovereign responsibility to also protect environmental values.²⁵ Some have lauded the evolution of the doctrine from merely guaranteeing continued public access to also protecting trust resources from degradation by overuse.²⁶ Others suggest that it unduly limits private property rights, compromises the separation of powers, or displaces more effective means of protecting environmental values.²⁷ Summarizing previously published work on its historical development,²⁸ this Part offers a brief account of the doctrine's historical roots in early Roman and English law before reviewing its historical development in the United States and abroad. It considers the surprisingly diverse array of axes along which the modern public trust doctrine has developed in different states, applying to different resources, protecting different values, and operating through different legal mechanisms. It then reviews three modern examples in which the doctrine was framed explicitly to protect environmental rights and concludes with a sampling of the public trust principles currently in operation internationally.

A. *The Public Trust Doctrine from Early Roman and English Law to the United States*

Most accounts of the public trust doctrine trace its roots back to ancient Rome.²⁹ In the sixth century, Byzantine Emperor Justinian I recorded public trust principles in his codification of imperial Roman common law in the *Institutes of Justinian*,³⁰ famously defining the *jus publicum* principle of common ownership of natural resources: “By the law of nature these things are common to mankind—the air, running

²⁵ *Id.* at 141 n.19 (see especially work by Michael Blumm and Mary Christina Wood).

²⁶ *Id.* at 141 n.20 (see especially work by Barton Thompson (critiquing the doctrine's impact on property rights), James Huffman (arguing that the doctrine encourages judicial encroachment on the legislature), and Richard Lazarus (providing an environmental critique of the doctrine)).

²⁷ *See id.*; see also Ryan, *The Historic Saga*, *supra* note 1, at 617–22.

²⁸ *See generally* Ryan, *A Short History*, *supra* note 1.

²⁹ *See id.* at 140–43. While the conventional account has been repeatedly stated by the U.S. Supreme Court and the majority of relevant scholarship, a handful of scholars have questioned it. *See id.* at 146–49 (discussing work by James Huffman, J.B. Ruhl and Tom McGinn, and Bruce Frier).

³⁰ H.F. JOLOWICZ & BARRY NICHOLAS, HISTORICAL INTRODUCTION TO THE STUDY OF ROMAN LAW 492–93 (3d ed. 1972).

water, the sea, and consequently the shores of the sea.”³¹ These principles were received from Roman common law into early English law, appearing as early as the 1215 Magna Carta,³² the progenitor of western democracy and constitutional law,³³ and its 1217 addendum, the Charter of the Forest.³⁴ The original Magna Carta protected public rights to fishing and navigation on major navigable waters “throughout the whole of England,”³⁵ and the Forest Charter guaranteed public access to certain undeveloped sovereign lands for grazing, forage, agriculture, and lumber.³⁶ The doctrine also appeared in early English common law, which affirmed sovereign ownership of submerged tidelands for public use and enjoyment.³⁷

The public trust doctrine was first recognized in the United States during the early 1800s, making its first appearances in state courts. In an 1821 dispute about the ownership of submerged oyster beds, *Arnold v. Mundy*, the New Jersey Supreme Court affirmed that the land beneath navigable waterways is common property, and that landward proprietors have no more power than the English crown to convert them into private property:

³¹ THE INSTITUTES OF JUSTINIAN 2.1.1 (Thomas Collett Sandars trans., Longmans, Green, & Co. 4th ed. 1869).

³² THE MAGNA CARTA OF 1215, ch. 33, <https://www.bl.uk/collection-items/magna-carta-1215?shelfitemviewer=1> [<https://perma.cc/S24G-JAUG>]; see also Ryan, *A Short History*, *supra* note 1, at 143–45 (discussing the appearance of public trust principles in the Magna Carta and Forest Charter).

³³ See Doris Mary Stenton, *Magna Carta*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/topic/Magna-Carta> (last updated Feb. 11, 2021) [<https://perma.cc/4QU4-ZK5B>].

³⁴ THE MAGNA CARTA OF 1217, ch. 12; see also Ryan, *A Short History*, *supra* note 1, at 143–45.

³⁵ THE MAGNA CARTA OF 1215, ch. 33, <https://www.bl.uk/collection-items/magna-carta-1215?shelfitemviewer=1> [<https://perma.cc/S24G-JAUG>]; see also Michael C. Blumm & Courtney Engel, *Proprietary and Sovereign Public Trust Obligations: From Justinian and Hale to Lamprey and Oswego Lake*, 43 VT. L. REV. 1, 7 (2018).

³⁶ THE MAGNA CARTA OF 1217, ch. 12; John Langton & Graham Jones, *The Charter of the Forest of King Henry III*, FORESTS & CHASES OF ENG. & WALES C. 1000 TO C. 1850, <http://info.sjc.ox.ac.uk/forests/Carta.htm> [<https://perma.cc/S76D-7WER>] (discussing public rights of access to public commons protected under the Forest Charter); see also Sarah Nield, *The New Forest: Ancient Forest and Modern Playground*, in 2 MODERN STUDIES IN PROPERTY LAW 287, 294 (Elizabeth Cooke ed. 2003); Anne Bottomley, *Beneath the City: The Forest! Civic Commons as Practice and Critique*, 5 BIRKBECK L. REV. 1, 2–3 (2018); Nicholas A. Robinson, *The Public Trust Doctrine in the 21st Century*, 10 GEO. WASH. J. ENERGY & ENV'T L. 83, 84–87 (2020).

³⁷ *The Case of the Royal Fishery of Banne* (1610) 80 Eng. Rep. 540, 543 (KB); MATTHEW HALE, A TREATISE DE JURE MARIS ET BRACHIORUM EJUSDEM, *reprinted in* STUART A. MOORE, A HISTORY OF THE FORESHORE AND THE LAW RELATING THERETO 370, 371–72 (3d ed. 1888) (describing public rights in different kinds of submerged lands); see also Ryan, *A Short History*, *supra* note 1, at 145.

The sovereign power itself, therefore, cannot, consistently with the principles of the law of nature and the constitution of a well ordered society, make a direct and absolute grant of the waters of the state, divesting all the citizens of their common right. It would be a grievance which never could be long borne by a free people.³⁸

In 1842, the U.S. Supreme Court provided a similar account of the public trust doctrine in *Martin v. Waddell's Lessee*, affirming the sovereign ownership of navigable waters and their submerged resources and the presence of the doctrine in English law as far back as the Magna Carta.³⁹ Some fifty years later, in 1894, the Supreme Court formally ratified the public trust doctrine in *Shively v. Bowlby*, holding that all submerged lands below the mean high-water mark in all U.S. lands are held in trust by the state for the benefit of the public.⁴⁰

Around the same time, in the canonical case of *Illinois Central Railroad Co. v. Illinois*, the U.S. Supreme Court demonstrated the force of the doctrine in constraining state authority to manage trust resources for the public benefit and in providing citizens with a judicial remedy for violations of the trust.⁴¹ In affirming that the state legislature could not transfer ownership of the bed of Chicago Harbor to a private railroad company, the Court emphasized that the government holds trust resources *in trust* for the public:

[T]he State holds the title to the lands under the navigable waters. . . in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over

³⁸ Arnold v. Mundy, 6 N.J.L. 1, 71–72, 78 (N.J. 1821) (referencing Justinian’s characterization of “the air, the running water, the sea, the fish, and the wild beasts” as common property and holding that title to these remained in the sovereign, to “be held, protected, and regulated for the common use and benefit”); see also Ryan, *A Short History*, *supra* note 1, at 150–51.

³⁹ *Martin v. Waddell's Lessee*, 41 U.S. (16 Pet.) 367, 416–18 (1842); see also Ryan, *A Short History*, *supra* note 1, at 152–53.

⁴⁰ *Shively v. Bowlby*, 152 U.S. 1, 53–54 (1894). The dispute revolved around the submerged lands below a state-sanctioned wharf of the Columbia River in Oregon, and the defendant claimed that he owned the submerged lands because the U.S. Congress had granted title to the original claimant before Oregon became a state. *Id.* at 8–9. The Court found the original grant did not include the submerged lands under the principles of English and American common law, in which the English King had held lands for the benefit of the public, that after the American Revolution those same rights went to the thirteen colonies, and that all American submerged land acquired by whatever means after the Revolution would be subject to the same public trust limitations. *Id.* at 14–15, 48–49, 57–58; see also Ryan, *A Short History*, *supra* note 1, at 155–60.

⁴¹ *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 452 (1892).

them, and have liberty of fishing therein freed from the obstruction or interference of private parties.⁴²

Analogizing to the responsibility of the trustee in a conventional property law trust, the case demonstrated that the government does not own public trust resources in the same proprietary way that it owns other public property.⁴³ With very circumscribed exceptions,⁴⁴ the state may not alienate or destroy trust resources.⁴⁵ The doctrine, therefore, creates a judicial remedy—one of the earliest examples of a citizen-suit cause of action—by which ordinary people may hold the state accountable for failure to maintain trust resources.⁴⁶ In this way, the *Illinois Central* case marks an important moment in the public trust doctrine's gradual transition from a doctrine conferring sovereign authority over trust resources to one that also imposes sovereign responsibilities over trust resources, rendering the doctrine both a grant and a limit of sovereign authority on the same resources.⁴⁷

Illinois Central has become a lodestar development of the common law public trust,⁴⁸ and today, the common law in nearly every U.S. state offers meaningful protection of navigable waterways as public commons and for public access.⁴⁹ Some states expand trust protections

⁴² *Id.*

⁴³ See, e.g., Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future*, 45 U.C. DAVIS L. REV. 665, 667 (2012) (“Simply stated, however, the doctrine provides that certain natural resources are held by the government in a special status—in ‘trust’—for current and future generations.”).

⁴⁴ See, e.g., *Ill. Cent.*, 146 U.S. at 453 (approving limited dispositions of trust resources to private parties to improve navigation or when discrete parcels can be disposed of without impairing the public interest in the remaining trust resource); see also Michael C. Blumm, *The Public Trust Doctrine and Private Property: The Accommodation Principle*, 27 PACE ENV'T L. REV. 649, 660–62 (2010) (discussing the *Illinois Central* exception, “authoriz[ing] privatization of trust resources when 1) the conveyance furthered public purposes, and 2) there was no substantial effect on remaining trust resources”).

⁴⁵ Frank, *supra* note 43, at 667 (“Government officials may neither alienate those resources into private ownership nor permit their injury or destruction.”).

⁴⁶ See Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 473 (1970) (describing how citizens have brought lawsuits to enforce the trust obligations of the state).

⁴⁷ See Ryan, *A Short History*, *supra* note 1, at 138, 160, 176–80, 205.

⁴⁸ See, e.g., Joseph D. Kearney & Thomas W. Merrill, *The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central*, 71 U. CHI. L. REV. 799, 802–03 (2004) (outlining the history of the case in light of its importance in modern public trust theory); see also Ryan, *A Short History*, *supra* note 1, at 160–66.

⁴⁹ See generally Craig, *Eastern Public Trust Doctrines*, *supra* note 22 (comparing eastern states' public trust doctrines); Craig, *Western Public Trust Doctrines*, *supra* note 22 (comparing western states' public trust doctrines); ALEXANDRA B. KLASS & LING-YEE HUANG, CTR. FOR

from waterways to other resources, such as the New Jersey doctrine protecting not only access to navigable waters but public rights of passage over dry sand beaches as needed to reasonably access coastal waters.⁵⁰ Even today, the doctrine continues to develop independently among the different states, as reviewed in the Section that follows.

B. *The Evolution of the American Public Trust Across Multiple Axes*

In the century and a third since *Illinois Central* was decided, the American public trust doctrine has become notably differentiated among the states, with different versions protecting different resources and values to different degrees and even through different legal mechanisms.⁵¹ Some states apply the doctrine to only waterways, while others expand the resources protected by the trust to include wildlife, beach access, other natural and cultural resources, and perhaps even atmospheric resources. Different trust values are protected in different states, some of which protect only the traditional fishing, swimming, and navigational values, while others add environmental, recreational, and cultural values. In some states, the doctrine primarily operates through common law, while others have incorporated public trust principles into state statutory, regulatory, and constitutional law.

Given so much variety, the public trust doctrine can be considered something of a genus from which countless differentiated species have evolved, all with a common ancestor. It would not be accurate today to say that every state's public trust doctrine serves as a guarantor of environmental rights. However, there are increasing examples in which the doctrine has been reframed as such. The question is how far that legal evolution of the doctrine will go. This Section reviews the different axes along which the trust has developed in different states, and, in so

PROGRESSIVE REFORM, RESTORING THE TRUST: WATER RESOURCES AND THE PUBLIC TRUST DOCTRINE, A MANUAL FOR ADVOCATES 21–24 (2009) (comparing the sources of various states' Public Trust doctrines); THE PUBLIC TRUST DOCTRINE IN 45 STATES (Michael C. Blumm ed. 2014) [hereinafter 45 STATES] (analyzing the public trust doctrines of 45 states); CTR. FOR PROGRESSIVE REFORM, RESTORING THE TRUST: AN INDEX OF STATE CONSTITUTIONAL AND STATUTORY PROVISIONS AND CASES ON WATER RESOURCES AND THE PUBLIC TRUST DOCTRINE (2009) [hereinafter RESTORING THE TRUST: AN INDEX].

⁵⁰ See, e.g., *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 363 (N.J. 1984) (“In order to exercise these rights guaranteed by the public trust doctrine, the public must have access to municipally-owned dry sand areas as well as the foreshore. The extension of the public trust doctrine to include municipally-owned dry sand areas was necessitated by our conclusion that enjoyment of rights in the foreshore is inseparable from use of dry sand beaches.”).

⁵¹ See, e.g., KLASS & HUANG, *supra* note 49, at 21–24 (describing the differentiation of the public trust doctrine along constitutional and statutory lines).

doing, provides a snapshot of very different versions of modern doctrine in five different regions of the United States: Hawaii, Colorado, California, Florida, and Idaho.

1. Vindicating Public Trust Principles Through Different Forms of Law

The public trust doctrine operates through a variety of different legal mechanisms among the several states. The common law doctrine is the undeniable progenitor of public trust principles in the United States, as recognized by the U.S. Supreme Court in cases like *Pollard v. Hagan*, *Illinois Central*, and *Shively v. Bowlby*.⁵² Since then, however, public trust principles have been adopted in various state statutes and even ratified in state constitutions, sometimes working with the common law doctrines and sometimes displacing them.⁵³ Perhaps for this reason more than any other, there is no single public trust doctrine in the United States. Many are developing along entirely different lines of legal evolution, in these different mechanisms of law.

Today, very few states operate from a purely common law version of the public trust doctrine, unaccompanied by additional statutory, regulatory, or constitutional directives or counterparts, but in some, the common law plays a relatively more important role than others. Massachusetts, for example, maintains a fairly traditional common law doctrine, protecting traditional values of navigation, fishing, and swimming, mostly through judicial enforcement and elaboration.⁵⁴ Massachusetts courts have steadfastly enforced historic *jus publicum* encumbrances for public navigation and fishing.⁵⁵ The political branches are statutorily authorized to enforce public access to trust resources, but their performance remains subject to public oversight

⁵² See *Shively v. Bowlby*, 152 U.S. 1, 53–54 (1894); *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387 (1892); *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845).

⁵³ See Ryan, *A Short History*, *supra* note 1, at 167–70; Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L. REV. 699, 714 (2006).

⁵⁴ *Butler v. Att’y Gen.*, 80 N.E. 688, 689 (Mass. 1907) (“In the seashore the entire property, under the colonial ordinance, is in the individual, subject to the public rights. . . . of navigation, with such incidental rights as pertain thereto. We think that there is a right to swim or float in or upon public waters as well as to sail upon them.”); *Commonwealth v. Alger*, 61 Mass. (7 Cush.) 53, 91–93 (Mass. 1851).

⁵⁵ *Arno v. Commonwealth*, 931 N.E.2d 1, 16–18 (Mass. 2010) (holding registration of certificate of title proceedings could not divest the public of its rights in tidelands).

through the judicial system.⁵⁶ The state's highest court has held that the legislature must act as a "fiduciary for the public"⁵⁷ to ensure that public trust encumbrances on submerged lands remain acknowledged and open for use for designated trust purposes.⁵⁸ The legislature has statutorily delegated much of its public trust authority to state administrative agencies, but these decisions remain subject to judicial review.⁵⁹ Even legislative determinations regarding public trust grants, uses, and purposes are reviewable by the Massachusetts courts.⁶⁰

In a few states, the public trust doctrine has been formally constitutionalized, shifting vindication of public trust principles from the common law to the constitution and the statutes it authorizes. For example, in Pennsylvania, the Environmental Rights Amendment to the Constitution has become the central locus for public trust protection of environmental values, promising:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.⁶¹

⁵⁶ *Alger*, 61 Mass. at 91–93.

⁵⁷ *Arno*, 931 N.E.2d at 14 (holding registration of certificate of title proceedings could not divest the public of its rights in tidelands).

⁵⁸ *Bos. Waterfront Dev. Corp. v. Commonwealth*, 393 N.E.2d 356, 358–59, 367 (Mass. 1979) ("We therefore hold that the [Boston Waterfront Development Corporation] has title to its property in fee simple, but subject to the condition subsequent that it be used for the public purpose for which it was granted." This was a rejection of the longstanding precedent that the legislature possessed the power to convert submerged land free from the public trust because the *jus publicum*, the *jus privatum*, and all of Parliament's rights of regulation had devolved upon the state at the time of the Revolution.); accord *United States v. 1.58 Acres of Land*, 523 F. Supp. 120, 124–25 (D. Mass. 1981) (holding that the United States could take property below low-water mark in "full fee simple," however, the federal government was restricted in its ability to abdicate to private individuals its sovereign public trust in land). *But see* *Op. of the Justs. to the Senate*, 424 N.E.2d 1092, 1100, 1107 (Mass. 1981) (upheld, as a general proposition, the legislature's power to free land from the public trust and stated the two-thirds voting requirement applies to the disposition of all lands and easements taken or acquired for the stated purposes, regardless of when they were taken or acquired).

⁵⁹ *Op. of the Justs. to the Senate*, 424 N.E.2d at 1105.

⁶⁰ *Id.* at 1101 ("The question whether a particular legislative act, or an administrative decision pursuant to statutory authorization, serves a public purpose is for the Legislature to determine, and, although that legislative determination is entitled to great deference, it is not wholly beyond judicial scrutiny."); Brian Sheets, *The Public Trust Doctrine in Massachusetts*, in 45 STATES, *supra* note 49, at 364.

⁶¹ PA. CONST. art. I, § 27; see also Ryan, *A Short History*, *supra* note 1, at 167–68; *infra* notes 158–59.

In other states, the common law trust has been flanked by related principles in constitutional and statutory law, but all remain robust sources of public trust protection. For example, the public trust plays an important role in the common law, constitution, and statutory laws of Hawaii. The Hawaiian Constitution guarantees that “[a]ll public natural resources are held in trust by the State for the benefit of the people.”⁶²

Similarly, California has adopted public trust principles in its constitution, statutes, and regulatory law, in addition to its robust common law trust. Article Ten of the California Constitution codifies the doctrine in relation to water resources, including the sovereign ownership doctrine as it applies to tidelands⁶³ and rights of public access to all navigable waters.⁶⁴ The doctrine also appears in several sections of the California Water Code.⁶⁵ Section 102 states that “[a]ll water within the State is the property of the people of the State,”⁶⁶ Section 104 deems the state responsible for determining how the state’s water will be used,⁶⁷ and Section 1201 affirms that all unappropriated water is to be “public water of the State.”⁶⁸ The California State Water Resources Control Board (SWRCB) has also cited the public trust doctrine in its

⁶² HAW. CONST. art. XI, § 1.

⁶³ CAL. CONST. art. X, § 3 (noting that “[a]ll tidelands within two miles of any incorporated city, city and county, or town in this State, and fronting on the water of any harbor, estuary, bay, or inlet used for the purposes of navigation, shall be withheld from grant or sale to private persons, partnerships, or corporations” with legislatively constrained exceptions as needed to protect the public interest).

⁶⁴ *Id.* § 4 (“No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof.”).

⁶⁵ RESTORING THE TRUST: AN INDEX, *supra* note 49, at 6; CAL. WATER CODE §§ 102, 104, 1201 (West 1943).

⁶⁶ CAL. WATER CODE § 102.

⁶⁷ *Id.* § 104.

⁶⁸ *Id.* § 1201.

decisions,⁶⁹ albeit sometimes cursorily⁷⁰ and not always to prioritize environmental values.⁷¹ Nevertheless, the most important California public trust developments have taken place judicially, by courts interpreting the common law doctrine, in such cases as the *National Audubon Society v. Superior Court* “Mono Lake” case,⁷² discussed below in Section I.C.1.

In Florida, the doctrine developed under the common law until it was codified in Article 10, Section 11 of the Florida Constitution, which states that “[t]he title to lands under navigable waters . . . is held by the state, by virtue of its sovereignty, in trust for all the people.”⁷³ Early in Florida’s history, the Florida Supreme Court had observed that the public trust doctrine protected the “use and enjoyment” of Florida’s trust resources for “navigation and fishing and other implied purposes.”⁷⁴ Over time, those uses were expanded through conventional common law processes to include navigation, commerce, fishing, swimming, and sunbathing.⁷⁵ More recently, the doctrine has been invoked as a defense to takings claims.⁷⁶ Since constitutional

⁶⁹ For a few examples of regulatory rulings, see CAL. ENV’T PROT. AGENCY, STATE WATER RES. CONTROL BD., ORD. WR 2009-0015 (Mar. 17, 2009), http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2009/wro2009_0015.pdf [<https://perma.cc/45DE-H8EB>] (requiring bypass flows “[f]or the protection of fish, wildlife, and public trust resources”); CAL. ENV’T PROT. AGENCY, STATE WATER RES. CONTROL BD., Div. Decision 2010-0001, at 7–11 (Oct. 28, 2010), http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/division_decisions/2010/dd2010_0001.pdf [<https://perma.cc/2L53-CPJT>] (citing the doctrine while rejecting a revised water rights permit and while inciting the early stages of a dam removal); CAL. ENV’T PROT. AGENCY, STATE WATER RES. CONTROL BD., ORD. WR 2007-0032-DWR, at 3–5 (Oct. 9, 2007), http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2007/wro2007_0032_dwr.pdf [<https://perma.cc/7MMY-N663>] (citing the doctrine as a reason for denying a temporary urgency change permit); CAL. ENV’T PROT. AGENCY, STATE WATER RES. CONTROL BD., ORD. WR 2004-0040-DWR, at 5–6 (Sept. 17, 2004), http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2004/wro2004_0040.pdf [<https://perma.cc/7QFB-FNA7>] (citing an impact on public trust resources as a reason for denial).

⁷⁰ Dave Owen, *The Mono Lake Case, the Public Trust Doctrine, and the Administrative State*, 45 U.C. DAVIS L. REV. 1099, 1130 n.186, 1132 n.192 (2012) (noting that the SWRCB occasionally makes what appear to be “boilerplate” references to public trust principles).

⁷¹ *Id.* at 1133–34.

⁷² See generally *Nat’l Audubon Soc’y v. Super. Ct.*, 658 P.2d 709 (Cal. 1983).

⁷³ FLA. CONST. art. X, § 11.

⁷⁴ *State v. Black River Phosphate Co.*, 13 So. 640, 648 (Fla. 1893).

⁷⁵ *White v. Hughes*, 190 So. 446, 448–51 (Fla. 1939); *Adams v. Elliot*, 174 So. 731, 734 (Fla. 1937).

⁷⁶ For example, in *Krieter v. Chiles* a riparian property owner brought a takings claim after being denied a permit to build a dock on sovereign submerged lands. *Krieter v. Chiles*, 595 So. 2d 111, 112 (Fla. 3d DCA 1992). The court held that the riparian owner’s rights were subject to the public’s interests and could not constitute a taking. *Id.* at 113.

codification, however, the development of the doctrine seems to have slowed. Statutorily, public-trust-like principles are also included in the state's "public interest" criterion for approving uses of water resources.⁷⁷

In other states, the common law trust principles have been codified without explicit language in the constitution. Public trust principles have been codified into Minnesota statutes, and, as these statutes have become the more important avenue for the protection of public trust values, the development of the common law trust has become less salient.⁷⁸ There is a lack of case law in Minnesota protecting natural resources;⁷⁹ in its place, the state enacted the Minnesota Environmental Rights Act (MERA) in 1971, which gives "any private party, state, or local government the right to sue for declaratory or injunctive relief to protect air, water, land, or other natural resources from pollution, impairment, or destruction."⁸⁰ Minnesota's doctrine relies largely on statutory and constitutional bases. Idaho's public trust doctrine exists in common law and statutory law, without a clear presence in the constitution.⁸¹ The Nevada public trust doctrine appears in both common law and state statute but does not explicitly appear in the state constitution.⁸² However, even though the public trust doctrine does not appear directly in the Nevada Constitution, the Supreme Court of Nevada has interpreted the common law doctrine as an implied constitutional limit on sovereign authority, blurring the boundary between common law and constitutional law.⁸³

⁷⁷ FLA. STAT. § 373.223 (2016).

⁷⁸ Alexandra B. Klass, *The Public Trust Doctrine in the Shadow of State Environmental Rights Laws: A Case Study*, 45 ENV'T L. 431, 431 (2015) (noting that Minnesota environmental statutes have channeled litigation into statutory claims instead of common law public trust doctrine claims).

⁷⁹ *Id.*

⁸⁰ *Id.* at 433–34.

⁸¹ See *infra* notes 137–44; see also Ryan, *A Short History*, *supra* note 1, at 197–99.

⁸² Lawrence v. Clark Cnty., 254 P.3d 606, 612–14 (Nev. 2011) (citing State v. Bunkowski, 503 P.2d 1231, 1234 (Nev. 1972)); NEV. REV. STAT. § 533.025 (1913) ("The water of all sources of water supply within the boundaries of the State whether above or beneath the surface of the ground, belongs to the public.").

⁸³ See Mineral Cnty. v. Lyon Cnty., 473 P.3d 418, 423–26 (Nev. 2020); see also Ryan, *A Short History*, *supra* note 1, at 199–204 (discussing recent developments in Nevada); Lawrence, 254 P.3d at 612 (interpreting the gift clause of the state constitution to constrain legislative alienation of trust lands).

2. Different Resources Protected by the Doctrine

Different states' public trust doctrines protect different resources, although the common core of all of them remains navigable waterways. For example, South Carolina statutorily defines navigable waters and the physical extent of the public rights in general waters and tidal waters.⁸⁴ In Louisiana, "running waters, the waters and bottoms of natural navigable water bodies, the territorial sea, and the seashore" are deemed "public things,"⁸⁵ and the state has also been deemed to own the "bayous, rivers, streams, lagoons, lakes and bays, and the beds thereof, not under the direct ownership of any person on August 12, 1910."⁸⁶ New Jersey strongly applies the public trust doctrine to its waterways and, notably, erases the navigability requirement, applying the trust to all water resources in the state, including surface, ground, and drinking water.⁸⁷ Of note, New Jersey also extends the public access rights implied by the public trust from submerged lands, as in most states, even to privately held dry sand beaches as needed to afford the public reasonable access to submerged public trust lands.⁸⁸

In Massachusetts, the doctrine has also been extended beyond traditional coastal assets to also protect acquired public lands⁸⁹ and even federal lands.⁹⁰ That said, the Supreme Judicial Court of Massachusetts has passed on the opportunity to link the public trust to rights to recreational activities in navigable waters,⁹¹ or to protect public access to beaches,⁹² departing from the trajectory taken by other states with

⁸⁴ S.C. CODE ANN. § 49-1-10 (1976). It is significant that case law protects access to navigable water whether or not there is a clearly defined public interest because of the amount of marshlands, intercoastal waterways, and shore that are protected under the specialized version of the trust. South Carolina *ex rel.* Medlock v. S.C. Coastal Council, 346 S.E.2d 716, 719 (S.C. 1986); Blumm & Guthrie, *supra* note 22, at 751–52.

⁸⁵ LA. CIV. CODE ANN. art. 450 (1978).

⁸⁶ LA. STAT. ANN. § 9:1101 (1954).

⁸⁷ N.J. STAT. ANN. § 58:11A-3(g) (West 1977); Mayor of Clifton v. Passaic Valley Water Comm'n, 557 A.2d 299 (N.J. 1989); *see also* RESTORING THE TRUST: AN INDEX, *supra* note 49, at 15 nn.149–53 (discussing the New Jersey doctrine).

⁸⁸ Borough of Neptune City v. Borough of Avon-By-The-Sea, 294 A.2d 47, 51 (N.J. 1972).

⁸⁹ *See* Gould v. Greylock Rsrv. Comm'n, 215 N.E.2d 114, 124–25 (Mass. 1966).

⁹⁰ *See* United States v. 1.58 Acres of Land, 523 F. Supp. 120, 124–25 (D. Mass. 1981).

⁹¹ *See* Fafard v. Conservation Comm'n of Barnstable, 733 N.E.2d 66, 76 (Mass. 2000) (passing on recreational values).

⁹² Op. of the Justs. to the House of Representatives, 313 N.E.2d 561 (Mass. 1974) (rejecting beach access).

strong public trust protections like New Jersey and California.⁹³ Indeed, the court has used its interpretive discretion to limit the further development of trust values by both judicial and legislative actors, holding that the Massachusetts Constitution requires a two-thirds vote to approve a public trust purpose beyond those previously identified, and with explicit acknowledgment of the change and new interest applied to the land.⁹⁴

However, other states have expanded the trust to other resources beyond waterways, especially states that include trust principles in statutory or constitutional law. Hawaii arguably boasts the most expansive public trust doctrine in the United States, applying not only to all surface and ground water resources, but to all public natural resources in the state. As noted, the Hawaii Constitution straightforwardly declares that not just navigable waterways, but “[a]ll public natural resources are held in trust by the State for the benefit of the people.”⁹⁵ Elsewhere, the constitution charges the state with the explicit duty to protect water resources for the benefit of the public.⁹⁶ The doctrine has been further developed in Hawaii statutes requiring the state to protect “traditional and customary Hawaiian rights” in the “procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation.”⁹⁷ The expansive doctrine has also been interpreted judicially, such as the Supreme Court of Hawaii’s decision in *Robinson v. Ariyoshi*, which affirmed the state’s “duty to maintain the purity and flow of our waters for future generations.”⁹⁸ Protected at these three different levels of state law, the Hawaii doctrine imposes a duty on the state to protect an exhaustive array of resources and associated values, including cultural, ecological, recreational, scenic, and economic values for present and future generations.

Similarly, Pennsylvania’s constitutionalized public trust also protects all natural resources in the state, including parklands, forests,

⁹³ See JOSEPH WILLIAM SINGER, BETHANY R. BERGER, NESTOR M. DAVIDSON & EDUARDO MOISÉS PEÑALVER, *PROPERTY LAW: RULES, POLICIES, AND PRACTICES* 75 (6th ed. 2014) (contrasting Massachusetts and New Jersey public trust law on beach access).

⁹⁴ *Op. of the Justs. to the Senate*, 424 N.E.2d 1092, 1100, 1107–08 (Mass. 1981) (upholding, as a general proposition, the legislature’s power to free land from the public trust and stating the two-thirds voting requirement applies to the disposition of all lands and easements taken or acquired for the stated purposes, regardless of when they were taken or acquired).

⁹⁵ HAW. CONST. art. XI, § 11.

⁹⁶ *Id.*

⁹⁷ HAW. REV. STAT. § 174C-2(c) (1999).

⁹⁸ *Robinson v. Ariyoshi*, 658 P.2d 287, 310 (Haw. 1982).

and the oil and mineral resources within them.⁹⁹ California's public trust doctrine applies mostly to waterways, but in at least one case, was held to also apply to wildlife. In *Center for Biological Diversity v. FPL Group*, the California Court of Appeal held that public agencies must consider wildlife preservation under public trust principles when making decisions,¹⁰⁰ although it is the only California case allowing citizens to enforce public trust principles for wildlife protection.¹⁰¹ In a 1970s codification of public trust principles, since repealed, Michigan law held the trust to apply to atmospheric resources.¹⁰²

By contrast, many states of the interior West, such as Colorado and Idaho, have developed a much narrower doctrine, limiting its protections only to conventionally navigable waterways, and even then, sometimes begrudgingly.¹⁰³ Indeed, of all the United States, Colorado has taken the most restrictive view of the public trust doctrine, weakening it to the point of near impotence. Like all states, Colorado gained title to all submerged lands at statehood,¹⁰⁴ presumably impressed with the same public trust doctrine that the Supreme Court recognized in *Illinois Central*.¹⁰⁵ However, it has since interpreted the doctrine to have little impact in its constitution, statutes, or common law,¹⁰⁶ most notoriously by declaring that there are no navigable

⁹⁹ PA. CONST. art. I, § 27; Pa. Env't Def. Found. v. Commonwealth, 161 A.3d 911, 916 (Pa. 2017).

¹⁰⁰ Ctr. for Biological Diversity, Inc. v. FPL Grp., 83 Cal. Rptr. 3d 588 (Cal. Ct. App. 2008).

¹⁰¹ See *id.*

¹⁰² Environmental Protection Act of 1970, MICH. COMP. LAWS § 691.1202(1) (1970) (extending the public trust to authorize legal actions "for the protection of the air" in addition to water and other natural resources), *repealed by* Natural Resources and Environmental Protection Act, 1994 Mich. Pub. Acts 451.

¹⁰³ IDAHO CODE § 58-1203 (1996); *In re German Ditch & Reservoir Co.*, 139 P. 2, 9 (Colo. 1914) (asserting that all Colorado streams are nonnavigable); *Stockman v. Leddy*, 129 P. 220, 222 (Colo. 1912) (same), *overruled in part by* *United States v. City & Cnty. of Denver*, 656 P.2d 1 (Colo. 1982) (disputing its treatment of non-navigable waters on federal lands); Craig, *Western Public Trust Doctrines*, *supra* note 22, at 71.

¹⁰⁴ See *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845) (holding the shores of navigable waters, and the soils under them, were reserved to the states, and the new states have the same sovereignty and jurisdiction over these lands as the original thirteen states).

¹⁰⁵ See *supra* notes 41–47.

¹⁰⁶ *People v. Emmert*, 597 P.2d 1025, 1027–29 (Colo. 1979) (limiting public recreational use of state waterways); *Colo. Oil & Gas Conservation Comm'n v. Martinez*, 433 P.3d 22 (Colo. 2019) (upholding the state's decision not to engage in proposed rulemaking to limit oil and gas drilling that could harm public trust resources). *Martinez* is part of the youth's climate change litigation. *Id.* at 24. Although much of the climate change litigation has failed, *Martinez* is illustrative of Colorado's expressed rejection of the public trust doctrine in two important ways. First, the Commissioner responded by stating that Colorado expressly rejects the public trust doctrine.

waterways in the state.¹⁰⁷ In later litigation, it further clarified that to the extent there is a public trust doctrine in Colorado, it does not protect recreational values associated with waterways.¹⁰⁸ Interestingly, having disempowered the public trust doctrine as a formal matter, Colorado has nevertheless instituted several other programs to protect some environmental values protected by the public trust doctrine in other states, such as dedicating natural streams not previously appropriated for the use of citizens¹⁰⁹ and creating a trust fund to preserve state wildlife, parks, rivers, and open space.¹¹⁰

3. Different Values Protected by the Doctrine

As different states protect different resources, they also protect different trust-associated values. For example, California's Constitution contains public trust principles, preserving water for the public welfare and in the public interest,¹¹¹ and statutorily declares that "[a]ll water within the State is the property of the people of the State";¹¹² that the state is responsible for determining water use;¹¹³ and that all

Second, the holding is contrary to a plain reading of the text. The Colorado Supreme Court reasoned that it must give deference to the agency. *Id.* at 25–26. The court affirmed the interpretation that the commission is not required to ensure public health, safety, and welfare, including protection of environment and wildlife resources. *Id.* at 32. Instead, the law merely requires balancing these interests against oil and gas development. *Id.*

¹⁰⁷ *In re German Ditch*, 139 P. at 9 ("The natural streams of the state are nonnavigable within its limits . . ."); *Stockman*, 129 P. at 222. *But see* *Bonelli Cattle Co. v. Arizona*, 414 U.S. 313, 321 (1973) (implying that the Colorado River is a navigable river); Richard Gast, *People v. Emmert: A Step Backward for Recreational Water Use in Colorado*, 52 U. COLO. L. REV. 247, 267 (1981) (discussing the assertions in *Stockman* and *In re German Ditch* that Colorado waterways are nonnavigable, but suggesting they are merely dicta).

¹⁰⁸ *See, e.g., Emmert*, 597 P.2d at 1027 (declaring private landowner's ownership of the streambed of a non-navigable stream, and thereby upholding a charge of criminal trespass against a recreationist who had floated down a non-navigable stream, occasionally touching the streambed).

¹⁰⁹ COLO. CONST. art. XVI, §§ 5–7 (declaring natural streams not already appropriated as property of the public).

¹¹⁰ *Id.* art. XXVII, §§ 1–3 (creating the Great Outdoors Colorado Program to preserve, protect, and manage wildlife, park, river, trail, and open space heritage funded by state-supervised lottery games). The state also imposes duties on its land management agency to manage school trust lands. *Id.* art. IX, § 10 (placing duties on the state board of land commissioners for the prudent management in protecting beauty, wildlife habitat, open space, and natural values of school lands that are held in public trust to benefit public schools).

¹¹¹ CAL. CONST. art. X, § 2.

¹¹² CAL. WATER CODE § 102 (West 1943).

¹¹³ *Id.* § 104.

unappropriated water is public water.¹¹⁴ However, California case law expands the doctrine to protect values beyond the conventional rights of fishing, swimming, and navigation. First in *Marks v. Whitney*, and, most notably, affirmed in *National Audubon Society v. Superior Court* (the Mono Lake case), the California Supreme Court held that the public trust protects ecological, scenic, and recreational uses associated with trust resources, and that the state must “protect public trust uses whenever feasible.”¹¹⁵ As noted, *Center for Biological Diversity* held that public agencies must also consider wildlife preservation when making decisions.¹¹⁶

Hawaii protects similar trust values, including recreational, ecological, and scenic values.¹¹⁷ Nevada has also expanded on traditionally protected values to include recreational and ecological protections.¹¹⁸ Other states’ doctrines offer expanded protection for recreational values, but fewer explicit protections for environmental values. Montana’s doctrine focuses on the traditional rights of navigation and fishing but includes some protection for recreational uses.¹¹⁹ Oregon expressly protects public rights for recreation on all navigable-in-fact waters¹²⁰ and also specifies rights for commercial use.¹²¹ New Jersey protects recreational values extensively, including beach access.¹²² Florida expressly protects fishing, navigation, and commercial and recreational uses, such as swimming and sunbathing.¹²³

¹¹⁴ *Id.* § 1201.

¹¹⁵ *Nat’l Audubon Soc’y v. Super. Ct.*, 658 P.2d 709, 719–28 (Cal. 1983); KCLASS & HUANG, *supra* note 49, at 4.

¹¹⁶ *Ctr. for Biological Diversity, Inc. v. FPL Grp.*, 83 Cal. Rptr. 3d 588 (Cal. Ct. App. 2008).

¹¹⁷ *See supra* notes 95–98.

¹¹⁸ *Mineral Cnty. v. Dep’t of Conservation & Nat. Res.*, 20 P.3d 800 (Nev. 2001) (reviewing petitions to prevent the state from granting more rights to withdraw water from the Walker River system and a writ of mandamus challenging the state’s public trust obligations in managing the flows into Walker Lake). Justice Rose, in his concurrence, stated, “Although the original objectives of the public trust were to protect the public’s rights in navigation, commerce, and fishing, the trust has evolved to encompass additional public values—including recreational and ecological uses.” *Id.* at 807 (Rose, J., concurring).

¹¹⁹ Erika A. Doot, *The Public Trust Doctrine in Montana*, in 45 STATES, *supra* note 49, at 467.

¹²⁰ *Or. Dep’t of Just., Off. of the Att’y Gen.*, Op. No. 8281 (Apr. 21, 2005).

¹²¹ *Guilliams v. Beaver Lake Club*, 175 P. 437, 441–42 (Or. 1918) (considering whether Beaver Creek was navigable, the court was not convinced that the test for navigability should only include transportation of goods and that commerce could be construed to include the use of boats for pleasure).

¹²² *See Borough of Neptune City v. Borough of Avon-By-The-Sea*, 294 A.2d 47 (N.J. 1972). *See generally supra* Section I.B.2.

¹²³ *White v. Hughes*, 190 So. 446, 448–51 (Fla. 1939) (detailing that “[t]here is probably no custom more universal, more natural or more ancient on the sea-coasts” than that of bathing in the ocean and enjoying the related recreation); *Adams v. Elliott*, 171 So. 731, 734 (Fla. 1937).

South Carolina's doctrine has been expanded past fishing rights to include "valuable floatage," defined broadly to include "all 'legitimate and beneficial public use,' including recreation."¹²⁴

Other states have expressly limited the doctrine's development of protected values. As noted above, in addition to minimizing the reach of the doctrine by eliminating recognition of its waterways as navigable, Colorado has disclaimed any protection by the doctrine for recreational values and limits consideration under the doctrine of environmental values.¹²⁵ Idaho's common law and statutory law point in different directions, with judicial common law expanding trust resources beyond navigable waters and, seemingly, toward environmental values, but as discussed below, the legislature has responded by statutorily limiting the trust to protect only the most traditional trust values.¹²⁶

4. Different Legal Theories About the Nature of the Doctrine

Finally, different states have developed different ideas about the nature of the doctrine itself at the level of legal theory.¹²⁷ Some states treat the doctrine as an ordinary feature of judicial common law, an extension of the police power to protect public health and safety that can be displaced or overridden by the legislature through enactment of contrary statutory law.¹²⁸ Others see the doctrine as a quasi-constitutional, "constitutive" doctrine that cannot be revoked through typical legislative or judicial means because it is an irrevocable limit on

¹²⁴ Hughes v. Nelson, 399 S.E.2d 24, 25 (S.C. Ct. App. 1990); Casey Hill, *The Public Trust Doctrine in South Carolina*, in 45 STATES, *supra* note 49, at 760.

¹²⁵ See, e.g., People v. Emmert, 597 P.2d 1025, 1027–29 (Colo. 1979) (defendants had no right under the Constitution of Colorado to float and fish on a non-navigable natural stream, stating, "Without permission, the public cannot use such waters for recreation."); Colo. Oil & Gas Conservation Comm'n v. Martinez, 433 P.3d 22 (Colo. 2019).

¹²⁶ See, e.g., Walbridge v. Robinson, 125 P. 812, 814 (Idaho 1912) (indicating that the state may hold in its sovereign capacity all resources not suited to private appropriation, including light and air); Selkirk-Priest Basin Ass'n v. State *ex rel.* Andrus, 899 P.2d 949, 952–56 (Idaho 1995) (recognizing that, even if not public trust lands themselves, if the alienation of state land could adversely affect trust resources, private citizens have standing to challenge the sale under the public trust doctrine); see IDAHO CODE §§ 58-1201–1203 (1996) ("The public trust doctrine as it is applied in the state of Idaho is solely a limitation on the power of the state to alienate or encumber the title to the beds of navigable waters as defined in this chapter. . . . The public trust doctrine shall not be applied to any purpose other than as provided in this chapter.").

¹²⁷ See Ryan, *A Short History*, *supra* note 1, at 176–81, 192–204 (discussing the constitutive question).

¹²⁸ See, e.g., *id.* at 197–99; IDAHO CODE §§ 58-1201–1203 (quoted *supra* note 126).

the authority with which the sovereign may govern.¹²⁹ This was an essential element of the Supreme Court's reasoning in the *Illinois Central* case, discussed in Section I.A, explaining why state legislation purporting to alienate the bed of Chicago Harbor was held to be ultra vires and thus void of legal effect.¹³⁰

Support for the constitutive interpretation as a guarantor of environmental rights appears most famously in the California Supreme Court's decision in the Mono Lake case, protecting environmental values at Mono Lake from water withdrawals authorized under water allocation statutes.¹³¹ Los Angeles had secured state permits to export the water decades earlier under statutory water allocation laws, and it had argued that the California legislature had abrogated the public trust doctrine when it enacted these water law statutes.¹³² However, the

¹²⁹ Ryan, *A Short History*, *supra* note 1, at 176–81, 192–204; *see, e.g.*, Jan S. Stevens, *The Public Trust and In-Stream Uses*, 19 ENV'T L. 605, 609 (1989) (arguing that the public trust is an inalienable attribute of state sovereignty); Joseph Regalia, *A New Water Law Vista: Rooting the Public Trust Doctrine in the Courts*, 108 KY. L.J. 1, 6 (2020) (“Not only should litigants be able to argue for an expansion of trust duties in state courts under state constitutions, they should also be able to argue for this expansion in federal courts under the U.S. Constitution.”); Michael C. Blumm & Mary Christina Wood, “*No Ordinary Lawsuit*”: *Climate Change, Due Process, and the Public Trust Doctrine*, 67 AM. U. L. REV. 1, 43–44 (2017) (arguing that the public trust doctrine is “an inherent constitutional limit on sovereignty”); Michael C. Blumm & Lynn S. Schaffer, *The Federal Public Trust Doctrine: Misinterpreting Justice Kennedy and Illinois Central Railroad*, 45 ENV'T L. 399 (2015) (arguing that the public trust doctrine is an inherent limit on both state and federal sovereign authority, and that *Illinois Central* represents an application of the Tenth Amendment's reserved powers doctrine); Gerald Torres & Nathan Bellinger, *The Public Trust: The Law's DNA*, 4 WAKE FOREST J.L. & POL'Y 281, 288 (2014) (arguing that the public trust doctrine is an implied limit on federal authority because it “is the chalkboard on which the Constitution is written”); Crystal S. Chase, *The Illinois Central Public Trust Doctrine and Federal Common Law: An Unconventional View*, 16 HASTINGS W.-NW. J. ENV'T L. & POL'Y 113, 133, 137–42 (2010) (arguing that the *Illinois Central* public trust doctrine is grounded in federal common law, and that the federal common law reading confers continuing legitimacy on the decision, even after the 1938 *Erie Railroad* decision limited the reach of federal common law); Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENV'T L. 425, 453, 458, 461–62 (1989) (arguing that the Supreme Court's *Illinois Central* decision was “premised on federal law” and that the public trust doctrine is therefore a feature of both federal and state law because states manage trust lands within a federally imposed limit that prevents them from abdicating their responsibility as trustees). *But see* Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269, 273–74, 278 (1980) (arguing for a public trust responsibility in the federal administration of federal public lands, but that this trust responsibility arises from a different source than the state-constraining public trust in submerged lands).

¹³⁰ Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892); *see supra* notes 41–47 and accompanying text (discussing *Illinois Central*); *see also* Ryan, *A Short History*, *supra* note 1, at 160–66 (interpreting *Illinois Central*).

¹³¹ *See generally* Nat'l Audubon Soc'y v. Super. Ct., 658 P.2d 709 (Cal. 1983).

¹³² *Id.*

California Supreme Court held that the statutory prior appropriations doctrine did not displace the public trust doctrine, and that the state had erred in granting these permits decades earlier because it lacked the authority to do so without considering its public trust obligations first.¹³³

Many states have followed California's model,¹³⁴ considering the public trust as a quasi-constitutional constraint on sovereign authority. Nevertheless, other states are less committed to the idea. Colorado law minimizes the role of the public trust in general,¹³⁵ and Idaho most famously rejected the California approach in protecting environmental values compromised by water rights granted under state allocation statutes.¹³⁶ Idaho case law had initially invited a broader interpretation of the public trust doctrine, considering application to light, air, public lands, and other natural resources,¹³⁷ but responsive legislative moves imposed a more traditional version of the doctrine, rejecting application to environmental values.¹³⁸ After the Idaho Supreme Court

¹³³ *Id.* at 728; see also Ryan, *A Short History*, *supra* note 1, at 192–97 (discussing the significance of the case for the constitutive legal theory question).

¹³⁴ See, e.g., *Lawrence v. Clark Cnty.*, 254 P.3d 606, 613 (Nev. 2011) (“The final underpinning of our formal adoption of the public trust doctrine arises from the inherent limitations on the state’s sovereign power . . .”); *In re Water Use Permit Applications*, 9 P.3d 409, 443 (Haw. 2000) (“[H]istory and precedent have established the public trust as an inherent attribute of sovereign authority . . .”); *E. Cape May Assocs. v. State Dept. of Env’t Prot.*, 777 A.2d 1015, 1034 (N.J. Super. Ct. App. Div. 2001) (“[T]idally-flowed land has always been subject to the public trust doctrine . . . [which] provides that the sovereign never waives its right to regulate the use of public trust property . . .”); *Caminiti v. Boyle*, 732 P.2d 989, 994 (Wash. 1987) (“The state can no more convey or give away this *jus publicum* interest than it can ‘abdicate its police powers in the administration of government and the preservation of the peace.’”).

¹³⁵ See *supra* note 107.

¹³⁶ See IDAHO CODE §§ 58-1201–1203 (1996) (Chapter 12: Public Trust Doctrine); see also Ryan, *A Short History*, *supra* note 1, at 197–99 (discussing the significance of the case for the constitutive legal theory question).

¹³⁷ See, e.g., *Walbridge v. Robinson*, 125 P. 812, 814 (Idaho 1912) (indicating that the state may hold in its sovereign capacity all resources not suited to private appropriation, including light and air); *Selkirk-Priest Basin Ass’n v. State ex rel. Andrus*, 899 P.2d 949, 952–56 (Idaho 1995) (recognizing that, even if not public trust lands themselves, if the alienation of state land could adversely affect trust resources, private citizens have standing to challenge the sale under the public trust doctrine).

¹³⁸ See IDAHO CODE §§ 58-1201–1203 (“The public trust doctrine as it is applied in the state of Idaho is solely a limitation on the power of the state to alienate or encumber the title to the beds of navigable waters as defined in this chapter. . . . The public trust doctrine shall not be applied to any purpose other than as provided in this chapter.”); see also Craig, *Western Public Trust Doctrines*, *supra* note 22, at 77 (“Idaho courts until 1996 were following the western ‘modern trend,’ indicated that water and ‘proprietary rights to use water . . . are held subject the public trust.’ In 1996, however, Idaho’s legislature invalidated this line of cases, instead defining (and confining) that state’s public trust doctrine by statute.”) (footnote omitted).

issued a series of public trust decisions converging on California's approach, the legislature expressly foreclosed the constitutive interpretation of the public trust doctrine by statute.¹³⁹ Idaho Code Title 58, Chapter 12 explicitly recognizes that the doctrine does limit the state's ability to alienate the title to the beds of navigable waterways,¹⁴⁰ but it expressly states that the trust will not impact the allocation of prior appropriative water rights or affect state decisions regarding the use of public trust waterways.¹⁴¹ In so doing, Idaho also rejected California's interpretation in the Mono Lake case, finding itself that the prior appropriation doctrine does in fact trump the public trust doctrine.¹⁴² As now codified in statute, the Idaho doctrine applies only to navigable waters and not to any other trust lands or water rights.¹⁴³

In an attempt, perhaps, to split the difference on the constitutive question, the Nevada Supreme Court recently affirmed its understanding of the doctrine as a constitutive limit on sovereign authority regarding all waterways in the state—but also held that there can be no conflict between the state's obligations under the public trust doctrine and settled water allocation permits because state water law has always required that water permits only be granted when doing so serves the public interest.¹⁴⁴ In so doing, Nevada affirmed the doctrine's sovereign ownership constraint as a quasi-constitutional limit on state sovereign authority, but foreclosed the constitutive interpretation of the doctrine as a guarantor of environmental rights.¹⁴⁵

¹³⁹ IDAHO CODE §§ 58-1201–1203.

¹⁴⁰ *Id.* § 58-1201(4), (6) (defining the public trust doctrine as guiding alienation of the title of the beds of navigable waters and clarifying that the purpose of the act is to define limits on the public trust doctrine); *id.* § 58-1203(1) (limiting the public trust doctrine to “solely a limitation on the power of the state to alienate or encumber the title to the beds of navigable waters”).

¹⁴¹ *Id.* § 58-1203(3) (stating that the trust does not limit the state to authorize public and private use or alienation of title to the beds of navigable waters if the state board of land commissioners determines that it is in accordance with Idaho statutes and constitution and for the purposes of navigation, commerce, recreation, agriculture, mining, forestry, or other uses).

¹⁴² See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 56–57. The move prompted considerable scholarly controversy on this issue. See James M. Kearney, *Recent Statute Closing the Floodgates? Idaho's Statutory Limitation on the Public Trust Doctrine*, 34 IDAHO L. REV. 91, 94 (1997); Michael C. Blumm, Harrison C. Dunning & Scott W. Reed, *Renouncing the Public Trust Doctrine: An Assessment of the Validity of Idaho House Bill 794*, 24 ECOLOGY L.Q. 461, 472 (1997) (noting that the new statute “was the legislature's response to judicial public trust declarations” in a series of Idaho Supreme Court cases).

¹⁴³ IDAHO CODE § 58-1203.

¹⁴⁴ *Mineral Cnty. v. Lyon Cnty.*, 473 P.3d 418, 425–27 (Nev. 2020); see also Ryan, *A Short History*, *supra* note 1, at 199–204 (discussing the significance of the case for the constitutive legal theory question).

¹⁴⁵ See Ryan, *A Short History*, *supra* note 1, at 201–04 (critiquing this aspect of the decision).

C. *The Modern U.S. Public Trust Doctrine as a Protector of Environmental Rights*

Considering the array of covered resources, protected values, and operating mechanisms that attend the public trust doctrine in different states, it is clear that there is no one way to understand the modern American doctrine. However, this Section introduces a handful of examples in which the modern public trust doctrine has been framed as a protector of environmental rights. These examples—the California doctrine’s protection of environmental values at Mono Lake, the Pennsylvania doctrine’s protection of environmental values against fracking, and the Michigan doctrine’s protection of the Great Lakes from damage by oil spills—help showcase the gradual shift in focus of the doctrine from a grant of sovereign authority to guarantee public access to trust resources toward an assignment of sovereign responsibility to also protect trust resources from environmental degradation, even by public overuse. In addition, the doctrine has been increasingly deployed as a defense against regulatory takings claims challenging environmental regulations, though not with universal success.

1. The California Public Trust and Water Rights at Mono Lake

The first is the seminal public trust case recognizing that the doctrine protects environmental values: the California Supreme Court’s 1983 decision protecting Mono Lake.¹⁴⁶ This hallmark case of the modern public trust era featured a battle among competing public uses of Mono Lake, a vast desert lake draining the eastern watershed of Yosemite National Park, due east of San Francisco and four hundred miles north of Los Angeles.¹⁴⁷ To secure drinking water resources for its citizens, Los Angeles had constructed an aquifer diverting southward fresh water from nearly all of the mountain creeks that sustained Mono Lake.¹⁴⁸ By the early 1980s, after forty years of water withdrawals, the lake’s level had dropped forty-five vertical feet, the ecosystem was on the verge of collapse, and toxic dust storms from the exposed lakebed threatened public health as the region came into violation of particulate

¹⁴⁶ Nat’l Audubon Soc’y v. Super. Ct., 658 P.2d 709 (Cal. 1983).

¹⁴⁷ See generally Ryan, *The Historic Saga*, *supra* note 1.

¹⁴⁸ See *id.* at 591–603; see also JOHN HART, STORM OVER MONO: THE MONO LAKE BATTLE AND THE CALIFORNIA WATER FUTURE 56–57 (1996); Craig Anthony (Tony) Arnold, *Working Out an Environmental Ethic: Anniversary Lessons from Mono Lake*, 4 WYO. L. REV. 1, 13–14 (2004).

matter pollution thresholds under the Clean Air Act.¹⁴⁹ Attempting a novel use of the public trust doctrine, the plaintiffs argued that the state had failed its obligations to protect Mono Lake, a navigable water body indisputably protected by the public trust doctrine, when it authorized Los Angeles to begin diverting water decades earlier on grounds that the SWRCB had failed to consider the foreseeable harms this would cause to the public trust values at Mono Lake, including ecologic, scenic, and recreational values.¹⁵⁰ Among other defenses,¹⁵¹ Los Angeles countered that the public trust doctrine had been subsumed by the statutory prior appropriations doctrine of water allocation, and that their use of Mono Basin water for conventional municipal use was protected by California law.¹⁵²

The California Supreme Court held that state obligations under the common law public trust doctrine had not been abrogated by statutory water law, and that the state had indeed violated its public trust obligations to consider the environmental consequences of water withdrawals from the Mono Basin.¹⁵³ It invalidated Los Angeles' diversion permits and required the SWRCB to start over, this time weighing the legitimate needs for water in Southern California against the environmental harms at Mono Lake and encouraging the protection of Mono Lake's public trust values, including environmental values, as much as possible.¹⁵⁴ The Mono Lake case is notable for protecting environmental values of a trust resource, applying the doctrine to the non-navigable tributaries of a protected waterway,¹⁵⁵ recognizing the

¹⁴⁹ See Ryan, *The Historic Saga*, *supra* note 1, at 599–601; see also HART, *supra* note 148, at 52–54; Michael C. Blumm & Thea Schwartz, *Mono Lake and the Evolving Public Trust in Western Water*, 37 ARIZ. L. REV. 701, 704–05 (1995) (describing Mono Lake's unique level of salinity).

¹⁵⁰ *Nat'l Audubon Soc'y*, 658 P.2d at 728–29 (noting that the rights had been acquired “in 1940 from a water board which believed it lacked both the power and the duty to protect the Mono Lake environment,” and that DWP “continues to exercise those rights in apparent disregard for the resulting damage to . . . Mono Lake”).

¹⁵¹ *Id.* at 716, 727 (rejecting Los Angeles' defense that the public trust doctrine applied only to navigable waterways, and not the diverted non-navigable creeks, and holding instead that it protects the non-navigable tributaries that sustain a protected navigable waterway).

¹⁵² Ryan, *The Historic Saga*, *supra* note 1, at 604–07.

¹⁵³ *Nat'l Audubon Soc'y*, 658 P.2d at 728–29.

¹⁵⁴ *Id.* at 712, 727 (“Approval of such diversion without considering public trust values . . . may result in needless destruction of those values. . . . [B]efore state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests.”).

¹⁵⁵ *Id.* at 720–21; see also *Env't L. Found. v. State Water Res. Control Bd.*, 237 Cal. Rptr. 3d 393, 399–403 (Cal. Ct. App. 2018) (concluding that the public trust doctrine protected groundwater tributaries of navigable waters), *cert. denied*, 2018 Cal. LEXIS 9313 (Cal. 2018).

state's ongoing duty to supervise the protection of trust resources,¹⁵⁶ and perhaps most importantly, for suggesting that the California public trust is a quasi-constitutional doctrine because, unlike ordinary common law doctrines, it was not abrogated by conflicting state statutes.¹⁵⁷

2. The Pennsylvania Constitution's Environmental Rights Amendment

In other states, as discussed in Section I.B.1, public trust principles have developed through means other than the common law, including constitutional or statutory doctrines. As noted, Pennsylvania's Environmental Rights Amendment constitutionally expands the public ownership premise of the Justinian *jus publicum* to other natural resources and explicitly protects environmental values, including "clean air, pure water, and . . . the preservation of the natural, scenic, historic and esthetic values of the environment."¹⁵⁸ The provision goes on to affirm protection for future generations, implying the importance of protecting the long-term environmental values over short-term economic interests of present generations: "Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."¹⁵⁹

Demonstrating the power of these principles in Pennsylvania, in the 2014 case of *Robinson Township v. Commonwealth*, the Pennsylvania Supreme Court invoked these principles sua sponte to invalidate a statute preempting local regulation of fracking operations through zoning ordinances.¹⁶⁰ The court observed that the Environmental Rights Amendment required the protection of present and future generations' interests in the state's public natural resources.¹⁶¹ The *Robinson Township* decision was affirmed a few years

¹⁵⁶ *Nat'l Audubon Soc'y*, 658 P.2d at 727.

¹⁵⁷ See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 56–60; Ryan, *The Historic Saga*, *supra* note 1, at 609–13; Ryan, *A Short History*, *supra* note 1, at 192–97.

¹⁵⁸ PA. CONST. art. I, § 27.

¹⁵⁹ *Id.*

¹⁶⁰ *Robinson Twp. v. Commonwealth*, 83 A.3d 901, 919–20 (Pa. 2013).

¹⁶¹ *Id.* (noting that "a political subdivision has a substantial, direct, and immediate interest in protecting the environment and the quality of life within its borders" and that "[t]he protection of environmental and esthetic interests is an essential aspect of Pennsylvanians' quality of life and a key part of local government's role").

later when the Pennsylvania Supreme Court held that the state was obliged to manage the resources in state parks and forests (including oil and other minerals) as trustee for the public according to standard public trust principles.¹⁶²

3. Michigan's Public Trust and the Great Lakes

Finally, the public trust doctrine is not always invoked by citizens against the government, but, occasionally, by the government in defense of public resources, even when it puts the state in conflict with citizens whose access is curtailed or denied. For example, as discussed further in Part III, the governor of Michigan recently relied on the public trust doctrine in revoking a nearly-seventy-year-old easement permitting submerged oil pipelines to run between Lake Huron and Lake Michigan to prevent a potentially catastrophic oil spill from frequent anchor strikes by passing commercial shipping traffic.¹⁶³ The Office of the Governor announced that “[t]he state is revoking the 1953 easement for violation of the public trust doctrine. This body of law recognizes the State of Michigan as the ‘trustee’ of the public’s rights in the Great Lakes and lays upon the state legal obligations to protect those rights from any impairment.”¹⁶⁴ In a statement, the governor explained that “the continued use of the dual pipelines cannot be reconciled with the public’s rights in the Great Lakes and the State’s duty to protect them,” and that the pipeline operators had imposed “on the people of Michigan an unacceptable risk of a catastrophic oil spill in the Great Lakes that could devastate our economy and way of life.”¹⁶⁵ The Michigan example

¹⁶² Pa. Env’t Def. Found. v. Commonwealth, 161 A.3d 911 (Pa. 2017).

¹⁶³ John Flesher, *Michigan Governor Seeks to Revoke Enbridge Easement*, STAR TRIB. (Nov. 13, 2020, 7:51 PM), <https://www.startribune.com/michigan-governor-seeks-to-revoke-enbridge-easement/573072012> [<https://perma.cc/T64V-QP38>].

¹⁶⁴ Press Release, State of Mich. Off. of the Governor, Governor Whitmer Takes Action to Shut Down the Line 5 Dual Pipelines Through the Straits of Mackinac After a Reasonable Transition Period to Protect the State’s Energy Needs (Nov. 13, 2020), https://www.michigan.gov/whitmer/0,9309,7-387-90499_90640-545110—,00.html [<https://perma.cc/V95P-VPRZ>].

¹⁶⁵ *Id.* (“The state found that the 1953 easement violated the public trust doctrine from its inception because the easement does not make the necessary public trust findings. Moreover, the state also found that the continued use of the dual pipelines cannot be reconciled with the public’s rights in the Great Lakes and the State’s duty to protect them. Transporting millions of gallons of petroleum products each day through two 67-year old [sic] pipelines that lie exposed along the entire span of a busy shipping channel presents an extraordinary and unacceptable risk. The dual pipelines are vulnerable to anchor strikes, similar dangerous impacts, and the inherent risks of

shows how the public trust doctrine has shifted from serving solely as a mandate for public access to a background principle of state law, obligating the state to protect public access and environmental values of trust resources, with an increasing thumb on the scale toward protecting environmental values because of the state's obligation to preserve them unimpaired for the enjoyment of future generations.

4. The Public Trust as a Defense of Environmental Regulation Against Takings Claims

From an environmental rights perspective, an important doctrinal development that cuts across jurisdictions is the increasing reliance by governments on the public trust doctrine as a defense against takings challenges to environmental regulations.¹⁶⁶ In a number of high-profile cases, the doctrine has been invoked in litigation brought under the U.S. Constitution's Takings Clause,¹⁶⁷ where governments defending environmental regulations argue that the trust sets forth environmental rights in the public that limit plaintiffs' reasonable expectations with regard to the use of trust resources. Not every court has allowed it, but state and municipal governments are increasingly shielding themselves against regulatory takings claims on the grounds that the public trust doctrine obligates them to protect the environmental values of trust resources, especially wetland and coastal areas, as well as public access to those resources.¹⁶⁸

In its 1992 decision in *Lucas v. South Carolina Coastal Council*, the Supreme Court clarified that takings liability applies whenever state regulation obstructs all economically viable use of private property,¹⁶⁹ sidestepping the usual regulatory takings balancing test that also requires consideration of the public interest in the regulatory prevention of harm,¹⁷⁰ and making it easier for owners to challenge environmental regulations limiting the development of fragile coastal

pipeline operations.”). The statement goes on to list examples in which the pipelines were accidentally struck by commercial vessel anchors and repeated efforts by the state to win cooperation by the pipeline operators in meeting its obligations under the easement to avoid potential harm. *Id.*

¹⁶⁶ See Ryan, *A Short History*, *supra* note 1, at 170–73.

¹⁶⁷ U.S. CONST. amend. V.

¹⁶⁸ See Ryan, *A Short History*, *supra* note 1, at 172–73.

¹⁶⁹ *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1027–30 (1992); *see also Palazzolo v. Rhode Island*, 533 U.S. 606, 626–30 (2001).

¹⁷⁰ *Compare Lucas*, 505 U.S. 1003, with *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978) (describing the three factor regulatory takings balancing test).

or wetland property.¹⁷¹ However, the Court also clarified that the *Lucas* rule does not apply if the regulation is a “background principle[]” of state property law—such as nuisance law—that already limits the owner’s reasonable expectations about the permissible uses of property.¹⁷² The Supreme Court’s nineteenth century recognition in decisions like *Illinois Central* and others¹⁷³ that the public trust doctrine is a foundational element of American law “thus took on new importance as its twentieth century takings jurisprudence expanded liability for environmental regulations that interfere with economic use,”¹⁷⁴ confirming the doctrine as a “background principle[]” of state common law.¹⁷⁵ As one author has previously observed:

Today, the doctrine is increasingly invoked by state and municipal parties defending takings claims against regulations involving construction on tidelands and wetlands, public access to waterways, and interference with water rights. For example, the Hawaii Supreme Court rejected a takings challenge against the state’s denial of water use permits because “the original limitation of the public trust” extinguished any claim the plaintiffs could make to an absolute right to water for purposes other than those protected by the trust. Quoting Professor Joseph Sax, one of the original scholarly proponents of the modern public trust doctrine, the court explained that “[t]he state is not ‘taking’ something belonging to an owner, but is asserting a right it always held as a servitude burdening owners of water rights.” . . . Given the extensive history reported in this article and recited in these decisions, it seems difficult to argue that the public trust doctrine is *not* a background principle of state law that should impact reasonable expectations, even if it remains possible to argue over how, exactly, it should impact them.¹⁷⁶

¹⁷¹ See Ryan, *A Short History*, *supra* note 1, at 170–73.

¹⁷² *Lucas*, 505 U.S. at 1027–30; see also *Palazzolo*, 533 U.S. at 626–30.

¹⁷³ See Ryan, *A Short History*, *supra* note 1, at 152–55 (discussing *Martin v. Wadell*, 41 U.S. 367 (1842), *Pollard v. Hagan*, 44 U.S. 212 (1845), and *Shively v. Bowlby*, 152 U.S. 1 (1894)).

¹⁷⁴ *Id.* at 172; see also John D. Echeverria, *The Public Trust Doctrine as a Background Principles Defense in Takings Litigation*, 45 U.C. DAVIS L. REV. 931, 931–34 (2012); Frank, *supra* note 43, at 682–84.

¹⁷⁵ Ryan, *A Short History*, *supra* note 1, at 171 (defining “background principles” as “those built-in legal norms that constrain owners’ legitimate expectations about the suitable uses of different kinds of property”).

¹⁷⁶ *Id.* at 172–73 (footnotes omitted).

At present, courts in New Jersey,¹⁷⁷ Hawaii,¹⁷⁸ Wisconsin,¹⁷⁹ South Carolina,¹⁸⁰ Louisiana,¹⁸¹ Rhode Island,¹⁸² and the Ninth Circuit¹⁸³ have all accepted the public trust doctrine as a legitimate “background principles” defense to takings claims against environmental regulations, all implicitly recognizing an underlying right of the public in preventing environmental harm, even when it causes private economic harm. Nevertheless, the Federal Court of Claims has cast doubt on the background principles defense,¹⁸⁴ and the Texas Supreme Court also

¹⁷⁷ Nat'l Ass'n of Home Builders v. N.J. Dep't of Env't Prot., 64 F. Supp. 2d 354 (D.N.J. 1999) (rejecting a takings challenge to a state agency rule requiring developers of waterfront property to provide walkways along the water because the public trust doctrine prevents owners from claiming any entitlement to exclude).

¹⁷⁸ *In re* Water Use Permit Applications, 9 P.3d 409 (Haw. 2000).

¹⁷⁹ See *R.W. Docks & Slips v. State*, 628 N.W.2d 781 (Wis. 2001) (rejecting a takings challenge to the state's denial of a marina's dredging permit because the developer lacked reasonable investment-backed expectations to fill wetlands and because riparian rights are inferior to the public trust doctrine). The Wisconsin Supreme Court emphasized that “[t]he public trust doctrine as an encumbrance on riparian rights is established ‘by judicial authority so long acquiesced in as to become a rule of property.’ It is part of the organic law of the state, and is to be broadly and beneficially construed.” *Id.* at 788 (internal citations omitted) (quoting *Franzini v. Layland*, 97 N.W. 499, 502 (Wis. 1903)).

¹⁸⁰ *McQueen v. S.C. Coastal Council*, 580 S.E.2d 116 (S.C. 2003) (holding that the public trust doctrine properly blocked tidelands development without compensation, even when the lands at issue became submerged after the owner took title).

¹⁸¹ See *Avenal v. State*, 886 So. 2d 1085, 1088, 1102 (La. 2004) (rejecting a takings challenge against erosion-controlling freshwater diversion programs and holding that “the redistribution of existing productive oyster beds to other areas must be tolerated under the public trust doctrine”).

¹⁸² See *Palazzolo v. State*, No. WM 88-0297, 2005 WL 1645974, at *1 n.2, *7, *15 (R.I. Super. Ct. July 5, 2005) (an unpublished decision on remand from the U.S. Supreme Court rejecting a takings challenge against the denial of permit to develop in coastal wetlands because, *inter alia*, the public trust doctrine prevented the formation of reasonable investment-backed expectations to “fill or develop that portion of the site which is below mean high water”).

¹⁸³ *Esplanade Props., LLC v. City of Seattle*, 307 F.3d 978 (9th Cir. 2002) (affirming the city's refusal to allow construction of residences on an elevated platform above tidelands because the public trust doctrine vitiated any entitlement by the owner to build there).

¹⁸⁴ *Compare* *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1293–96 (Fed. Cir. 2008) (Judge Moore, reversing dismissal of a takings claim by a California irrigator required to create fish passage lanes to satisfy the Endangered Species Act, and rejecting, *in dicta*, all counterarguments that would have barred the claim), *with id.* at 1297 (Mayer, J., dissenting) (Judge Mayer, writing in dissent: “Casitas does not own the water in question because all water sources within California belong to the public. Cal. Wat. Code §§ 102, 1001. Whether Casitas even has a vested property interest in the use of the water is a threshold issue to be determined under California law. California subjects appropriative water rights licenses to the public trust and reasonable use doctrines, so Casitas likely has no property interest in the water, and therefore no takings claim.”). Although the Court allowed the Casitas Water District to litigate its takings claim in the 2008 decision, a different panel on the same court ultimately dismissed the claim

appears skeptical,¹⁸⁵ showing that for the time being, this use of the doctrine remains jurisdictionally unsettled.

D. *Public Trust Principles Around the World*

Even though the roots of the public trust doctrine extend back to early Roman and English common law,¹⁸⁶ the doctrine is most closely associated with the United States, where constitutional constraints on sovereign authority have long been a distinguishing feature of American law.¹⁸⁷ Nevertheless, public trust principles continue to appear and evolve in other legal jurisdictions throughout the world. Indeed, variations on the idea that people hold common rights in natural resources have developed in various ancient legal systems simultaneously and independently, for example, in ancient Ottoman law—which extends common rights not only to water and air commons, but to trees, grass, and even mushrooms.¹⁸⁸ Civil law nations

(without prejudice) when litigation concluded in 2013, though without addressing the public trust background principle issue. *Casitas Mun. Water Dist. v. United States*, 708 F.3d 1340, 1360 (Fed. Cir. 2013); *see also Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313 (2001) (in an opinion by the same judge who authored the 2008 *Casitas* decision, rejecting the state’s public trust “background principles” defense against a takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act).

¹⁸⁵ *See Severance v. Patterson*, 370 S.W.3d 705, 723 (Tex. 2012) (“[W]hile losing property to the public trust as it becomes part of the wet beach or submerged under the ocean is an ordinary hazard of ownership for coastal property owners, it is far less reasonable, and unsupported by ancient common law precepts, to hold that a public easement can suddenly encumber an entirely new portion of a landowner’s property or a different landowner’s property that was not previously subject to that right of use.”).

¹⁸⁶ *See supra* Section I.A.

¹⁸⁷ *See, e.g.,* LAWRENCE M. FRIEDMAN, *LAW IN AMERICA: A SHORT HISTORY* 12–13 (2002) (discussing the uniquely American tradition of subjecting sovereign activity to constitutional review by the judiciary).

¹⁸⁸ *See* Al-Majalla Al Ahkam Al Adaliyyah [The Ottoman Courts Manual (Hanafi)], bk. X, ch. IV, § 1, arts. 1234–47, https://www.iium.edu.my/deed/lawbase/al_majalle/al_majalle10.html [<https://perma.cc/7U4B-8G8A>]. In 1962, an Israeli court drew on the *Mejelle* to apply public trust-like principles in a case affirming public rights to access beaches, overturning the conviction of Moshe Puterman for trespassing on a public beach. *CrimA (TA) 851/60 Puterman v. AG*, PM 30, 7 (1962) (Isr.). For discussion of the case and the role of Ottoman law in the court’s decision, *see* David Schorr, *The Israeli (and Ottoman and Islamic) Public Trust Doctrine*, ENV’T, L., & HIST. (July 13, 2016, 11:46 AM), <https://environmentlawhistory.blogspot.com/2016/07/the-israeli-and-ottoman-and-islamic.html> [<https://perma.cc/Z5KT-AND8>] (discussing the case and the role of Article 1234, *et seq.*, of the Ottoman civil code); Zafir Rinat, *Thanks to This Man, You Don’t Have to Pay to Go to the Beach in Israel*, HAARETZ (Apr. 10, 2018), <https://www.haaretz.com/israel-news/premium.MAGAZINE-this-man-is-the-reason-why-israeli-beach-entry-is-free->

often enforce a public-trust like doctrine of the sovereign ownership of water resources,¹⁸⁹ presumably with shared roots in the Justinian *jus publicum*, as Roman common law is also the progenitor of much of the civil codes of the European continent.¹⁹⁰ Among nations that recognize environmentally protective public trust principles, some base their legal doctrines on versions of the trust found commonly in the United States, while others have developed versions of the public trust doctrine wholly their own. This Section reviews the reach of public trust principles across the globe, with representative examples from all inhabited continents, working roughly west from the International Date Line.

1. Oceania

a. New Zealand and Australia

The two largest nations in Oceania, Australia and New Zealand, are both British commonwealth nations that root their formal legal systems in the same English common law as the United States. Unlike the wayward American colony, however, neither Australia nor New Zealand has extended the public trust doctrine beyond its early English origins toward environmental protection. Instead, both nations have addressed related concerns through the development of rights of nature

1.5387797 [<https://perma.cc/ANH3-APTD>] (describing the case and the Mejele doctrine it applied). See also Ryan, *A Short History*, *supra* note 1, at 205 (briefly discussing the public trust principles in the Mejele).

¹⁸⁹ Las Siete Partidas, P. III, tit. 28, laws III, IV, VI; see also C.C. Art. 407 (Spain) (declaring that rivers and their natural courses, springs, streams, and riverbeds are in the public domain); C.C. Art. 339 (Spain) (declaring that rivers, riverbanks, shores, and bays are in the public domain); see also MERITXELL COSTEJÀ, NURIA FONT, ANNA RIGOL, & JOAN SUBIRATS, THE EVOLUTION OF THE NATIONAL WATER REGIME IN SPAIN (2002), <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.7319&rep=rep1&type=pdf> [<https://perma.cc/858Y-6V49>] (detailing the aspects of water that remain in the public domain after Spain's Civil Code was amended with multiple comprehensive pieces of water law legislation); *Ker & Co. v. Couden*, 223 U.S. 268 (1912) (in interpreting a case about ownership of submerged lands, noting that under Spanish civil law, the seashore flowed by the tides was public property, belonging, in Spain, to the sovereign). Several Florida cases also discuss the Spanish roots of the Florida sovereign ownership aspect of the public trust doctrine. *Apalachicola Land & Dev. Co. v. McRae*, 98 So. 505, 517–18 (Fla. 1923); *Geiger v. Filor*, 8 Fla. 325, 336–37 (1859); *Bd. of Trs. v. Webb*, 618 So. 2d 1381, 1382 (Fla. Dist. Ct. App. 1993). Other Florida cases also cite to the English common law roots of the Florida public trust doctrine. *Broward v. Mabry*, 50 So. 826, 829 (Fla. 1909).

¹⁹⁰ Hessel E. Yntema, *Roman Law and Its Influence on Western Civilization*, 35 CORNELL L.Q. 77, 88 (1949) (describing Roman common law as the “fundamental body of legal doctrine” which is the “common element in the individual legal systems of much of Continental Europe, and its colonies”).

principles, derived from the legal culture of their indigenous populations, that are the subject of Part II.

Nevertheless, it is worth noting that some Oceanian scholars have advocated for the expansion of the doctrine beyond its English origins to encompass vulnerable environmental values in their countries.¹⁹¹ It has also been argued that environmentally protective elements of the doctrine are already in force in Oceania, even if they have not yet been formally recognized.¹⁹² The Maori People of New Zealand, among the original progenitors of the modern rights of nature movement, have also attempted to utilize the public trust doctrine in their ongoing litigation against anthropogenic contributions to climate change.¹⁹³ The willingness of advocates to embrace both public trust and rights of nature principles in support of environmental goals is a notable phenomenon discussed further in Section III.B.

2. Asia

a. The Philippines

The Philippines boasts one of the most comprehensive public trust doctrines in the world. The public trust has played an important role in the common law, statutory law, and constitution of the Philippines since the 1970s. The Water Code of 1976 declared that all waters belong to the State,¹⁹⁴ that the public held an easement along the banks of all rivers and streams for access, and that the public also held an easement for “recreation, navigation, floatage, fishing and salvage” on the shores

¹⁹¹ Nicola Hulley, *The Public Trust Doctrine in New Zealand*, AUG. 2015 RMJ 31, 31; N.J. Hulley, *New Zealand's Public Trust Doctrine* (2018) (LLM Paper, University of Wellington) https://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/8072/thesis_access.pdf?sequence=1 [<https://perma.cc/9TZC-JDCG>]; Tim Bonyhady, *An Australian Public Trust, in ENVIRONMENTAL HISTORY AND POLICY: STILL SETTLING AUSTRALIA* 258–72 (Stephen Dovers ed., 2000); Bruce Thom, *Climate Change, Coastal Hazards, and the Public Trust Doctrine*, MQJICEL (2012) Vol 8(2).

¹⁹² *Id.*

¹⁹³ Patricia Quijano Vallejos & Lisa Anne Hamilton, *Maori Communities Bring Climate Claims Against New Zealand Under the Public Trust Doctrine*, CTR. FOR INT'L ENV'T L. (Nov. 1, 2017), <https://www.ciel.org/maori-communities-bring-climate-claims-new-zealand-public-trust-doctrine> [<https://perma.cc/N6LF-428V>].

¹⁹⁴ A Decree Instituting a Water Code, Thereby Revising and Consolidating the Laws Governing the Ownership, Appropriation, Utilization, Exploitation, Development, Conservation and Protection of Water Resources, Pres. Dec. No. 1067, art. 3 (Dec. 31, 1976) (Phil.), <https://www.officialgazette.gov.ph/1976/12/31/presidential-decree-no-1067-s-1976> [<https://perma.cc/A4BR-FMK8>]. The code defines waters broadly to include surface water, groundwater, atmospheric water, and sea water. *Id.* art. 4.

of all seas and lakes.¹⁹⁵ One year later, the Philippines passed the 1977 Environmental Policy, which declared that the nation would “recognize, discharge and fulfill the responsibilities of each generation as trustee and guardian of the environment for succeeding generations”¹⁹⁶ Ten years later, the Filipino Constitution of 1987 constitutionalized these environmental rights, announcing that “[t]he State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.”¹⁹⁷

The doctrine has also been developed judicially. In 1987, the Supreme Court ruled in *Oposa v. Factoran* that the new constitutional language did, in fact, codify public trust principles and was self-executing.¹⁹⁸ The Court held that a class of students challenging the state’s grant of a timber license could sue the Department of Environment and Natural Resources for violating its public trust obligations under the Constitution.¹⁹⁹ In the end, the case had little effect on timber harvesting in the Philippines because the students failed to pursue the case.²⁰⁰ However, in revisiting the issue fifteen years later, the Supreme Court clarified that the government did hold trust obligations under the Constitution.²⁰¹ Since then, the doctrine has been interpreted to include the conservation and management of natural resources to ensure their equitable distribution across present and future generations.²⁰²

¹⁹⁵ *Id.* art. 51.

¹⁹⁶ Philippine Environmental Policy, Pres. Dec. No. 1151, § 2 (June 6, 1977) (Phil.), <https://www.officialgazette.gov.ph/1977/06/06/presidential-decree-no-1151-s-1977> [<https://perma.cc/JF6Z-8D8S>]. One pair of scholars have observed that the policy is reminiscent of language in the U.S. National Environmental Policy Act. Blumm & Guthrie, *supra* note 22, at 770 n.154 (quoting this policy, which also includes U.S. NEPA-like language, 42 U.S.C. § 4331, at Pres. Dec. No. 1151, § 1: “It is hereby declared a continuing policy of the State (a) to create, develop, maintain and improve conditions under which man and nature can thrive in productive and enjoyable harmony with each other, (b) to fulfill the social, economic and other requirements of present and future generations of Filipinos, and (c) to insure the attainments of an environmental quality that is conducive to a life of dignity and well-being.”).

¹⁹⁷ CONST. (1987), art. II, § 16 (Phil.).

¹⁹⁸ *Oposa v. Factoran*, G.R. No. 101083 (July 30, 1993) (Phil.), reprinted in 1 U.N. ENV’T PROGRAMME ET AL., COMPENDIUM OF JUDICIAL DECISIONS IN MATTERS RELATED TO ENVIRONMENT: NATIONAL DECISIONS 22, 30–31 (1998) [hereinafter UN COMPENDIUM]; see also *id.* at 36 (Feliciano, J., concurring).

¹⁹⁹ See Dante B. Gatmaytan, *The Illusion of Intergenerational Equity: Oposa v. Factoran as a Pyrrhic Victory*, 15 GEO. INT’L ENV’T L. REV. 457, 467–68 (2003).

²⁰⁰ Blumm & Guthrie, *supra* note 22, at 772; see also Gatmaytan, *supra* note 199, at 467–68.

²⁰¹ Blumm & Guthrie, *supra* note 22, at 772 (citing *Metro. Manila Dev. Auth. v. Concerned Residents of Manila Bay*, G.R. No. 171947-48, 574 S.C.R.A. 661 (Dec. 18, 2008) (Phil.)).

²⁰² *Id.* at 775.

The expansive Filipino public trust doctrine has been described as “encompassing terrestrial, aquatic, and marine resources, and providing public access for recreational and ecological purposes, as well as traditional public trust purposes.”²⁰³ While some public trust scholars point to the Filipino doctrine as an international model,²⁰⁴ others have raised questions about the force of the aspirational doctrine in reality.²⁰⁵

b. India

India, which inherited its jurisprudence from English common law, recognizes the public trust even more broadly than the United States,²⁰⁶ guaranteeing the protection of public environmental rights in all natural resources nationwide. In India, the right to a healthy environment has been framed as a component of the constitutionally protected right to life,²⁰⁷ as first recognized in the *Dehradun Quarrying* case.²⁰⁸ After *Dehradun Quarrying*, the Supreme Court of India first articulated the Indian public trust doctrine in the 1997 decision in *M.C. Mehta v. Kamal Nath*, in which it cited the California Supreme Court’s reasoning in the Mono Lake case to set forth an even more powerful version of the doctrine.²⁰⁹ After a developer sought to blast, dredge, reconstruct, and redirect the flow of a river threatening its resort,²¹⁰ the plaintiffs sued to prevent it, arguing that the proposed action would encroach on a protected forest, cause harm to public lands, and threaten the community with landslides and flooding.²¹¹ Affirming the public trust as “the law of the land” and that the public was the beneficiary of the “sea-shore, running waters, airs, forests and ecologically fragile lands,” the court sided with the plaintiffs.²¹² Referring to the English

²⁰³ *Id.* at 774.

²⁰⁴ *Id.*

²⁰⁵ David L. Callies & Katie L. Smith, *The Public Trust Doctrine: A United States and Comparative Analysis*, 7 J. INT’L & COMP. L. 41 (2020) (while acknowledging that public trust principles are evident throughout Filipino history, arguing that “the doctrine has never been unequivocally adopted,” and that the words “public trust doctrine” are “not found anywhere in the common law, statutes or Constitution of the Philippines”).

²⁰⁶ Blumm & Guthrie, *supra* note 22, at 760.

²⁰⁷ INDIAN CONST., art. 21.

²⁰⁸ *Rural Litigation and Entitlement Kendra, Dehradun v. State of Uttar Pradesh*, AIR 1988 SC 2187 (India).

²⁰⁹ *M.C. Mehta v. Kamal Nath*, (1997) 1 SCC 388 (India), *reprinted in* UN COMPENDIUM, *supra* note 198, at 259.

²¹⁰ *Id.*

²¹¹ *Id.* at 266–69.

²¹² *Id.* at 269–70, 272.

common law roots of the public trust, the court held that the doctrine protected:

The aesthetic use and the pristine glory of the natural resources, the environment and the ecosystems of our country . . . [from being] eroded for private, commercial or any other use unless the courts find it necessary, in good faith, for the public good and in the public interest to encroach upon the said resources.²¹³

Three years after *M.C. Mehta*, the Indian Supreme Court held that the doctrine was part of the Indian Constitution²¹⁴ and further extended its reach over all natural resources in the nation to include parklands.²¹⁵ Indian case law also gives citizens a right to enforce the doctrine, regardless of personal injury.²¹⁶ At least one scholar credits judicial use of the doctrine in the 1980s and 1990s with significant environmental justice gains in India, but suggests that reinforcement by formal environmental laws and regulations will be required to sustain them.²¹⁷

3. The Greater Middle East

a. Pakistan

There is no direct mention of the public trust doctrine in the constitution or statutes of Pakistan,²¹⁸ but the Supreme Court has concluded that public rights to environmental health are implied by the language of the constitution in article nine: “No person shall be deprived of life or liberty save in accordance with law.”²¹⁹ Article nine appears to contain public trust-like principles that protect public rights

²¹³ *Id.* at 273.

²¹⁴ Blumm & Guthrie, *supra* note 22, at 762 (quoting *M.I. Builders Priv. Ltd. v. Radhey Shayam Sahu*, (1999) 6 SCC 464, 518 (India)) (“The court agreed with a state high court that the public trust doctrine protected the park because of its ‘historical importance and environmental necessity’ and was entrenched in Article 21 of the Constitution, which declares that ‘[n]o person shall be deprived of his life or personal liberty except according to procedure established by law.’”).

²¹⁵ *Id.* at 763.

²¹⁶ *Id.* at 765 (citing Interview by Rachel Guthrie with Sairam Bhat, Professor, Nat’l L. Sch. of India at Bangalore, in Portland, Or. (Oct. 21, 2010)).

²¹⁷ Naazima Kamardeen, *The Honeymoon Is Over: an Assessment of Judicial Activism in Environmental Cases in Sri Lanka*, 6 JINDAL GLOB. L. REV. 73 (2015).

²¹⁸ Blumm & Guthrie, *supra* note 22, at 766.

²¹⁹ PAKISTAN CONST. art. 9; Blumm & Guthrie, *supra* note 22, at 766–68; see *In re Hum. Rts. Case*, (1994) 46 PLD (SC) 102 (1992) (Pak.), reprinted in UN COMPENDIUM, *supra* note 198, at 280; *Zia v. WAPDA*, (1994) 46 PLD (SC) 693 (Pak.), reprinted in UN COMPENDIUM, *supra* note 198, at 323.

in the “clean atmosphere and unpolluted environment” against actions that would harm them.²²⁰ The doctrine has been definitively used to protect water resources from pollution, especially drinking water, but *West Pakistan Salt Miners Union v. Director of Industries & Mineral Development* suggested that it would apply as needed to protect “any environmental resources protected by the constitutional right to life.”²²¹ In one case, *In re Human Rights Case (Environmental Pollution in Balochistan)*, the Supreme Court held that industrial and nuclear waste dumping on coastal land violated article nine by creating “environmental hazard and pollution.”²²² In *Shehla Zia v. WAPDA*, the Supreme Court further emphasized that the right to life included the right to environmental health, applying the doctrine to electromagnetic energy and requiring that any future siting of electricity facilities be preceded by public notice and comment.²²³

b. Israel

Through a combination of different sources of law, Israeli law features public trust language seeking to protect environmental rights for present and future generations.²²⁴ The Protection of Coastal and Environmental Law was enacted in 2004 to restore and preserve the coastal environment for the benefit and enjoyment of the public and future generations.²²⁵ The law considers the sea and shore as integral pieces that extend three hundred meters inland from the country’s territorial waters, essentially deeming the whole area a public resource to be protected from damage.²²⁶ The *Mejelle*, referenced by Israeli case law, also states that “[w]ater, air, and light are free to all, and all people are joint owners in these three things.”²²⁷ The country has most

²²⁰ *Zia*, 46 PLD (SC) 693, reprinted in UN COMPENDIUM, *supra* note 198, at 333–34.

²²¹ Blumm & Guthrie, *supra* note 22, at 769 nn.145–46 (citing *Salt Miners Union v. Dir. of Indus. & Mineral Dev.*, (1994) SCMR (SC) 2061 (Pak.), reprinted in UN COMPENDIUM, *supra* note 198, at 286 and PAKISTAN CONST. art. 9 (describing the constitutional right to life)).

²²² *In re Hum. Rts. Case*, 46 PLD (SC) 102, reprinted in UN COMPENDIUM, *supra* note 198, at 280.

²²³ *Zia*, 46 PLD (SC) 693, reprinted in UN COMPENDIUM, *supra* note 198, at 323; see Blumm & Guthrie, *supra* note 22, at 767–68 (citing the description of the word “life” in the decision of *Zia*).

²²⁴ *Introduction to Israel’s Legal System*, LIBR. CONG. (June 6, 2015), <https://www.loc.gov/law/help/legal-research-guide/israel.php> [<https://perma.cc/67EZ-5VCH>].

²²⁵ *Protecting Israel’s Coast*, MINISTRY ENV’T PROT. (Aug. 17, 2020), https://www.gov.il/en/departments/guides/coastal_environment_preservation [<https://perma.cc/UST6-H7YE>]; Tzvi Levinson, Julia Lietzmann & Gil Dror, *Protection of the Coastal Environment—A Step Towards Sustainability*, 36 ENV’T POL’Y & L. 94 (2006).

²²⁶ MINISTRY ENV’T PROT., *supra* note 225.

²²⁷ Schorr, *supra* note 188.

famously applied the rule to guarantee public rights of access to beach and coastal areas in *Puterman v. AG*.²²⁸

4. Africa

a. Uganda

Uganda's extensive public trust doctrine parallels the comprehensiveness of the doctrines found in the Philippines and India, extending far upland from navigable waters.²²⁹ The Supreme Court of Uganda first articulated the doctrine in its 2004 decision in *Advocates Coalition for Development and Environment v. Attorney General*,²³⁰ where the plaintiff challenged on public trust grounds the government's approval of a fifty-year plantation permit for a forest reserve.²³¹ The court ruled that the government had breached its public trust obligations by failing to perform an environmental impact assessment and had failed its duty to obtain consent from the local community.²³² Since then, Ugandan constitutional and statutory laws²³³ have elaborated the Ugandan public trust doctrine to protect all surface water resources, wetlands, groundwater, public lands (including national parks, forests, and game reserves), wildlife, plant life, mineral resources, and "any land to be reserved for ecological and touristic purposes for

²²⁸ In 1962, an Israeli court drew on the Mejele to apply public trust-like principles in a case affirming public rights to access beaches, overturning the conviction of Moshe Puterman for trespassing on a public beach. CrimA (TA) 851/60 *Puterman v. AG*, PM 30, 7 (1962) (Isr.). For a discussion of the case and the role of Ottoman law in the court's decision, see Schorr, *supra* note 188; Rinat, *supra* note 188 (describing the case and the Mejele doctrine it applied); Ryan, *A Short History*, *supra* note 1, at 205.

²²⁹ Blumm & Guthrie, *supra* note 22, at 779 n.199 (comparing Ugandan law to parallel Indian and Philippine case law).

²³⁰ *Advocs. Coal. for Dev. & Env't v. Att'y Gen.*, Misc. Cause No. 0100 of 2004 (July 11, 2005) (Uganda), https://elaw.org/system/files/attachments/publicresource/ug.Acode_.v.AttorneyGeneral_0.pdf [<https://perma.cc/RDV5-TTK6>].

²³¹ *Id.* at *4–5.

²³² *Id.* at *23.

²³³ UGANDA CONST. objective XIII; *id.* art. 39; *id.* art. 237(2)(b); *id.* objective XXVII (directing the state to "promote sustainable development and public awareness of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations," and that "the natural resources of Uganda shall be managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans; and . . . take all possible measures to prevent or minimise damage and destruction to land, air and water resources resulting from pollution or other causes"); The Land Act, ch. 227, § 44 (2010) (Uganda); Blumm & Guthrie, *supra* note 22, at 777–78.

the common good”²³⁴ As this piece goes to press, Ugandan plaintiffs are currently attempting to expand public trust protections to include atmospheric resources.²³⁵

b. Kenya

Kenya has interpreted the public trust doctrine as a legal means for vindicating the right to life that is expressly protected in the Kenyan Constitution.²³⁶ In *Waweru v. Republic*, the High Court of Kenya allowed plaintiffs to rely on the doctrine in challenging the discharge of raw sewage into the Kiserian River, holding that the Kenyan Constitution entitles every citizen to the right to life and that the Environmental Management and Co-ordination Act grants citizens a right to a clean and healthy environment.²³⁷ After *Waweru*, Kenya adopted a new constitution in 2010, which further expanded environmental protections in guaranteeing the right “to have the environment protected for the benefit of present and future generations through legislative and other measures.”²³⁸

c. Nigeria

The public trust doctrine makes a brief but potentially significant appearance in Nigeria’s Constitution of 1999, which declares that “[t]he State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.”²³⁹ However, to our

²³⁴ UGANDA CONST. art. 237(2)(b); The Land Act, ch. 227, § 44 (2010) (Uganda); Blumm & Guthrie, *supra* note 22, at 779 (citing UGANDA CONST. objective XIII).

²³⁵ *Mbabzi v Att’y Gen.*, Civil Suit No. 283 of 2012 (Uganda 2012) (sending the case to mediation); *see also* Callies & Smith, *supra* note 205, at 61 (discussing the case). As this piece goes to press, the plaintiffs are awaiting a scheduled hearing after failing to resolve the case in mediation and amending their complaint. ‘Uganda, OUR CHILD.’S TR., <https://www.ourchildrenstrust.org/uganda> [<https://perma.cc/QL5P-LL2F>].

²³⁶ *Waweru v. Republic*, (2006) 1 K.L.R. 677, 688 (H.C.K.) (Kenya), <http://www.kenyalaw.org/caselaw/cases/view/14988> [<https://perma.cc/TL3Q-Q6RB>]; *see also* Blumm & Guthrie, *supra* note 22, at 781–82 (discussing the case and its significance).

²³⁷ *Waweru*, 1 K.L.R. at 687 (citing CONST. OF KENYA art. 26 (2010) (Kenya) and Environmental Management and Coordination Act (1999), Cap. 8 § 3, 108).

²³⁸ CONST. OF KENYA (2010), art. 42 (2010) (Kenya), <https://www.klrc.go.ke/index.php/constitution-of-kenya/112-chapter-four-the-bill-of-rights/part-2-rights-and-fundamental-freedoms/208-42-environment> [<https://perma.cc/WRQ5-ET6Y>] (“Every person has the right to a clean and healthy environment, which includes the right—(a) to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69; and (b) to have obligations relating to the environment fulfilled under Article 70.”); *see also* Callies & Smith, *supra* note 205, at 62–63 (discussing the new provisions).

²³⁹ CONST. OF NIGERIA (1999), § 20.

knowledge at the time this piece goes to press, this provision has yet to be the subject of any case law enforcing or interpreting it.

d. South Africa

As in Kenya, India, Pakistan, and Nigeria, the South African Constitution protects the right to life.²⁴⁰ South Africa goes further, however, in codifying public trust principles directly into its constitutional text, protecting the environment for the benefit of present and future generations in Sections 11,²⁴¹ 24,²⁴² and 27²⁴³. In addition, the legislature codified public trust principles through the National Water Act of 1998, which states that water is a natural resource belonging to all people.²⁴⁴ One scholar reports that the judiciary is also confirming the force of the doctrine in litigation.²⁴⁵ However, another South African researcher observes that while the nation's public trust was designed to free scarce water resources from the constraints of both private ownership and environmental regulation to meet basic human needs, it has yet to be "operationalized" with meaningful guidance for administrative decision-making.²⁴⁶

²⁴⁰ S. AFR. CONST., 1996, § 11.

²⁴¹ *Id.*

²⁴² *Id.* § 24 ("Everyone has the right—a. to an environment that is not harmful to their health or well-being; and b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—i. prevent pollution and ecological degradation; ii. promote conservation; and iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.").

²⁴³ *Id.* § 27 ("Everyone has the right to have access to . . . sufficient food and water The state must take reasonable legislative and other measures . . . to achieve the progressive realisation of . . . these rights.").

²⁴⁴ National Water Act 36 of 1998 (S. Afr.).

²⁴⁵ Andrew Blackmore, Note, *The Application of and the Prospects for the Public Trust Doctrine in South Africa: A Brief Overview*, 135 S. AFR. L.J. 631 (2018); see, e.g., *Minister of Water & Env't Affs. v. Really Useful Invs.*, 2017 (1) SA 505 (SCA) (S. Afr.); *Clairison's CC v. MEC for Loc. Gov't Env't Affs. & Dev. Plan. & Bitou Mun.*, 2012 (3) SA 128 (CC) (S. Afr.); *HTF Devs. v. Minister of Env't Affs. and Tourism*, 2006 (5) SA 512 (T) (S. Afr.); *Thomas v. Gouveia*, 2008 (1) SA 392 (T) (S. Afr.).

²⁴⁶ See Dr. Bill Harding, email communication of August 17, 2021 (on file with author) ("While our version of the trust has clear US 'roots', it is quite a different beast and was deployed as a transformative and democratising instrument which, without challenge, dispensed with riparian rights to water and reallocated the whole of the resource in favour of meeting basic human needs and reallocating water to the most appropriate uses. The parallel intention was to remove obstacles to environmental protection, particularly with respect to water resource protection according to an ecosystem directed basis. . . . What our environmental body of law lacks is that the trust principles have yet to be built out to further their understanding, especially in guidance for administrative decision making."); see also Bill Harding, *Hydroecological*

5. Europe

Conspicuously missing from the parade of nations developing public trust principles for environmental protection are many of the countries in Europe. As discussed further below, the British maintain the doctrine of sovereign ownership of submerged lands but have not developed the doctrine much beyond the common law principles reviewed in Section I.A. Meanwhile, as noted above, European civil law nations, such as Spain, have adopted a related principle of sovereign ownership with shared roots in the Justinian *jus publicum*,²⁴⁷ given that Roman common law is also the progenitor of much of the continental European civil codes.²⁴⁸ It may be that Europeans have felt less need to develop environmental rights under public trust principles because their legal systems, at least by comparison with many others across the globe, have protected environmental values more effectively by conventional statutory and regulatory means. This Section briefly reviews related developments in Great Britain, given its special status as midwife to the American public trust.

a. England

While the principle of sovereign ownership of submerged tidelands continues to apply, public trust principles never developed in England the way they did in the United States.²⁴⁹ The term “public trust doctrine” will not be recognized by the average English law scholar unless they have studied its development in the United States or corresponding principles of fiduciary obligations to public commons that bind the crown in Canada.²⁵⁰ Even resource commons protected

connectivity as a normative framework for aquatic ecosystem regulation: Lessons from the USA (thesis in preparation for the degree PhD in Public Law (Environmental Law), University of Cape Town, South Africa).

²⁴⁷ *Las Siete Partidas*, P. III, tit. 28, laws III, IV, VI; *Ker & Co. v. Couden*, 223 U.S. 268 (1912) (in interpreting a case about ownership of submerged lands, noting that under Spanish civil law, the seashore flowed by the tides was public property, belonging, in Spain, to the sovereign). Several Florida cases also discuss the Spanish roots of the Florida sovereign ownership aspect of the public trust doctrine. *Apalachicola Land & Dev. Co. v. McRae*, 98 So. 505, 517–18 (Fla. 1923); *Geiger v. Filor*, 8 Fla. 325, 336–37 (1859); *Bd. of Trs. v. Webb*, 618 So. 2d 1381, 1382 (Fla. 3d DCA 1993). Other Florida cases also cite to the English common law roots of the Florida public trust doctrine. *Broward v. Mabry*, 50 So. 826, 829 (Fla. 1909); *Geiger*, 8 Fla. at 336–37.

²⁴⁸ See Yntema, *supra* note 190 (describing Roman common law as the “fundamental body of legal doctrine” which is the “common element in the individual legal systems of much of Continental Europe, and its colonies”).

²⁴⁹ See Bottomley, *supra* note 36, at 18–19 (distinguishing the American and English approaches to common property).

²⁵⁰ See *id.*

under the Magna Carta's ancient Charter of the Forests have dwindled in importance.²⁵¹ Traditional forms of common property, such as common pasture lands for grazing, became less important as the British economy shifted from its feudal origins toward more entrenched and widespread privatization.²⁵² In assessing the devolution of English commons to private property, Professor Anne Bottomley has observed that "patterns of enclosure and privatisation" were substantially altering the landscape by the seventeenth century and had overwhelmingly changed it by the late eighteenth century.²⁵³

b. Scotland and Wales

However, the historic trend toward privatization of natural resource commons is increasingly meeting with reversals in Great Britain, especially in Scotland and Wales. In both Wales and England, recent statutory law enables both public authorities and private individuals to proactively designate land they already own as a "registered commons" to purposefully preserve common rights of access overlying more conventional forms of ownership.²⁵⁴ This approach enables the creation of broader forms of public commons than are currently recognized under most applications of the American public trust doctrine, but these statutory commons do not hold the foundational, quasi-constitutional character of the pre-statutory public trust doctrine as a constraint on sovereign authority.²⁵⁵ Meanwhile, Scotland has embarked on an even more ambitious program of reasserting public natural resource commons in its adoption of the 2003 Land Reform Act, which establishes access rights over much of the

²⁵¹ See Nield, *supra* note 36, at 5–8, 13 (discussing the waning lands and resources protected under English Forest Law from the Middle Ages to the New Forest Act of 1964).

²⁵² See *id.* at 12–23 (discussing the gradual privatization of the sovereign forest commons); Daniel R. Coquillette, *Mosses from an Old Manse: Another Look at Some Historic Property Cases About the Environment*, 64 CORNELL L. REV. 761, 807–09 (1979) (discussing the development of the "enclosure movement" and the historical trend away from public commons and toward exclusivity in the use and ownership of natural resources).

²⁵³ See Bottomley, *supra* note 36, at 5; see also *id.* at 16 ("It is no surprise that commons, as the state of nature, was understood in so much European political philosophy as simply being in a state-of-waiting to be made into, reduced into, property by the inventive intrusion of the human.").

²⁵⁴ *Id.* at 19–20.

²⁵⁵ *Id.* at 18–19 (differentiating between the English and Welsh approaches to public commons and the public trust approach taken in the United States).

country's open land and inland water resources, even those privately owned.²⁵⁶

c. A Future British Trust?

Notably, some predict that environmental law in Great Britain will likely get weaker after Brexit, the British exit from the European Union, because environmental harm will no longer be the subject of stricter E.U. laws overseen by the Court of the European Union.²⁵⁷ If environmental protection becomes weakened in this way, it could present an opportunity to for the British to readdress the role of the public trust doctrine as a common law constraint with implications for environmental protection.²⁵⁸ Some scholars suggest that English courts adopt the American version of the doctrine that has developed since its departure from English origins, referencing American public trust cases where analogous claims have arisen in the U.K.²⁵⁹ In this way, public trust principles emphasizing environmental values may yet cross the pond in the opposite direction, bringing the development of the common law doctrine full circle.

6. Latin America

a. Brazil

Public trust principles are both an explicit and implicit feature of Brazil's 1993 constitution, which affirms the sovereign ownership of submerged lands and tidelands, mineral resources, archaeological sites,

²⁵⁶ Land Reform (Scotland) Act 2003, (ASP 2) pt. 1; see also John A. Lovett, *Progressive Property in Action: The Land Reform (Scotland) Act 2003*, 89 NEB. L. REV. 739, 741 (2011) ("In Part I of the Land Reform (Scotland) Act 2003 (the LRSA), just the latest in a series of sweeping property law reform initiatives in Scotland, the Scots have created a new kind of property interest and a detailed property regime to contextualize this interest. At the heart of this regime is the right of *responsible* access. It is a right to go almost anywhere in Scotland, on most land and inland water, whether privately owned or public, without a motorized vehicle, for purposes of recreation, education, and passage, as long as one acts responsibly.").

²⁵⁷ Marc Willers & Emily Shirley, *The Public Trust Doctrine's Role in Post-Brexit Britain*, GARDEN CT. CHAMBER (Mar. 31, 2017), <https://www.gardencourtchambers.co.uk/the-public-trust-doctrines-role-in-post-brexit-britain> [<https://perma.cc/7885-UJW4>].

²⁵⁸ *Id.*

²⁵⁹ See, e.g., Bottomley, *supra* note 36, at 17–19. Nevertheless, other scholars considering the matter have noted that English statutory law may already obviate some of the more ambitious environmental applications of the trust, such as the atmospheric trust project, which some may argue has been preempted by the Climate Change Act of 2008 that sets legally binding carbon reduction targets for the country. Bradley Freeman & Emily Shirley, *England and the Public Trust Doctrine*, J. PLAN. & ENV'T L. 839, 845 (2014).

caves, and energy sites,²⁶⁰ but also adopts the core environmental rights of ecological protection, intergenerational equity, public environmental rights, and the sovereign responsibility of the government as trustee of these rights and resources.²⁶¹ Brazil's Constitution also protects ecological processes, genetic wealth, fauna, and flora—recognizing the “national wealth” and key resources of the Amazon Forest, Atlantic Woodlands, and the coastline.²⁶² However, the public trust doctrine has not thus far been the subject of litigation in Brazilian courts.²⁶³

b. Ecuador

In 2008, Ecuador arguably ratified the most ambitious set of constitutional protections for environmental rights in the world.²⁶⁴ The 2008 Ecuadorian Constitution incorporated public trust principles extending well beyond waterways to include nearly all natural resources.²⁶⁵ However, as discussed in Part II, Ecuador went further than protecting the public trust doctrine, becoming the first nation to explicitly recognize the legal rights of nature. In addition to assigning sovereign responsibility for protecting conventional public trust principles, the constitution declares the fundamental rights inherent in nature, including rights to exist, persist, and flourish, and grants all persons the right to “call upon public authorities to enforce the rights of nature.”²⁶⁶

²⁶⁰ CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 20 (Braz.).

²⁶¹ *Id.* art. 5; *id.* art. 225 (“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.”).

²⁶² *Id.* art. 20; *id.* art. 225 (also listing the Serra do Mar and the Pantanal Mato-Grossense, and prohibiting the alienation of “unoccupied” lands if “necessary to protect the natural ecosystems”).

²⁶³ Blumm & Guthrie, *supra* note 22, at 794.

²⁶⁴ CONSTITUCIÓN DE LA REPUBLICA DEL ECUADOR 2008 [C.P.] [CONSTITUTION] Oct. 20, 2008, art. 71 (Ecuador).

²⁶⁵ *Id.* art. 12; *id.* art. 375, cl. 8. The constitution refers to “[t]he unique and priceless natural assets of Ecuador includ[ing], among others, the physical, biological and geological formations whose value from the environmental, scientific, cultural, or landscape standpoint requires protection, conservation, recovery and promotion.” *Id.* art. 404.

²⁶⁶ *Id.* art. 71.

7. North America

a. Canada

Canada has endorsed public trust principles without formally affixing them into law. Reflecting the common roots of American and Canadian law in the public trust principles of the Roman *jus publicum* and English Magna Carta, Canadian courts have allowed suit against the government for failure to maintain common rights to fish in Atlantic waters.²⁶⁷ Beyond that, Canadian law has not more formally developed the public trust in the ways that American states have. Nevertheless, references to public trust principles have surfaced in disputes over public access and private obstructions to navigable waterways and other environmental values. For example, in considering whether a mining project was exempt from environmental assessment requirements, the Newfoundland Court of Appeal held for the environmental plaintiffs on grounds that public trust principles protecting future generations were an important element of the governing environmental legislation.²⁶⁸ Similarly, in addressing a forest fire public nuisance claim in *British Columbia v. Canadian Forest Products*, the court discussed the evolution of the American public trust doctrine and opined that the public trust principles at stake in this case granted the federal government damages for the forest fire, which was caused by a Crown licensee's negligence.²⁶⁹

b. United States

Finally, we return full circle to the United States. Although Section I.B extensively reviewed the development of the doctrine across individual states, it is also worth noting the potential for future public

²⁶⁷ *Prince Edward Island v. Canada* (2005), 256 Nfld. & P.E.I.R. 343 ¶¶ 6, 37 (Can. P.E.I. Sup. Ct.) (relying in part on *British Columbia v. Canadian Forest Prods. Ltd.*, [2004] 2 S.C.R. 74 (Can.), the court explained that if a government can sue “as guardian of the public interest, to claim against a party causing damage to that public interest, then it would seem that in another case, a beneficiary of the public interest ought to be able to claim against the government for a failure to properly protect the public interest,” as “[a] right gives rise to a corresponding duty”).

²⁶⁸ *Labrador Inuit Ass'n v. Newfoundland* (1997), 155 Nfld. & P.E.I.R. 93 ¶¶ 11, 80 (Can. Nfld. C.A.) (“If the rights of future generations to the protection of the present integrity of the natural world are to be taken seriously, and not to be regarded as mere empty rhetoric, care must be taken in the interpretation and application of the legislation. Environmental laws must be construed against their commitment to future generations and against a recognition that, in addressing environmental issues, we often have imperfect knowledge as to the potential impact of activities on the environment.”).

²⁶⁹ *Canadian Forest Prods. Ltd.*, 2 S.C.R. ¶¶ 1, 46, 78–80 (the Crown sued for damages both in its capacity as landowner and as representative of the public interest).

trust developments at the national level. Although the U.S. Supreme Court has not considered the issue directly, it has indicated in dicta that the doctrine operates only as a matter of state law, and not federal law.²⁷⁰ Nevertheless, both environmental and scholarly advocates have long argued that there is no reason to distinguish between the implications of the doctrine for state and federal authority. That is to say, if the doctrine limits sovereign authority to alienate or compromise essential public commons, it should not matter at what level that authority is operating, and federal sovereign authority should also be subject to the responsibilities imposed by the doctrine.²⁷¹ The argument rests on the idea that the doctrine is an implied feature of federal constitutional law,²⁷² both because there is no reason to differentiate between state and

²⁷⁰ PPL Mont., LLC v. Montana, 565 U.S. 576, 603 (2012); *see also* Ryan, *A Short History*, *supra* note 1, at 170, 176–81 (discussing arguments that the public trust is also a constraint on federal authority).

²⁷¹ *See, e.g.*, MARY CHRISTINA WOOD, NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE 133–36 (2014)]; Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part I): Ecological Realism and the Need for a Paradigm Shift*, 39 ENV'T L. 43, 74 (2009); Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part II): Instilling a Fiduciary Obligation in Governance*, 39 ENV'T L. 91, 135–36 (2009) (suggesting avenues for Congress to meet its public trust responsibilities); Blumm & Schaffer, *supra* note 129, at 401 (arguing that “there is considerable precedent applying the public trust doctrine to the federal government”); Blumm, Dunning & Reed, *supra* note 142, at 494 (“[T]he public trust is grounded in the federal constitutional equal footing doctrine . . .”); Richard A. Epstein, *The Public Trust Doctrine*, 7 CATO J. 411, 426 (1987) (asserting that the constitutional nature of the trust limits sovereign authority over public property in the same way the Takings Clause limits sovereign authority over private property). As Gerald Torres and Nathan Bellinger have written:

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

Gerald Torres & Nathan Bellinger, *The Public Trust: The Law's DNA*, 4 WAKE FOREST J.L. & POL'Y 281, 288 (2014).

²⁷² *See, e.g.*, Blumm & Schaffer, *supra* note 129, at 403–07; *see also* *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60–64 (discussing the argument as raised in atmospheric trust litigation, including *Juliana v. United States*); *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020).

federal actors in this area, and because all post-thirteen-colony states inherited their trust obligations through federal sovereignty.²⁷³ The effort to expand recognition of the public trust constraint on federal sovereign authority was a foundation of the atmospheric trust project, a coordinated effort to sue state and federal actors for violating the public trust doctrine obligations on the government to protect the atmosphere, referencing the original Justinian reference to protected trust resources in not only the sea and the shores of the sea, but also the air.²⁷⁴ The most famous of these efforts included *Juliana v. United States*, the “Kid’s Climate Case,” where youth plaintiffs sought injunctive relief under the doctrine to protect the atmosphere from greenhouse gas pollution and vindicate their fundamental right to climate stability.²⁷⁵ After an exceedingly complex procedural history,²⁷⁶ the Ninth Circuit dismissed the case, but at the time of this writing, the plaintiffs are considering further appeals.²⁷⁷

But as avenues are foreclosed to protect critical environmental values and ecosystems under the public trust doctrine, environmental advocates are increasingly turning to a new argument: the obligation to protect the rights of nature themselves.

²⁷³ One way of viewing this is that in the equal footing conveyances, the federal government itself imposed the trust on the states. See Blumm & Schaffer, *supra* note 129, at 403–07 (discussing Justice Kennedy’s reference to the equal footing doctrine in *Idaho v. Coeur d’Alene Tribe*, 521 U.S. 261 (1997) and what it means for the public trust doctrine’s origins).

²⁷⁴ THE INSTITUTES OF JUSTINIAN 2.1.1 (Thomas Collett Sandars trans., Longmans, Green & Co. 4th ed. 1869).

²⁷⁵ *Juliana*, 217 F. Supp. 3d 1224; see also Symposium, *Juliana v. United States: Debating the Fundamentals of the Fundamental Right to a Sustainable Climate*, 45 FLA. ST. U. L. REV. ONLINE 1 (2018) (analyzing both the atmospheric trust claim and the accompanying fundamental rights claim for climate stability); *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60–64 (discussing the atmospheric trust litigation and analyzing the substantive and procedural history of *Juliana v. United States*).

²⁷⁶ After a dramatic series of interlocutory appeals, writs of mandamus, and other attempts to end the case before trial that extended over a period of nearly four years, the district court judge heeded the U.S. Supreme Court’s hint to reverse herself on allowing the case to move forward, making way for the Ninth Circuit to finally dismiss the case. *Juliana*, 217 F. Supp. 3d 1224 (rejecting the initial motion to dismiss); *Juliana v. United States*, 947 F.3d 1159, 1164–66 (9th Cir. 2020) (upholding the case amid two Trump Administration writs of mandamus); *In re United States*, 139 S. Ct. 452 (2018) (U.S. Supreme Court dismissing the Administration’s writ, but suggesting it be considered on interlocutory appeal); *Juliana v. United States*, No. 15-cv-01517, 2018 WL 6303774, at *3 (D. Or. Nov. 21, 2018) (district court reversing itself and allowing the interlocutory appeal); *Juliana*, 947 F.3d 1159 (reversing the district court and dismissing the case); see also *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60–64 (analyzing the complex procedural history of *Juliana v. United States*).

²⁷⁷ *Juliana*, 947 F.3d at 1175.

II. OVERVIEW OF THE RIGHTS OF NATURE

We've divided the diversity of life on Earth into two categories—people and things. . . . To say we share this planet with millions of other species is ecologically incontrovertible, but legally incorrect. If we are the only species with rights, we are the only species that really matters.²⁷⁸

Environmental law has long focused on protecting nature as a resource for human enjoyment. By conventional accounts, we protect water so people can drink or swim in it, air so people can breathe it, natural areas for beauty and recreation, and ecosystem services to provide irreplaceable benefits, such as flood control and agriculture. However, this account has left other environmental advocates unsatisfied. In *Environmental Personhood*, Professor Gwendolyn Gordon observes that the “homocentric view” of environmental law has “tended to jam environmental protection arguments into particular shapes,” justifying environmental measures solely for the benefits they can provide human beings, such as “allowing more people to experience wilderness, or protecting the food chain for human consumption.”²⁷⁹ Even the public trust doctrine, celebrated by advocates as it is increasingly deployed toward environmental protection, has been criticized for overreliance on property right principles centered around changing human needs.²⁸⁰ Tethering environmental protection to ownership raises troubling questions about the viability of long-term environmental protection in the face of mercurial public priorities.²⁸¹ Reflecting these concerns, the rights of nature movement rejects this paradigm and asserts that nature and natural features have inherent value independent of human needs, and should accordingly be entitled to their own legal rights.

The rights of nature movement springs from two wells, one philosophical and the other pragmatic. For philosophical adherents, the movement offers a critical reframing of environmental rights and values, from an anthropocentric worldview arranged around

²⁷⁸ DAVID R. BOYD, *THE RIGHTS OF NATURE: A LEGAL REVOLUTION THAT COULD SAVE THE WORLD* 8 (2017).

²⁷⁹ Gwendolyn J. Gordon, *Environmental Personhood*, 43 COLUM. J. ENV'T L. 49, 72 (2018).

²⁸⁰ See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60; see also *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 365 (N.J. 1984) (“[W]e 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.” (quoting *Borough of Neptune City v. Borough of Avon-By-The-Sea*, 294 A.2d 47, 54 (N.J. 1972))).

²⁸¹ See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60.

conventional property and tort legal constructs to a biocentric system that vindicates legal rights in ecosystems and other natural features unrecognized at common law.²⁸² For pragmatists, the movement provides an alternative mechanism for environmental protection to replace or complement conventional regulatory schemes that have proved inadequate to the task.²⁸³ These advocates point to mounting environmental degradation around the world as irrefutable evidence that the anthropocentric system is fundamentally flawed.²⁸⁴ Conventional environmental legislation like the Clean Water Act, they argue, only legalizes pollution, rather than preventing it.²⁸⁵ Many communities frustrated by the perceived shortfalls of existing environmental laws are pragmatically turning to the rights of nature as a new way to protect the natural systems they hold dear.

This Part provides a brief overview of the rights of nature movement, beginning with its historical origins in Indigenous culture and early U.S. law, including its famous rejection by the U.S. Supreme Court in *Sierra Club v. Morton*.²⁸⁶ It considers three different axes along which different movements have developed, including what in nature is protected, who speaks for rights-holders that cannot speak for themselves, and by what mechanism of governance legal protections are provided. It then reviews the explosion of rights of nature legal movements in countries throughout the world, including generalized constitutional recognition in Ecuador and legal personhood granted to specific resources, often rivers, in countries like India, New Zealand,

²⁸² For example, the Earth Law Center advocates for “a new generation of law that recognizes the interconnectedness between humans and Nature and our responsibility to protect and defend Nature.” *What is Earth Law?*, EARTH L. CTR., <https://www.earthlawcenter.org/what-is-earth-law> [<https://perma.cc/4ZJU-YZX7>]. Similarly, The Global Alliance for Rights of Nature seeks to “create a system of jurisprudence that sees and treats nature as a fundamental, rights bearing entity and not as mere property to be exploited at will.” *Our Mission*, GLOB. ALL. FOR RTS. NATURE, <https://www.therightsofnature.org/fundamental-principles> [<https://perma.cc/34AF-TB9U>].

²⁸³ Katharine Bleau, *Ecological Law: A New Era for the Environment*, AM. BAR. ASS’N (Apr. 28, 2021), https://www.americanbar.org/groups/environment_energy_resources/publications/natural_resources_environment/2020-21/spring/ecological-law-new-era-the-environment [<https://perma.cc/JP9W-2P7B>] (noting the inadequacies of environmental legal regimes and the growing “ecological law” movement).

²⁸⁴ *Id.*

²⁸⁵ The Clean Water Act, for example, prohibits the discharge of pollutants from a point source into navigable waters without first obtaining a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit, in turn, allows the discharge of a specified level of pollutant into a waterway. 33 U.S.C. § 1342.

²⁸⁶ *Sierra Club v. Morton*, 405 U.S. 727, 741 (1972).

and Colombia.²⁸⁷ Finally, it returns to the United States to review the series of local rights of nature efforts that have recently emerged in different states and among different North American tribal nations, including a closer look at the ongoing controversy over rights of nature ordinances in Florida.

A. *Historical Origins of Rights of Nature Principles*

1. Historical Origins: Indigenous Cultures

The basic principles advocated by the rights of nature movement—that nature and its constituent components have intrinsic value that deserve protection independently from human needs—appeared early in human history and remain vital in many Indigenous cultures that honor and protect the rights of nature as a cultural matter.²⁸⁸ For many such communities, both domestic and abroad, rights of nature principles are an ancient and deeply ingrained concept.²⁸⁹ Reflecting on the growing rights of nature movement among Indigenous communities today, Geneva E.B. Thompson, Associate General Counsel for the Yurok Tribe of California, has observed:

For many indigenous nations, the advocacy for a healthy environment is deeply intertwined with the protection of traditional, historical, and cultural lifeways and practices. . . . [a connection that] has been in place since time immemorial and will continue to be an important and sacred connection well into the future.²⁹⁰

In these systems of governance, nature is not subordinate to people; nature and humans are inextricably knit together. The 2010 Universal Declaration of the Rights of Mother Earth, drafted in Bolivia by the World People’s Conference on Climate Change and the Rights

²⁸⁷ For additional discussion of the theoretical origins of the rights of nature movement and its early milestones in New Zealand and elsewhere, see David Takacs, *We Are the River*, 2021 U. ILL. L. REV. 545 (2021), published just as this article goes to press.

²⁸⁸ See Joseph Kowalski, *Environmentalism Isn’t New: Lessons from Indigenous Law*, 26 BUFFALO ENV’T L.J. 15, 29 (2019) (“In short, much of Indigenous jurisprudence was tied to ancient spiritual beliefs regarding the earth as a sacred, living being. Their land carried lessons for them on how to live, and a duty to care for the land. . . . The land was the source of all life, and, therefore, the rules of how to live in that environment.”).

²⁸⁹ See BOYD, *supra* note 278, at 9 (“A key element of the legal systems of many Indigenous cultures is a set of reciprocal rights and responsibilities between humans and other species, as well as between humans and non-living elements of the environment.”).

²⁹⁰ Geneva E. B. Thompson, *Codifying the Rights of Nature: The Growing Indigenous Movement*, 59 JUDGES’ J. 12, 12 (2020).

of Mother Earth, draws on these ideals in its declaration that “we are all part of Mother Earth, an indivisible, living community of interrelated and interdependent beings with a common destiny.”²⁹¹ For many of the communities that contributed to this statement, the rights of nature movement simply represents a return to their traditions and values.²⁹² As Jon Greendeer, executive director of Heritage Preservation with the Ho-Chunk Nation, remarked, “[t]his concept was always there What the rights of nature does is translate our beliefs from an indigenous perspective into modern legislation.”²⁹³

Beyond Indigenous cultures like these, however, the idea has long run counter to most legal norms in most modern political contexts. Indeed, the idea first appeared in the U.S. legal context in a famous example of environmental litigation, *Sierra Club v. Morton*, where it was formally rejected by the U.S. Supreme Court.

2. Historical Origins: Should Trees Have Standing? and *Sierra Club v. Morton*

In the United States, the origin of the rights of nature movement is generally attributed to Christopher Stone’s article, *Should Trees Have Standing?*,²⁹⁴ which played an important role in Justice Douglas’s consideration of *Sierra Club v. Morton*.²⁹⁵ In that 1972 case, the Sierra Club had sued Disney to halt construction of a proposed ski resort within the Mineral King Valley in the Sequoia National Forest.²⁹⁶ The Disney proposal included a sprawling eighty-acre complex of motels, restaurants, ski facilities, parking lots, power lines, and a new twenty-

²⁹¹ WORLD PEOPLE’S CONF. ON CLIMATE CHANGE & THE RTS. OF MOTHER EARTH, UNIVERSAL DECLARATION OF RIGHTS OF MOTHER EARTH (2010), <https://www.therightsofnature.org/universal-declaration> [<https://perma.cc/X5TZ-V4ND>].

²⁹² See Lidia Cano Pecharroman, *Rights of Nature: Rivers That Can Stand in Court*, 7 RES. 1, 6 (2018) (“The paradigm that embraces and understands nature as a being with rights has been part of many indigenous populations’ worldviews for hundreds of years. Their interdependent relationship with nature has resulted in non-anthropocentric social systems in which human’s harmonious relation with nature has been always the desirable outcome.”).

²⁹³ Justin Nobel, *How a Small Town Is Standing Up to Fracking*, ROLLING STONE (May 22, 2017, 3:35 PM), <https://www.rollingstone.com/politics/politics-news/how-a-small-town-is-standing-up-to-fracking-117307> [<https://perma.cc/MF87-4VBZ>].

²⁹⁴ Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 453 (1972).

²⁹⁵ *Sierra Club v. Morton*, 405 U.S. 727, 741–42 (1972) (Douglas, J., dissenting).

²⁹⁶ *Id.* at 728–30 (majority opinion).

mile highway through the forest, and the Sierra Club argued that it would cause serious environmental damage.²⁹⁷

Notably, Sierra Club did not argue that their members were directly impacted by the proposal, but rather that the project would change the area's "aesthetics and ecology" and "destroy or otherwise adversely affect the scenery, natural and historic objects and wildlife of the park and would impair the enjoyment of the park for future generations."²⁹⁸ To seek redress for these harms in court, however, a plaintiff must show that it has standing to bring the suit, generally satisfied when the plaintiff can show that the allegedly wrongful conduct creates a specific and imminent injury that the court can redress.²⁹⁹ The Sierra Club claimed that its "longstanding concern with and expertise in such matters were sufficient to give it standing as a 'representative of the public.'"³⁰⁰ The Supreme Court rejected this argument, holding instead that the Sierra Club could not show standing without demonstrating that its members would directly suffer adverse impacts.³⁰¹ In other words, imminent harm to the natural resources themselves was not cognizable by the Court unless that harm produced secondary impacts to a specific person bringing the lawsuit.

Sierra Club v. Morton is most relevant today not because of the majority's holding, but because of the passionate dissent that Justice Douglas contributed to the decision. As David Boyd relates the story, while Justice Douglas was considering *Sierra Club v. Morton*, he was serving as a guest editor for a special edition of the Southern California Law Review.³⁰² Knowing this, contributing author Christopher Stone, an environmental law professor at the University of Southern California, "worked feverishly" to finish an article advocating for the formal recognition of legal rights in nature so that he could include it among the edition's articles for Justice Douglas's review.³⁰³ In his resulting article, *Should Trees Have Standing?*, Professor Stone argued that legal rights should be conferred on forests, oceans, rivers, and the "natural environment as a whole."³⁰⁴ Stone argued that natural objects should have legal guardians and that environmental groups like the Sierra Club were well poised to serve in that role. After all, he urged that

²⁹⁷ *Id.* at 729–34.

²⁹⁸ *Id.* at 727, 734.

²⁹⁹ *Lujan v. Defs. of Wildlife*, 504 U.S. 555 (1992).

³⁰⁰ *Sierra Club*, 405 U.S. at 736.

³⁰¹ *Id.* at 739–41.

³⁰² BOYD, *supra* note 278, at 107.

³⁰³ *Id.*

³⁰⁴ Stone, *supra* note 294, at 456.

“[c]orporations cannot speak either; nor can states, estates, infants, incompetents, municipalities or universities. Lawyers speak for them, as they customarily do for the ordinary citizen with legal problems.”³⁰⁵

By all accounts, Stone’s article appears to have had a strong influence on Justice Douglas’s decision in the case. Reflecting many of Stone’s arguments in his dissent, Justice Douglas advocated that legal standing should be conferred on “environmental objects to sue for their own preservation,” and that the case “would therefore be more properly labeled as *Mineral King v. Morton*.”³⁰⁶ He recounted the routine and widely accepted legal fictions of personhood conferred on ships and corporations and asserted the same should apply to the natural world.³⁰⁷

So it should be as respects valleys, alpine meadows, rivers, lakes, estuaries, beaches, ridges, groves of trees, swampland, or even air The river, for example, is the living symbol of all the life it sustains or nourishes—fish, aquatic insects, water ouzels, otter, fisher, deer, elk, bear, and all other animals, including man, who are dependent on it or who enjoy it for its sight, its sound, or its life. The river as plaintiff speaks for the ecological unit of life that is part of it.³⁰⁸

Although Justice Douglas failed to persuade a majority of his peers on the Supreme Court, his dissent became the subject of an ongoing legal conversation that would eventually help seed the modern rights of nature movement.³⁰⁹

Following *Sierra Club v. Morton*, the rights of nature movement lay dormant in the United States for nearly four decades. However, while the movement languished domestically, it reemerged in the early 2000s internationally, driven in many instances by the Indigenous communities discussed above, for whom these principles have long been culturally central.³¹⁰ Today, both the legacies of these traditional Indigenous belief systems and the legal arguments of Justice Douglas’s dissent are visible, in varying degrees, in many legal statements of the rights of nature. Indeed, the different historical and philosophical

³⁰⁵ *Id.* at 464.

³⁰⁶ *Sierra Club*, 405 U.S. at 742 (Douglas, J., dissenting).

³⁰⁷ *Id.* at 742–43.

³⁰⁸ *Id.* at 743.

³⁰⁹ David R. Boyd, *Recognizing the Rights of Nature: Lofty Rhetoric or Legal Revolution?*, 32 NAT. RES. & ENV’T 13, 13 (2018) (“Almost 50 years later, the seed of an idea planted by Professor Stone and endorsed by Justice Douglas is blossoming all over the world. Acknowledging that natural entities—trees, rivers and ecosystems—have legal rights has evolved from an academic concept into black letter law.”).

³¹⁰ See *infra* Section III.D.5.

underpinnings of distinct rights of nature movements add diversity and nuance to these different legal movements, which display as much or more jurisdictional variety as the public trust doctrine. As explored further in Part III, rich differences in the underlying legal cultures and jurisdictional contexts may help explain the relative ease or difficulty by which rights of nature movements take hold and succeed at their tasks.

B. *The Evolution of Rights of Nature Principles Across Different Axes*

Just as the public trust doctrine has developed along different axes in different jurisdictions, so has the rights of nature movement. Like the public trust doctrine, rights of nature initiatives vary in what they protect and the legal mechanisms by which protections are conferred, adding further variation on the issue of who is empowered to vindicate those rights.

This Section reviews four different axes along which different rights of nature movements have developed, including what in nature receives protection, who speaks for rights-holders that cannot speak for themselves, by what mechanism of governance legal protections are provided, and the nature of the rights that are actually granted. The categories reviewed here do not exhaustively catalog all rights of nature initiatives or the different features among them; instead, they showcase the broad diversity of efforts—some more successful than others—emerging both domestically and abroad. Indeed, aside from the core principle that environmental rights should inhere in nonhuman beings, the most striking feature of the rights of nature movement is the deep diversity among individual efforts. Most accurately stated, there is no one rights of nature movement; instead, there are many, each one unfolding uniquely from others. The resulting laws differ dramatically in design and application.³¹¹

1. What is Protected Under the Rights of Nature Doctrine?

The first important axis on which rights of nature initiatives divide is the question of what, exactly, it is in nature that receives legal

³¹¹ The academic discourse on understanding the nascent rights of nature movement is just emerging, analyzing efficacy and norm construction. Craig M. Kauffman & Pamela L. Martin, *Constructing Rights of Nature Norms in the US, Ecuador, and New Zealand*, 18 *GLOBAL ENV'T'L. POL.* 43 (2018) (describing the rights of nature movement in three nations along axes of scope and strength).

protection. In general, rights of nature laws fall into three distinct categories: those that protect all of nature, those that protect specific natural features or ecosystems, and those that protect individual plant or animal species.

The first and most sweeping category protects nature in its entirety, or as a very broad concept. For example, the Ecuadorian Constitution, discussed further below, sets forth broad protections for nature in its Constitution, explicitly protecting nature's right to "integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes."³¹² Similarly, the Bolivian Law of the Rights of Mother Earth grants "Mother Earth" the right to life, biodiversity, water, clean air, balance, restoration, and to be free from pollution.³¹³ The Mexican state of Colima adopted an ambitious rights of nature constitutional amendment recognizing that nature, including all its ecosystems and species, is entitled to rights, including restoration, regeneration of natural cycles, and the conservation of its structure and ecological functions.³¹⁴

In the second category, representing the most commonly deployed structure of the three, the rights of nature initiative protects a specific natural feature, and often the ecosystems they sustain. For example, rights of nature laws in New Zealand have protected the Whanganui River³¹⁵ and Mount Taranaki³¹⁶ ecosystems by name, including protections for the constituent components of these natural systems, including water flows, wildlife, soils, and geologic features.³¹⁷ India has protected the Ganges River³¹⁸ and two glacier-river systems, the

³¹² CONSTITUCIÓN DE LA REPUBLICA DEL ECUADOR 2008 [C.P.] [CONSTITUTION] Oct. 20, 2008, art. 71 (Ecuador).

³¹³ Ley de Derechos de la Madre Tierra [Law of the Rights of Mother Earth], 2010 (Law No. 71) ch. III, art. 7 (Bol.).

³¹⁴ CONSTITUCIÓN POLÍTICA DEL ESTADO LIBRE Y SOBERANO DE COLIMA [CONSTITUTION] art. 2 cl. IX (Mex.).

³¹⁵ Te Awa Tupua (Whanganui River Claims Settlement) Act of 2017, subpt. 12 (N.Z.).

³¹⁶ Record of Understanding for Mount Taranaki, Pouākai and the Kaitake Ranges (Dec. 20, 2017) (N.Z.) [hereinafter Record of Understanding], <https://www.govt.nz/assets/Documents/OTS/Taranaki-Maunga/Taranaki-Maunga-Te-Anga-Putakerongo-Record-of-Understanding-20-December-2017.pdf> [<https://perma.cc/W2F9-4L57>].

³¹⁷ Te Urewera Act 2014, subpt. 5 (N.Z.) ("the value of Te Urewera for soil, water, and forest conservation is maintained"); *Id.* at subpt. 46 (nothing that the management plan for Te Urewera must include "scenic, geological, soil, and landform features").

³¹⁸ Mohd. Salim v. State of Uttarakhand, (2017) Writ Petition (PIL) No. 126 of 2014 (UTT H.C.) (India), <https://www.nonhumanrights.org/content/uploads/WPPIL-126-14.pdf> [<https://perma.cc/EA23-EMBS>].

Gangotri and Yamunotri glaciers,³¹⁹ Colombia protects the Atrato River³²⁰ and the Columbian Amazon³²¹, among others. Australia protects the Yarra River³²² and has fielded calls for rights of nature protections for the Great Barrier Reef and Artesian Basin.³²³ The city of Toledo, Ohio, attempted to enact rights of nature protections for Lake Erie, although the ordinance was later invalidated.³²⁴ Occupying something of a middle-ground between this category and the first protecting nature more broadly, Bangladesh has granted legal personhood to all river systems within the nation.³²⁵

The final category along this axis more narrowly protects individual species within a wider unprotected ecosystem, such as the protection of a keystone species of wild rice by the White Earth Band of Ojibwe, part of the Minnesota Chippewa Tribe.³²⁶ Several state courts in India, including the High Court of Uttarakhand³²⁷ and the High Court of Punjab and Haryana, have protected animals as legal

³¹⁹ Lalit Miglani v. State of Uttarakhand, (2017) Writ Petition (PIL) No. 140 of 2015 (UTT H.C.) (India), <http://www.indiaenvironmentportal.org.in/files/living%20entity%20Gangotri%20Himalaya%20Uttarakhand%20High%20Court%20Order.pdf> [<https://perma.cc/FJ5M-BQ39>].

³²⁰ Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (Colom.) (Dignity Rts. Project trans., 2019), <https://delawarelaw.widener.edu/files/resources/riveratratodecisionenglishdrpdellaw.pdf> [<https://perma.cc/JYE9-6D8M>].

³²¹ Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala. Civ. abril 5, 2018, M.P. Luis Armando Tolosa Villabona, STC4360-2018, Radicación n. 11001-22-03-000-2018-00319-01 (Colom.), <https://www.dejusticia.org/wp-content/uploads/2018/01/Fallo-Corte-Suprema-de-Justicia-Litigio-Cambio-Clim%C3%A1tico.pdf> [<https://perma.cc/EB3T-9TD5>]; *Colombian Supreme Court Rules to Protect Future Generations and Amazon Rainforest in Climate Change Case*, ESCR-NET, <https://www.escr-net.org/caselaw/2019/stc-4360-2018> [<https://perma.cc/7E8T-H9DJ>].

³²² *Yarra River Protection Act 2017* (Vict.) subpt. 5(b) (Austl.).

³²³ U.N. Secretary-General, *Harmony with Nature*, ¶ 46, U.N. Doc. A/74/236 (July 26, 2019) (noting that in 2018, one Australian Senator “called for the adoption of rights of Nature laws, in particular for iconic ecosystems such as the Great Barrier Reef, the Murray-Darling Basin and the Great Artesian Basin”).

³²⁴ *Drewes Farms P’ship v. City of Toledo*, 441 F. Supp. 3d 551, 554, 558 (N.D. Ohio 2020).

³²⁵ Mari Margil, *Bangladesh Supreme Court Upholds Rights of Rivers*, MEDIUM (Aug. 24, 2020), https://medium.com/@mari_margil/bangladesh-supreme-court-upholds-rights-of-rivers-ed78568d8aa [<https://perma.cc/ZX94-EB5A>]; Rina Chandran, *Fears of Evictions as Bangladesh Gives Rivers Legal Rights*, THOMSON REUTERS FOUND. NEWS (July 4, 2019, 11:58 AM), <https://news.trust.org/item/20190704113918-rzada> [<https://perma.cc/GZD4-U9AF>]. For further discussion, see *infra* Section II.C.3.b.

³²⁶ 1855 Treaty Auth., Resolution Establishing Rights of Manoomin, Res. 2018-05 (Dec. 5, 2018), https://whiteearth.com/assets/files/public_documents/Letter%20to%20Tim%20Walz%20re%20Rights%20of%20Manoomin.pdf [<https://perma.cc/6Q26-UFBV>].

³²⁷ Vineet Upadhyay, *Animals Have Equal Rights as Humans, Says Uttarakhand High Court*, TIMES INDIA (July 5, 2018, 1:19 PM), <https://timesofindia.indiatimes.com/city/dehradun/members-of-animal-kingdom-to-be-treated-as-legal-entities-ukhand-hc/articleshow/64860996.cms> [<https://perma.cc/N5B9-ANPP>].

persons.³²⁸ Similar efforts to recognize the rights of animals in captivity through habeas corpus petitions have resulted in several instances of animals being recognized as non-human persons.³²⁹

2. Who Speaks for Rights-Holders?

The second axis on which different rights of nature initiatives divide centers on the question of who advocates for nature, or who speaks for rights-holders in the legal system that protects them, when they cannot speak directly for themselves. Again, most rights of nature laws fall into three categories: those in which anyone can speak for nature, as a citizen-attorney general; those empowering anyone in the local community with a special relationship to the protected aspect of nature; and those that designate a specific legal guardian for the rights-holder.

In the first variety, anyone can represent nature and vindicate its rights, empowering individuals, communities, and government entities. In Ecuador, for example, “[a]ll persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature.”³³⁰ This approach is often associated with rights of nature approaches that protect nature in its broadest sense, rather than those that target more specific features within nature.

The second and more common category is more restrictive, limiting representation to a local community with a recognized relationship to the protected aspect of nature. This approach is taken with many rights of nature ordinances and charter amendments in the

³²⁸ Sanket Khandelwal, *Environmental Personhood: Recent Developments and the Road Ahead*, JURIST (Apr. 24, 2020, 2:58 AM), <https://www.jurist.org/commentary/2020/04/sanket-khandelwal-environment-person> [<https://perma.cc/AX6G-FUZ7>].

³²⁹ In 2014, Argentine animal rights activists successfully filed a habeas petition for Sandra, a twenty-nine-year-old orangutan housed in a Buenos Aires zoo. The court ruled that Sandra was a non-human person and recognized an orangutan as a subject of rights. Cámara Nacional de Apelaciones en lo Criminal y Correccional [CNCrim. y Corr.] [National Court of Criminal and Correctional Appeals], 14/11/2014, “Orangutana, Sandra / Habeas Corpus,” CCC 68831/2014/CA1 (Arg.), <https://www.animallaw.info/sites/default/files/Orangutana%2C%20Sandra%20s%3A%20Habeas%20Corpus.pdf> [<https://perma.cc/JU7G-SSDA>]; Emiliano Giménez, *Argentine Orangutan Granted Unprecedented Legal Rights*, CNN (Jan. 4, 2015), <https://www.cnn.com/2014/12/23/world/americas/feat-orangutan-rights-ruling/index.html> [<https://perma.cc/8RD9-TR6Y>]; see also *Islamabad Wildlife Mgmt. Bd. v. Metro. Corp. Islamabad*, (2020) C.M. No. 1630 of 2020 (Islamabad High Court) (Pak.), <https://www.nonhumanrights.org/content/uploads/KAAVAN-Supp.Order-7.18.20.pdf.pdf> [<https://perma.cc/TRX5-ZEMT>] (recognizing the rights of non-human animals and ordering the release of a captive elephant).

³³⁰ CONSTITUCIÓN POLÍTICA DE 2008 [C.P.] art. 71 (Ecuador).

United States, such as the Wekiva River and Econlockhatchee River Bill of Rights (WEBOR) in Orange County, Florida, which protects the Wekiva and Econlockhatchee river basins in central Florida.³³¹ The WEBOR ordinance grants standing to Orange County, all municipalities and public agencies within the county, and all county citizens to bring an enforcement action on behalf of the local waters.³³² Similarly, the city of Santa Monica, California has enacted a “Sustainability Bill of Rights” recognizing the “fundamental and inalienable rights” of nature within the city limits.³³³ In turn, the ordinance grants city residents legal standing to enforce the rights of nature.³³⁴

A final category designates specific legal guardians to act on behalf of the protected natural features. For example, to enforce protections for the Whanganui River in New Zealand, the rights of nature initiative delegates legal guardianship to the office of Pou Tupua, a body composed of two representatives from different components of the larger polity, one appointed by the Crown and one by the local Māori communities.³³⁵ Similarly, the High Court of Uttarakhand, India required the Chief Secretary of the State of Uttarakhand and the Advocate General of the State of Uttarakhand to serve in loco parentis for the protection of the Ganges and Yamuna Rivers.³³⁶

3. What Legal Mechanism Protects Rights in Nature?

Similar to the different legal mechanisms by which the public trust doctrine operates, rights of nature initiatives differ on the legal mechanisms through which the designated rights of nature are protected and vindicated. A few proposals incorporate rights of nature protections into the relevant constitution, most are legislative, and in a few instances, legal personhood has been articulated by the judicial system.

To date, Ecuador is the only country to explicitly incorporate the rights of nature into its constitution. The rights of nature provision was

³³¹ ORANGE COUNTY, FLA., CHARTER art. VII, § 704.1 (2020).

³³² *Id.*

³³³ SANTA MONICA, CAL., MUN. CODE § 12.02.030(a) (2013).

³³⁴ *Id.* § 12.02.030(b).

³³⁵ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, subpt. 20 (N.Z.).

³³⁶ Mohd. Salim v. State of Uttarakhand, (2017) Writ Petition (PIL) No. 126 of 2014 (UTT H.C.) (India), <https://www.nonhumanrights.org/content/uploads/WPPIL-126-14.pdf> [<https://perma.cc/6Z3U-4UHA>].

part of a comprehensive constitutional amendment process ushered in by the newly elected president Rafael Correa and was approved by referendum in 2008.³³⁷ Similar efforts have also been considered in Nepal³³⁸ and, most recently, Sweden.³³⁹ In 2019, Swedish MP Rebecka Le Moine proposed a constitutional amendment to recognize nature's right to "exist, flourish, regenerate, and evolve."³⁴⁰ Le Moine remarked, "The underlying value in our society is that we are the dominators of this world, and Nature is just a resource for us to use I hope we can re-think our relationship with Nature. And for me, it starts with admitting that Nature has rights."³⁴¹ Though not yet successful, the Swedish proposal is the first of its kind in the European Union. In 2020, the Convention on Biological Diversity (CBD) included the rights of nature in its working draft of the Post-2020 Global Diversity Framework, which will be up for adoption at the fifteenth meeting of the Conference of the Parties to the CBD.³⁴²

Legislative examples range from the national level to municipal ordinances. Bolivia, for example, adopted the first-ever statutory rights of nature law in 2010.³⁴³ The Law of the Rights of Mother Earth was enacted by the national legislature and creates rights throughout the land.³⁴⁴ In 2019, Senator Risa Hontiveros introduced the "Rights of Nature Act of 2019" in the congress of the Philippines.³⁴⁵ The law sought to recognize the rights of "natural ecosystems" and would have allowed

³³⁷ Craig M. Kauffman & Pamela L. Martin, *Can Rights of Nature Make Development More Sustainable? Why Some Ecuadorian Lawsuits Succeed and Others Fail*, 92 *WORLD DEV.* 130, 132 (2017).

³³⁸ Mari Margil, *Our Laws Make Slaves of Nature. It's Not Just Humans Who Need Rights*, *GUARDIAN* (Oct. 6, 2018, 6:08 PM), <https://www.theguardian.com/commentisfree/2018/may/23/laws-slaves-nature-humans-rights-environment-amazon> [<https://perma.cc/69US-FENX>].

³³⁹ Press Release, Cmty. Env't Legal Def. Fund, *Rights of Nature Constitutional Amendment Introduced in Sweden's Parliament* (Oct. 8, 2019), <https://celdf.org/2019/10/media-release-rights-of-nature-constitutional-amendment-introduced-in-swedens-parliament> [<https://perma.cc/S79P-HNUZ>].

³⁴⁰ Jon Queally, *In European First, Proposed Constitutional Amendment in Sweden Would Enshrine Rights of Nature*, *COMMON DREAMS* (Oct. 8, 2019), <https://www.commondreams.org/news/2019/10/08/european-first-proposed-constitutional-amendment-sweden-would-enshrine-rights-nature> [<https://perma.cc/K6NZ-SD6W>].

³⁴¹ *Id.*

³⁴² Convention on Biological Diversity, *Update of the Zero Draft of the Post-2020 Global Biodiversity Framework* (Aug. 17, 2020), <https://www.cbd.int/doc/c/3064/749a/0f65ac7f9def86707f4eaefa/post2020-prep-02-01-en.pdf> [<https://perma.cc/MNT4-K9PP>].

³⁴³ *Ley de Derechos de la Madre Tierra* [Law of the Rights of Mother Earth], 2010 (Law No. 71) ch. III, art. 7 (Bol.).

³⁴⁴ *Id.*

³⁴⁵ *Rights of Nature Act of 2019*, S.B. 1097 (Oct. 2, 2019) (Phil.), <http://files.harmonywithnatureun.org/uploads/upload937.pdf> [<https://perma.cc/HT7A-5435>].

any Philippine resident to bring an action enforcing the rights of nature.³⁴⁶ At the other end of the jurisdictional spectrum are local legislative ordinances, such as the 2006 Sewage Sludge Ordinance of Tamaqua Borough, Pennsylvania, which recognized that “natural communities, and ecosystems shall be considered to be ‘persons’ for purposes of the enforcement of the civil rights of those residents, natural communities, and ecosystems.”³⁴⁷

Finally, judicially articulated rights for nature have emerged in Colombia, India, and Bangladesh. In Bangladesh, for example, in resolving litigation over the health of the Turag River, the High Court of Bangladesh declared all rivers in the country to be “living entities” entitled to rights as “legal persons.”³⁴⁸ In Colombia, the recognition of the rights of the Atrato River resulted from an *acción de tutela*, a cause of action used to enforce the immediate protection of fundamental constitutional rights, brought by “disadvantaged ethnic communities before the constitutional court to protect the fundamental rights to life, health, water, food security . . . and to address the health, socio-environmental, ecological and humanitarian crisis in the Atrato River Basin”³⁴⁹ The recognition of the rights of the Amazon River also resulted from an *acción de tutela* brought by youth plaintiffs asserting their right to a healthy environment.³⁵⁰

4. What Rights Are Protected?

Finally, there is great diversity in the type of rights granted by different rights of nature initiatives. Again, the laws generally fall into three categories: legal personhood, nature-specific rights, and strong environmental management obligations to protect designated natural objects.

The first type frames the legal rights of nature as legal personhood, enabling the vindication of rights against otherwise legally cognizable harms. For example, New Zealand’s Whanganui River is granted “the

³⁴⁶ *Id.*

³⁴⁷ Tamaqua Borough, Pa., Tamaqua Borough Sewage Sludge Ordinance, Ordinance No. 612 (Sept. 19, 2006).

³⁴⁸ Margil, *supra* note 325.

³⁴⁹ Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (Colom.) (Dignity Rts. Project trans., 2019), <https://delawarelaw.widener.edu/files/resources/riveratratodecisionenglishdrpdellaw.pdf> [<https://perma.cc/8Y2U-AWTJ>].

³⁵⁰ Alessandro Pelizzon, *An Intergenerational Ecological Jurisprudence: The Supreme Court of Colombia and the Rights of the Amazon Rainforest*, 2 L. TECH. & HUMS. 33, 33 (2020).

rights, powers, duties, and liabilities of a legal person.”³⁵¹ Similarly, the Punjab and Haryana High Court recognizes all animals in Haryana as “legal entities having a distinct persona with corresponding rights, duties and liabilities of a living person.”³⁵²

The second variety moves beyond mere legal personhood and grants nature-specific rights to “exist, flourish, and naturally evolve.”³⁵³ Examples include the Lake Erie Bill of Rights, WEBOR, and the Grant Township, Pennsylvania Community Bill of Rights Ordinance recognizing the rights of “[n]atural communities and ecosystems within Grant Township, including but not limited to, rivers, streams, and aquifers . . . to exist, flourish, and naturally evolve.”³⁵⁴ Similarly, the Ecuadorian Constitution recognizes a nature-specific right to regeneration and restoration.³⁵⁵

The third and final category grants something less than legal rights and, instead, imposes strong environmental management obligations on the state to protect designated natural objects. For example, when the Australian state of Victoria recognized the Yarra River as “one living and integrated natural entity”³⁵⁶ in 2017, the River was not granted personhood or the specific rights to flow or evolve, but the law requires the development of a strategic plan to inform the future management of the region.³⁵⁷ To date, this is the least common type of rights of nature law, but it may represent an emerging middle ground for jurisdictions that are interested in the way the doctrine puts a fist on the scale in favor of environmental protection but are unwilling to commit to full legal personhood or independent rights in natural features.

Perhaps it is fitting that a doctrine asserting nature’s rights to biodiversity and evolution should itself prove so diverse and so fluid in its own evolution. One thing that is clear is that there are successes and failures in nearly each of the categories, and that none has yet emerged the clear victor.

³⁵¹ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, subpt. 14 (N.Z.).

³⁵² Karnail Singh v. State of Haryana, 2019 SCC OnLine P&H 704 (India), https://www.livelaw.in/pdf_upload/pdf_upload-361239.pdf [<https://perma.cc/X56L-K7UX>].

³⁵³ TOLEDO, OHIO, MUN. CODE § 254(a) (2019).

³⁵⁴ Grant Township, Pa., Community Bill of Rights Ordinance § 2(d) (June 1, 2014), <http://s3.documentcloud.org/documents/1370022/grant-township-community-bill-of-rights-ordinance.pdf> [<https://perma.cc/76MQ-3VNP>].

³⁵⁵ CONSTITUCIÓN POLÍTICA DE 2008 [C.P.] ch. VII (Ecuador).

³⁵⁶ *Yarra River Protection Act 2017* (Vict.) subpt. 5(b) (Austl.).

³⁵⁷ *Id.* subpt. 16.

C. *The Rights of Nature Internationally*

Having explored the enormous variety of approaches taken within different rights of nature initiatives, we now review the best-known examples of unfolding initiatives worldwide. This Section begins with international examples, tracing them through each of the inhabited continents of the world, followed separately by examples from within the United States. As noted above, these examples differ dramatically in their design, goals, and results—further revealing that the rights of nature movement is much more of a mosaic than a monolith, with substantial variation along the multiple axes identified in Section II.B.

1. South America

a. Ecuador

Perhaps the most famous rights of nature example is the world's most ambitious initiative: Ecuador's blanket constitutional protection for all of nature. In 2008, drawing deeply on the core values of its Indigenous cultures, the Ecuadorian Constitution was amended by public referendum to protect a pantheon of environmental rights associated with nature in general.³⁵⁸ The new provisions set forth that Pacha Mama, or Mother Earth, "has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes," and further recognizes the right of nature to exist, persist, maintain, and regenerate its vital cycles.³⁵⁹ The constitution further specifies that "[a]ll persons, communities, peoples and nations" are legally empowered to enforce these rights.³⁶⁰

Ecuador is the first and only country thus far to explicitly recognize the rights of nature at the constitutional level, and the rights thereby created have proven actionable. To date, the rights of nature have been enforced primarily through litigation.³⁶¹ Between 2008 and 2016, one study identified thirteen cases in which the rights of nature were invoked in litigation.³⁶² Of those thirteen cases, ten were successful—a

³⁵⁸ CONSTITUCIÓN POLÍTICA DE 2008 [C.P.] ch. VII (Ecuador).

³⁵⁹ *Id.* art. 71.

³⁶⁰ *Id.*

³⁶¹ Kauffman & Martin, *supra* note 337, at 133.

³⁶² *Id.* at 133–34.

yield of 76.9%.³⁶³ For example, three years after ratification of the new constitutional provisions, two Americans living near the Vilcabamba River successfully sued on behalf of the river to stop a proposed road-widening project³⁶⁴ on grounds that the construction altered the river's natural flow.³⁶⁵ In October 2020, the Constitutional Court of Ecuador heard arguments on proposed mining projects in Los Cedros Protected Forest.³⁶⁶ The case, still unfolding as this Article goes to press, is the first rights of nature case to reach Ecuador's highest court, and it could have significant implications for extraction projects in Ecuador's other 186 Protected Forests.³⁶⁷

b. Bolivia

Following Ecuador's 2008 constitutional referendum, and drawing on similar Indigenous values, Bolivia adopted similar rights of nature provisions legislatively in the 2010 Law of the Rights of Mother Earth.³⁶⁸ The law states that Madre Tierra, Mother Earth, is entitled to life, biodiversity, water, clean air, balance, restoration, and to be free from pollution.³⁶⁹ Bolivia's move was the first statutory recognition of the rights of nature worldwide, though it was grounded in weaker environmental rights recognized by the 2009 Bolivian Constitution.³⁷⁰ However, the 2010 law did not include sufficient guidance or mechanics for enforcement. For example, when Indigenous resistance to roadbuilding through the Isiboro Ségure Indigenous Territory and National Park led to violence, lawmakers were forced to recognize that the new law lacked any means by which authorities were required to

³⁶³ *Id.* at 134.

³⁶⁴ Mihnea Tanasescu, *When a River Is a Person: From Ecuador to New Zealand, Nature Gets Its Day in Court*, CONVERSATION (June 19, 2017, 2:00 AM), <https://theconversation.com/when-a-river-is-a-person-from-ecuador-to-new-zealand-nature-gets-its-day-in-court-79278> [<https://perma.cc/FJN2-4HQH>].

³⁶⁵ María Valeria Berros, *Defending Rivers: Vilcabamba in the South of Ecuador*, 6 RCC PERSPS. 37, 38 (2017).

³⁶⁶ Rebekah Hayden, *Rights of Nature in Ecuador*, ECOLOGIST (Nov. 6, 2020), <https://theecologist.org/2020/nov/06/rights-nature-ecuador> [<https://perma.cc/39AK-LE7B>].

³⁶⁷ *Id.*

³⁶⁸ See Paola Villavicencio Calzadilla & Louis J. Kotzé, *Living in Harmony with Nature? A Critical Appraisal of the Rights of Mother Earth in Bolivia*, 7 TRANSNAT'L ENV'T L. 397 (2018) (extensively detailing the legislative history of Bolivia's rights of nature laws).

³⁶⁹ Ley de Derechos de la Madre Tierra [Law of the Rights of Mother Earth], 2010 (Law No. 71) ch. III, art. 7 (Bol.).

³⁷⁰ See Calzadilla & Kotzé, *supra* note 368, at 404–05 (noting that while the Bolivian Constitution recognizes the importance of protecting nature, it does not constitutionally entrench the rights of nature as firmly as the Ecuadorian counterpart).

account for or protect the Rights of Mother Earth when threatened.³⁷¹ Accordingly, the legislative effort was expanded in 2012 in the Framework Law of the Mother Earth and Integral Development for Living Well, specifically designed to operationalize the specific rights in Mother Earth that had been set out in the 2010 law.³⁷² In 2010, Bolivia hosted the World People's Conference on Climate Change and the Rights of Mother Earth, resulting in the *Universal Declaration on the Rights of Mother Earth*, which was issued by the Conference and submitted to the United Nations for its consideration.³⁷³

c. Colombia

In Colombia, the rights of nature were first articulated by the judiciary after a series of legal challenges resulted in the judicial recognition of rights for certain national parks, rivers, and lakes.³⁷⁴ The Colombia Constitutional Court, which is specifically tasked with resolving constitutional issues, first recognized the rights of the Atrato River in 2016 as “an entity subject to rights of protection, conservation, maintenance and restoration.”³⁷⁵ In 2018, responding to a suit by youth plaintiffs against the government for the right to a healthy environment, the supreme court of Colombia built on the Atrato River decision to recognize the Amazon River as “an entity subject of rights.”³⁷⁶ In addition to creating an Intergenerational Pact for the Life of the Colombian Amazon, the Supreme Court required Amazonian municipalities to create and implement territorial land use plans

³⁷¹ Pablo Sólón, *The Rights of Mother Earth*, in *THE CLIMATE CRISIS: SOUTH AFRICAN AND GLOBAL DEMOCRATIC ECO-SOCIALIST ALTERNATIVES* 107, 121–24 (Vishwas Satgar ed., 2018).

³⁷² See *Ley Marco de la Madre Tierra y Desarrollo Integral para Vivir Bien* [Framework Law of the Mother Earth and Integral Development for Living Well], 2012 (Law No. 301) (Bol.); Anna Hernandez, *Defending Mother Earth in Bolivia*, *CULTURAL SURVIVAL* (June 19, 2016), <https://www.culturalsurvival.org/news/defending-mother-earth-bolivia> [<https://perma.cc/X8SY-Z3UT>].

³⁷³ Sólón, *supra* note 371, at 122–23.

³⁷⁴ *Rights of Nature Law and Policy*, HARMONY WITH NATURE, U.N., <http://harmonywithnatureun.org/rightsOfNature> [<https://perma.cc/Y4V4-ZDQ5>] (listing recent legal decisions regarding the rights of nature in Colombia).

³⁷⁵ Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (Colom.) (Dignity Rts. Project trans., 2019), <https://delawarelaw.widener.edu/files/resources/riveratratodecisionenglishdrpdellaw.pdf> [<https://perma.cc/9SRP-8ZM7>].

³⁷⁶ Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala. Civ. abril 5, 2018, M.P. Luis Armando Tolosa Villabona, STC4360-2018, Radicación n. 11001-22-03-000-2018-00319-01 (Colom.), <https://www.dejusticia.org/wp-content/uploads/2018/01/Fallo-Corte-Suprema-de-Justicia-Litigio-Cambio-Clim%C3%A1tico.pdf?x54537> [<https://perma.cc/4APV-DUJ5>]; *Colombian Supreme Court Rules to Protect Future Generations and Amazon Rainforest in Climate Change Case*, ESCR-NET, <https://www.escr-net.org/caselaw/2019/stc-4360-2018> [<https://perma.cc/7E8T-H9DJ>].

respecting the rights of the Amazon and required action plans to combat deforestation and mitigate the impacts of climate change.³⁷⁷ It is worth noting the striking similarity between this suit seeking a healthy environment, brought by youth plaintiffs against the government, and the atmospheric trust litigation seeking a livable climate, brought by youth plaintiffs against the government, in cases like *Juliana v. United States*—and the strikingly different results.³⁷⁸

2. Oceania

a. New Zealand

As in Ecuador and Bolivia, the rights of nature movement in New Zealand has been driven by the core values and cultural identities of local Indigenous cultures. Departing from the broad grants of rights enacted in Ecuador and Bolivia, however, New Zealand has set forth a more limited set of rights of nature initiatives over the past decade, recognizing the legal personhood of three specific natural features. In 2014, the New Zealand Parliament first granted legal personhood to Te Urewera National Park.³⁷⁹ The park is “the homeland and the heartland of the Tūhoe people”³⁸⁰ and was a historic source of conflict between the Crown and the tribe.³⁸¹ The statute recognizes that Te Urewera “has all the rights, powers, duties, and liabilities of a legal person”³⁸² and transfers ownership of the land from the Crown to Te Urewera itself.³⁸³ The statute also establishes a legal guardian for the protected park, the Te Urewera Board.³⁸⁴ The Board is composed of nine members—six appointed by the trustees of Tūhoe Te Uru Taumatua and three

³⁷⁷ See Nicholas Bryner, *Colombian Supreme Court Recognizes Rights of the Amazon River Ecosystem*, IUCN (Apr. 20, 2018), <https://www.iucn.org/news/world-commission-environmental-law/201804/colombian-supreme-court-recognizes-rights-amazon-river-ecosystem> [<https://perma.cc/KH75-UJHY>] (quoting the Supreme Court opinion, which is written in Spanish and translated in this article).

³⁷⁸ *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020); see also Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60–64 (discussing the atmospheric trust movement).

³⁷⁹ Te Urewera Act 2014, subpt. 11 (N.Z.).

³⁸⁰ TE UREWERA BD., TE KAWA O TE UREWERA [TE UREWERA MANAGEMENT PLAN] 43 (2017).

³⁸¹ See generally Vincent O'Malley, *Tūhoe-Crown Settlement—Historical Background*, MĀORI L. REV. (Oct. 2014) (discussing the turbulent history behind the Tūhoe-Crown Settlement).

³⁸² Te Urewera Act 2014, subpt. 11(1) (2014) (N.Z.).

³⁸³ *Id.* subpt. 12(3).

³⁸⁴ *Id.* subpts. 16–20.

appointed by the Minister of Conservation—and is empowered to exercise and protect the rights set forth in the law.³⁸⁵ While the Te Urewera Act represents a radical shift for the Western property constructs that form the basis of New Zealand’s common law tradition, for the Tūhoe people it is simply a return to the philosophy of environmental rights that have always been part of their culture.³⁸⁶ As the Te Urewera Board’s management plan observes, “The Act does not establish the Te Urewera identity rather it liberates it from human speculation in order that nature and the natural world return to its primal role, revered and served by those of her children she has given life to.”³⁸⁷

In 2017, three years after the recognition of Te Urewera, the New Zealand Parliament granted legal personhood to the Whanganui River (Te Awa Tupua) watershed, resolving a legal fight by the local Māori people that dates back to 1873.³⁸⁸ The legislation grants legal personhood to the river as “an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and metaphysical elements,”³⁸⁹ and creates the office of Te Pou Tupua, a body of two representatives, one appointed by the Crown and one appointed by the Māori communities, to act as legal guardians on behalf of the river.³⁹⁰ Finally, New Zealand has also granted personhood to a specific mountain, Mt. Taranaki,³⁹¹ a dormant volcano on the west coast of the North Island.³⁹² This legislation appoints a joint entity composed of both Māori tribes and representatives of the British Commonwealth Crown as “the human face of” of Mt. Taranki, to “act in the name of” the mountain as legal guardians.³⁹³

b. Australia

Neighboring Australia began recognizing limited rights to specific natural areas shortly after New Zealand pioneered the concept at Te Urewera National Park in 2014. In 2017, the Australian state of Victoria

³⁸⁵ *Id.* subpts. 19, 21(2).

³⁸⁶ TE UREWERA BD., *supra* note 380, at 24.

³⁸⁷ *Id.*

³⁸⁸ Erin L. O’Donnell & Julia Talbot-Jones, *Creating Legal Rights for Rivers: Lessons from Australia, New Zealand, and India*, 23 *ECOLOGY & SOC’Y* 1, 4 (2018).

³⁸⁹ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, subpt. 12 (N.Z.).

³⁹⁰ *Id.* at subpt. 20.

³⁹¹ Record of Understanding, *supra* note 316.

³⁹² Global Volcanism Program, Taranaki (241030), SMITHSONIAN INST., <https://volcano.si.edu/volcano.cfm?vn=241030> [<https://perma.cc/26JZ-8MXH>].

³⁹³ Record of Understanding, *supra* note 316, at subpts. 5.14–5.15.

recognized the Yarra River as “one living and integrated natural entity.”³⁹⁴ Victoria mandated the development and implementation of a Yarra Strategic Plan, as well as the creation of the Birrarung Council, a statutory advisory board designated to speak and advocate for the Yarra River.³⁹⁵ Like the rights of nature efforts in New Zealand, the Victorian law incorporates traditional Australian Aboriginal values.³⁹⁶ Unlike New Zealand, however, the Act was passed at the state level, rather than the national level. More importantly, it does not grant full legal personhood to the river, but protects environmental rights associated with the river basin by requiring the development of a strategic plan to inform the future management of the region.³⁹⁷ Some proponents of the rights of nature have advocated that Australia broaden rights of nature initiatives to create legal rights in the Great Barrier Reef,³⁹⁸ the world’s largest coral reef system off the Australian east coast,³⁹⁹ and the Great Artesian Basin, the largest and deepest artesian groundwater basin in the world,⁴⁰⁰ from which most of inland Australian draws its drinking water.⁴⁰¹ However, these efforts have yet to materialize into legislative action.⁴⁰²

3. Asia

a. India

In 2017, in the northern Indian state of Uttarakhand, traversed by the Himalayas, the High Court of Uttarakhand granted legal

³⁹⁴ *Yarra River Protection Act 2017* (Vict.) subpt. 5(b) (Austl.).

³⁹⁵ *Id.* at pts. 4, 5.

³⁹⁶ Katie O’Bryan, *Indigenous Rights and River Rights: Australia and New Zealand*, GLOB. WATER F. (June 7, 2018), <https://globalwaterforum.org/2018/06/07/indigenous-rights-and-river-rights-australia-and-new-zealand> [<https://perma.cc/8C2Y-S8VE>].

³⁹⁷ *Id.*

³⁹⁸ U.N. Secretary-General, *Harmony with Nature*, ¶ 46, U.N. Doc. A/74/236 (July 29, 2019) (noting that in 2018, one Australian Senator “called for the adoption of rights of Nature laws, in particular for iconic ecosystems such as the Great Barrier Reef, the Murray-Darling Basin and the Great Artesian Basin”).

³⁹⁹ Britannica, *Great Barrier Reef*, ENCYCLOPEDIA BRITANNICA (June 18, 2021), <https://www.britannica.com/place/Great-Barrier-Reef> [<https://perma.cc/N66L-BYQS>].

⁴⁰⁰ *Great Artesian Basin Strategic Management Plan*, DEP’T OF AGRIC., WATER & THE ENV’T (Austl.) (June 18, 2021), <https://www.agriculture.gov.au/sites/default/files/documents/strategic-management-plan.pdf> (last visited Aug. 1, 2021).

⁴⁰¹ *Id.*

⁴⁰² *Rights of Nature*, AUSTRAL. EARTH L. CTR., <https://www.earthlaws.org.au/aclc/rights-of-nature> [<https://perma.cc/98A6-TGGK>].

personhood to the Ganges and Yamuna Rivers.⁴⁰³ Ten days later, the same court granted legal rights to the Gangotri and Yamunotri Glaciers above these rivers.⁴⁰⁴ The court observed that the rights granted “shall be equivalent to the rights of human beings and the injury/harm caused to these bodies shall be treated as harm/injury caused to the human beings.”⁴⁰⁵ The Supreme Court of India ultimately stayed the lower court rulings on the Ganges and Yamuna Rivers,⁴⁰⁶ as well as the Gangotri and Yamunotri Glaciers.⁴⁰⁷ Despite the supreme court’s ruling, rights of nature initiatives have continued to develop in India, especially in the North. In 2018, the Uttarakhand High Court acted once again to declare that animals are “legal entities.”⁴⁰⁸ In 2019, the Punjab and Haryana High Court also declared animals to be legal persons,⁴⁰⁹ and the following year, it declared Chandigarh’s Sukhna Lake to be a living entity.⁴¹⁰

b. Bangladesh

In 2019, following several years of environmental litigation over serious water pollution and illegal riverbank development,⁴¹¹ the Bangladeshi Supreme Court granted all of its rivers the same legal status

⁴⁰³ Mohd. Salim v. State of Uttarakhand (2017) Writ Petition (PIL) No. 126 of 2014 (UTT H.C.) (India), <https://www.nonhumanrights.org/content/uploads/WPPIL-126-14.pdf> [<https://perma.cc/EA23-EMBS>].

⁴⁰⁴ Lalit Miglani v. State of Uttarakhand (2017) Writ Petition (PIL) No. 140 of 2015 (UTT H.C.) (India), <http://www.indiaenvironmentportal.org.in/files/living%20entity%20Gangotri%20Himalaya%20Uttarakhand%20High%20Court%20Order.pdf> [<https://perma.cc/2YRM-4XUA>]

⁴⁰⁵ *Id.* at *65.

⁴⁰⁶ *India’s Ganges and Yamuna Rivers Are ‘Not Living Entities’*, BBC (July 7, 2017), <https://www.bbc.com/news/world-asia-india-40537701> [<https://perma.cc/RGY8-5CPT>].

⁴⁰⁷ Stellina Jolly & K.S. Roshan Menon, *Of Ebbs and Flows: Understanding the Legal Consequences of Granting Personhood to Natural Entities in India*, TRANSNAT’L ENV’T L. 1, 2 n.5 (2021) (explaining that the appeals of both the river and glacier decisions have been grouped together and stayed).

⁴⁰⁸ See Vineet Upadhyay, *Animals Have Equal Rights as Humans, Says Uttarakhand High Court*, TIMES INDIA (July 5, 2018, 1:19 PM) <https://timesofindia.indiatimes.com/city/dehradun/members-of-animal-kingdom-to-be-treated-as-legal-entities-ukhand-hc/articleshow/64860996.cms> [<https://perma.cc/CP44-B3C6>].

⁴⁰⁹ Karnail Singh v. State of Haryana, 2019 SCC OnLine P&H 704 (India), https://www.livelaw.in/pdf_upload/pdf_upload-361239.pdf [<https://perma.cc/3H97-JLX9>].

⁴¹⁰ Court on Its Own Motion v. Chandigarh Administration, CWP No. 18253 of 2009 (P&H H.C.) (2020) (Unreported), https://www.livelaw.in/pdf_upload/pdf_upload-370827.pdf [<https://perma.cc/W4NU-VJRN>].

⁴¹¹ See *Protecting Rights of Rivers: Turning Intention into Action*, DAILY STAR (Nov. 20, 2020, 12:00 AM), <https://www.thedailystar.net/law-our-rights/news/protecting-rights-rivers-turning-intention-action-1998201> [<https://perma.cc/E9ZN-LZA8>].

as human beings and called for the removal of all illegal establishments on their banks.⁴¹² In 2016, a nongovernmental organization had filed suit over pollution and illegal construction on the Turag River, the upper tributary of the major Buriganga River in the Dhaka region in the center of the country.⁴¹³ By 2019, the case made its way to the High Court of Bangladesh, which resolved the case with reference to both the public trust doctrine and emerging rights of nature principles. It held that the government had an obligation under the public trust doctrine to protect the river, but it also declared that the river, together with all other rivers within the country, are “living entit[ies]” entitled to rights as “legal persons.”⁴¹⁴

D. *The Rights of Nature in the United States*

Even as the rights of nature movement surged abroad, it struggled to gain traction in the United States after its rejection in *Sierra Club v. Morton*.⁴¹⁵ Domestic responses to the rights of nature movement have ranged from incredulity and derision to sincere philosophical debate over who should be able to represent nature and how to cope with potential conflicts among legal guardians. Illustrating naked skepticism, one blogger on Marcellus Drilling News, a website promoting Northeast shale drilling, assessed the rights of nature movement as “[u]tter bull crap of the highest order—but a dangerous precedent if allowed. We can see your dog suing you, the trees that ring your property suing you, wrongful death lawsuits for killing a snake”⁴¹⁶

Professor Stone, author of the rights of nature-supportive article that inspired Justice Douglas’s dissent in *Sierra Club v. Morton*,⁴¹⁷ seemed to anticipate these reactions in his original work. There, he warned,

Each time there is a movement to confer rights onto some new “entity,” the proposal is bound to sound odd or frightening or laughable. This is partly because until the rightless thing

⁴¹² See Chandran, *supra* note 325.

⁴¹³ *Legal Rights of Rivers—An International Trend?*, CLIENTEARTH (Mar. 13, 2019), <https://www.clientearth.org/projects/access-to-justice-for-a-greener-europe/updates/legal-rights-of-rivers-an-international-trend> [<https://perma.cc/TZ2X-ZVD8>].

⁴¹⁴ Margil, *supra* note 325.

⁴¹⁵ *Sierra Club v. Morton*, 405 U.S. 727, 741 (1972).

⁴¹⁶ *It Speaks! An “Ecosystem” Has Filed to Join a Lawsuit in PA*, MARCELLUS DRILLING NEWS (Aug. 14, 2015), <https://marcellusdrilling.com/2015/08/it-speaks-an-ecosystem-has-filed-to-join-a-lawsuit-in-pa> [<https://perma.cc/W7JD-EPQS>].

⁴¹⁷ See *supra* Section II.A.2 (discussing *Sierra Club v. Morton*).

receives its rights, we cannot see it as anything but a *thing* for the use of “us”—those who are holding rights at the time.⁴¹⁸

Since the 2000s, whether by international adoption or the passage of a half-century since Professor Stone’s original work, the rights of nature concept has become increasingly normalized in some legal and intellectual circles. The concept appears to be enjoying a domestic renaissance, especially at the municipal level. While these local efforts have not always proved successful, rights of nature initiatives have appeared in multiple city ordinances and charters, county charters, and tribal constitutions throughout the country. Unsuccessful attempts have also been made to recognize the rights of nature in state legislation, state constitutional amendments, and in litigation on the Colorado River.⁴¹⁹ In 2019, in Florida, rights of nature principles were even formally incorporated into the state Democratic Party platform.⁴²⁰ While the U.S. legal system continues to regard these efforts with skepticism, increasingly ambitious appeals to rights of nature principles in American law reflect the growing sentiment that natural systems deserve better protection than conventional environmental law has provided and protection for their own intrinsic value, rather than those values and services they provide us.

This Section reviews the emerging rights of nature initiatives around the United States, noting examples from Pennsylvania, Ohio, and California before reviewing examples from Tribal Nations within the United States and Canada. It culminates with a closer examination of efforts in the State of Florida.

1. Pennsylvania

a. Tamaqua Borough’s Sewage Ordinance

Ecuador’s constitutional recognition in 2008 may be the most famous rights of nature initiative in the world, but the first community in the world to formally recognize legal personhood for nature is a small

⁴¹⁸ Stone, *supra* note 294, at 455.

⁴¹⁹ See *Advancing Legal Rights of Nature: Timeline*, CMTY. ENV’T LEGAL DEF. FUND, <https://celdf.org/rights-of-nature/timeline> [<https://perma.cc/JT82-T6BN>] (providing a comprehensive history of rights of nature efforts in the United States and abroad).

⁴²⁰ Scott Powers, *Florida Democratic Party Adopts ‘Rights of Nature’ into Platform*, FLA. POL. (Oct. 16, 2019), <https://floridapolitics.com/archives/308603-florida-democratic-party-adopt-rights-of-nature-into-platform> [<https://perma.cc/X9JJ-PRD5>].

town of 7,000 people in central Pennsylvania: Tamaqua Borough.⁴²¹ The effort was inspired in the mid-2000s by opposition to a proposed sewage sludge dumpsite in the town, which is northwest of Allentown, Pennsylvania.⁴²² In 2006, after lobbying by community advocates, the Borough Council adopted the Tamaqua Borough Sewage Sludge Ordinance, prohibiting the land application of sewage sludge and recognizing that “natural communities, and ecosystems shall be considered ‘persons’ for purposes of the enforcement of the civil rights of those residents, natural communities, and ecosystems.”⁴²³

b. City of Pittsburgh’s Anti-Fracking Ordinance

Tamaqua’s action motivated the larger Pennsylvania City of Pittsburgh to adopt rights of nature principles in 2010 in a bid to stop hydraulic fracking within its boundaries. Hoping to circumvent state preemption of municipal oil and gas regulations, the city adopted an ordinance that not only prohibited fracking, but also granted the “inalienable and fundamental rights to exist and flourish” to “[n]atural communities and ecosystems, including, but not limited to, wetlands, streams, rivers, [and] aquifers”⁴²⁴ Doug Shields, former President of the Pittsburgh City Council, observed, “We not only banned fracking, but we asserted our right to self-government. We asserted nature’s rights, and our obligation to protect the ecosystems that sustain us.”⁴²⁵

Four years after the adoption of Pittsburgh’s anti-fracking ordinance, as discussed above in Section I.C.2, the Pennsylvania Supreme Court invalidated the fracking preemption statute under the Environmental Rights Amendment of the Pennsylvania Constitution, which codifies an expansive version of the public trust doctrine.⁴²⁶ While not a party to the suit, the City of Pittsburgh had filed an amicus

⁴²¹ *Timeline*, GLOB. ALL. FOR RTS. NATURE, <https://therightsofnature.org/timeline> [<https://perma.cc/A8N5-GTT7>] (noting that Tamaqua Borough was the first place in the world to officially recognize the rights of nature).

⁴²² Madeleine Sheehan Perkins, *How Pittsburgh Embraced a Radical Environmental Movement Popping Up in Conservative Towns Across America*, BUS. INSIDER (July 9, 2017, 2:00 PM) <https://www.businessinsider.com/rights-for-nature-preventing-fracking-pittsburgh-pennsylvania-2017-7> [<https://perma.cc/G9CP-XFCT>].

⁴²³ Tamaqua Borough, Pa., Tamaqua Borough Sewage Sludge Ordinance, Ordinance No. 612 (Sept. 19, 2006).

⁴²⁴ PITTSBURGH, PA., CODE § 618.03 (2010).

⁴²⁵ *Doug Shields from We the People 2.0—The Second American Revolution*, CMTY. ENV’T LEGAL DEF. FUND (Oct. 19, 2016), <https://celdf.org/2016/10/doug-shields-people-2-0-second-american-revolution> [<https://perma.cc/3KUP-HFSE>].

⁴²⁶ *Robinson Twp. v. Commonwealth*, 83 A.3d 901, 976–78 (Pa. 2013).

curiae brief and argued that the preemption prohibited local governments from meeting their civic obligations to protect public health and welfare through local zoning regulations.⁴²⁷ While the city did not raise the public trust doctrine or the rights of nature directly in its brief, the court situated the city's understanding of civic duty as within the constitutional recognition of these public trust obligations. The Pennsylvania fray over fracking thus presents a rare example where the rights of nature and public trust doctrine have been deployed simultaneously to resolve the same underlying issue. The fact that the court raised the public trust doctrine *sua sponte* suggests that the parties did not think the doctrine offered a viable legal argument on which to fight the preemption, perhaps explaining why Pittsburgh turned to the untested rights of nature as an alternative. It will be interesting to see whether the court's action has changed the environmental legal calculus there going forward.

c. Anti-Fracking Home Rule Charter of Grant Township

Rights of nature principles continue to play a notable role in the ongoing regulatory battles over fracking the Marcellus Shale in Pennsylvania. In 2020, the small community of Grant Township won one of the most high-profile and hard-fought victories for rights of nature principles in the state. In 2014, Pennsylvania General Energy (PGE) received an initial permit to convert an existing gas well into a fracking wastewater injection well in Grant Township, a tiny town of fewer than one thousand people.⁴²⁸ The proposal to inject 42,000 gallons of fracking wastewater a day was met with opposition from these residents.⁴²⁹ In 2014, the Township adopted a Community Bill of Rights Ordinance prohibiting the disposal of fracking waste within the township, restricting corporate personhood, and recognizing the rights of “[n]atural communities and ecosystems within Grant Township, including but not limited to, rivers, streams, and aquifers . . . to exist, flourish, and naturally evolve.”⁴³⁰ When the ordinance was challenged by PGE, a group of local environmental advocates, the East Run Hellbenders Society, attempted unsuccessfully to intervene as legal guardians on behalf of the Little Mahoning Watershed.⁴³¹

⁴²⁷ Amicus Curiae Brief of Council of the City of Pittsburgh at 3, *id.* (No. 284 M.D. 2012).

⁴²⁸ Pa. Gen. Energy Co. v. Grant Twp., No. 14-209ERIE, 2017 WL 1215444, at *3 (W.D. Pa. Mar. 31, 2017).

⁴²⁹ Nobel, *supra* note 293.

⁴³⁰ Grant Township, Pa., Community Bill of Rights Ordinance §§ 2(d), 3(a), 5(a) (June 1, 2014).

⁴³¹ Pa. Gen. Energy Co. v. Grant Twp., 658 F. App'x. 37, 42–43 (3d Cir. 2016).

The community rights ordinance was eventually struck down in federal court as “run[ning] afoul of constitutional protections afforded corporations such as PGE and attempt[ing] to immunize Grant Township from clashes with current federal and state law.”⁴³² The Township responded by enacting a Home Rule Charter that incorporated the same prohibition on fracking waste, limits on corporate personhood, and rights of nature provisions included in the original ordinance.⁴³³ In 2017, the Pennsylvania Department of Environmental Protection (DEP) issued a permit to allow PGE to inject fracking waste into an existing natural gas well.⁴³⁴ After a prolonged legal battle over the issuance of the permit, the DEP reversed course and rescinded the well permit, citing the Home Rule Charter’s ban on injection wells for fracking fluids.⁴³⁵ However, in December 2020, PGE again filed suit against Grant Township,⁴³⁶ seeking declaratory and injunctive relief on the grounds that the Home Rule Charter is void and unenforceable.⁴³⁷ At the time this Article goes to press, it is not yet clear whether Grant Township’s rights of nature charter will remain in force.

2. Ohio

a. The Lake Erie Bill of Rights

In 2014, the same year that the Flint, Michigan, water crisis began,⁴³⁸ the City of Toledo, Ohio, was forced to warn local residents not to use their tap water for drinking, bathing, or cooking.⁴³⁹ A harmful algae bloom in Lake Erie, the source of the city’s drinking water, had rendered the water toxic. The algae produce microcystin, a toxin that causes gastrointestinal, respiratory, neurological, and dermatological

⁴³² *Pa. Gen. Energy*, 2017 WL 1215444, at *16.

⁴³³ Grant Twp., Pa., Home Rule Charter §§ 105, 107, 301, 401 (Nov. 21, 2015).

⁴³⁴ Laura Legere, *Pa. DEP Revokes Permit for Grant Twp. Oil and Gas Waste Well*, PITT. POST-GAZETTE (Mar. 27, 2020, 7:15 AM), <https://www.post-gazette.com/business/powersource/2020/03/27/Pennsylvania-DEP-revokes-permit-oil-gas-waste-well-Grant-home-rule-charter/stories/202003260151> [<https://perma.cc/3VKD-6ZY2>].

⁴³⁵ *Id.*

⁴³⁶ Complaint, *Pa. Gen. Energy Co. v. Grant Twp.*, 20-cv-00351 (W.D. Pa. Dec. 9, 2020).

⁴³⁷ *Id.* at 3.

⁴³⁸ Merrit Kennedy, *Lead-Laced Water in Flint: A Step-by-Step Look at the Makings of a Crisis*, NPR (Apr. 20, 2016, 6:39 PM), <https://www.npr.org/sections/thetwo-way/2016/04/20/465545378/lead-laced-water-in-flint-a-step-by-step-look-at-the-makings-of-a-crisis> [<https://perma.cc/FJ57-APM6>].

⁴³⁹ *Toledoans for Safe Water’s Amicus Brief re Motions for Judgment on the Pleadings, Drewes Farms P’ship v. City of Toledo*, 441 F. Supp. 3d 551 (N.D. Ohio 2020) (No. 19-cv-00434).

health effects.⁴⁴⁰ For three days, the 400,000 city residents had to rely on bottled water instead.

After this three-day tap water ban, Toledo residents successfully launched a multi-year effort to amend their city charter with the Lake Erie Bill of Rights (LEBOR), one of the most ambitious rights of nature initiatives in the United States. In its own words, LEBOR was created by residents to “reclaim, reaffirm, and assert our inherent and inalienable rights, and to extend legal rights to our natural environment in order to ensure that the natural world . . . [is] no longer subordinated to the accumulation of surplus wealth and unaccountable political power.”⁴⁴¹ LEBOR asserts three different sets of rights: (1) the rights of the Lake Erie ecosystem, (2) the rights of the residents to a clean and healthy environment, and (3) the right of local community self-governance.⁴⁴² Under LEBOR, Lake Erie and its watershed “possess the right to exist, flourish, and naturally evolve,” and any local resident (or the city itself) has the right to sue to enforce these rights.⁴⁴³ LEBOR also engages one of the more powerful rhetorical foils of the rights of nature movement—the idea that corporations are granted legal personhood while natural systems are not. While LEBOR explicitly grants legal personhood to the Lake Erie ecosystem, it also expressly restricts legal personhood for corporations that violate the law, stating that “[c]orporations that violate this law, or that seek to violate this law, shall not be deemed to be ‘persons’ to the extent that such treatment would interfere with the rights or prohibitions enumerated by this law.”⁴⁴⁴

The day after Toledo voters approved the measure, the city was promptly sued by agricultural interests.⁴⁴⁵ The plaintiff, Drewes Farms, alleged primarily that LEBOR exceeded Toledo’s authority as a municipal arm of the state, was unconstitutionally vague, and violated due process.⁴⁴⁶ Drewes Farms argued that by applying fertilizer on their land they might run afoul of LEBOR’s protections and expose their operations to liability, despite legally operating under a certificate by

⁴⁴⁰ Elizabeth D. Hilborn et al., *Algal Bloom-Associated Disease Outbreaks Among Users of Freshwater Lakes—United States, 2009–2010*, 63 MORBIDITY & MORTALITY WKLY. REP. 11 (2014).

⁴⁴¹ TOLEDO, OHIO, MUN. CODE ch. XVII, § 253 (2019).

⁴⁴² *Id.* § 254(a)–(c).

⁴⁴³ *Id.* § 254(a), (d).

⁴⁴⁴ *Id.* § 257(a).

⁴⁴⁵ Complaint at 2–3, *Drewes Farms P’ship v. City of Toledo*, 441 F. Supp. 3d 551 (N.D. Ohio 2020) (No. 19-cv-00434) (alleging violations of the First Amendment, the Equal Protection Clause, the Fifth Amendment (for vagueness), and deprivation of rights without due process).

⁴⁴⁶ *Drewes Farms*, 441 F. Supp. 3d at 556 (Order Invalidating Lake Erie Bill of Rights).

the Ohio Department of Agriculture.⁴⁴⁷ While the case was winding its way through federal court, the Ohio State Legislature acted directly to preempt the initiative and specifically prohibited any person from bringing a legal action on behalf of an ecosystem.⁴⁴⁸ In 2020, the federal district court agreed with the plaintiff's arguments and invalidated LEBOR, noting that it was "well-intentioned" but unconstitutionally vague and beyond the power of local government.⁴⁴⁹ The City of Toledo initially fought the decision, but in May 2020, it voluntarily dismissed its appeal, citing budgetary constraints.⁴⁵⁰

3. California

a. Santa Monica's Bill of Rights for Sustainability

In 2013, the City Council of Santa Monica, California unanimously approved the "Bill of Rights for Sustainability," granting "[n]atural communities and ecosystems . . . fundamental and inalienable rights to exist and flourish" within the city limits.⁴⁵¹ The ordinance also allows city residents to bring legal actions on behalf of "groundwater aquifers, atmospheric systems, marine waters, and native species" within the city.⁴⁵² Santa Monica is a rare example of a proactive rights of nature ordinance that was not adopted in response to an immediate environmental threat. To date, neither the city nor its citizens have utilized the ordinance to bring an action on behalf of nature, but neither has the ordinance been challenged.

4. Florida

Like Pennsylvania, Florida provides an interesting example of a state in which the rights of nature movement and public trust doctrine could intersect in the context of environmental law. As detailed in Section I.B.1, Florida has codified the public trust doctrine in both the state constitution and statutory law, emphasizing the sovereign

⁴⁴⁷ *Id.*

⁴⁴⁸ H.R. 166, 133d Gen. Assemb., Reg. Sess. § 2305.011 (Ohio 2019).

⁴⁴⁹ *Drewes Farms*, 441 F. Supp. 3d at 557–58.

⁴⁵⁰ Tom Henry, *City Quietly Drops Appeal of Lake Erie Bill of Rights Ruling*, BLADE (May 11, 2020, 3:43 PM), <https://www.toledoblade.com/local/environment/2020/05/11/toledo-quietly-drops-appeal-of-lebor-ruling-lake-erie/stories/20200511082> [<https://perma.cc/VN5E-25N9>].

⁴⁵¹ SANTA MONICA, CAL., MUN. CODE § 12.02.030(b) (2019).

⁴⁵² *Id.*

ownership of submerged lands.⁴⁵³ However, the Florida public trust has thus far not played a significant role in environmental advocacy. Unlike New Jersey, Florida has not applied the doctrine to protect its upland beaches or drinking water resources.⁴⁵⁴ Unlike California, it has not explicitly required the balancing of environmental values against other values associated with state waterways in the state's ambitious water management system.⁴⁵⁵ The lack of a dynamic public trust doctrine in Florida is not for lack of need. Florida's environment is beset by environmental woes as laws struggle to keep pace with explosive development and population growth.⁴⁵⁶ Additionally, Florida's waterways are uniquely vulnerable, given the importance to the state of groundwater resources that have not been explicitly protected by the Florida public trust doctrine.⁴⁵⁷

⁴⁵³ Article X, Section 11 of the Florida Constitution reads:

The title to lands under navigable waters, within the boundaries of the state, which have not been alienated, including beaches below mean high water lines, is held by the state, by virtue of its sovereignty, in trust for all the people. Sale of such lands may be authorized by law, but only when in the public interest. Private use of portions of such lands may be authorized by law, but only when not contrary to the public interest.

FLA. CONST. art. X, § 11; *see also* *Broward v. Mabry*, 50 So. 826, 829–30 (Fla. 1909) (affirming the sovereign ownership aspect of the public trust doctrine); *Coastal Petrol. Co. v. Am. Cyanamid Co.*, 492 So. 2d 339, 342–43 (Fla. 1986) (holding that the trust imposes a legal duty on the state to preserve and control navigable rivers, lakes, and tidelands for public navigation, fishing, swimming, and other lawful uses).

⁴⁵⁴ *Mayor of Clifton v. Passaic Valley Water Comm'n*, 557 A.2d 299 (N.J. 1989) (applying the public trust doctrine to all water resources in the state, including surface, ground, and drinking water).

⁴⁵⁵ *Nat'l Audubon Soc'y v. Super. Ct.*, 658 P.2d 709 (Cal. 1983); *see also* *Owen*, *supra* note 70, at 1116–17 (detailing the many provisions of the California Water Code that protect public trust doctrine values, including water quality, fisheries, and wildlife).

⁴⁵⁶ Approximately one thousand new residents move to Florida every day. DEMOGRAPHIC ESTIMATING CONFERENCE EXECUTIVE SUMMARY, FLA. OFF. ECON. & DEMOGRAPHIC RSCH. (2021), <http://edr.state.fl.us/Content/conferences/population/demographicsummary.pdf> [<https://perma.cc/SZ8B-RH8F>]. In 1960, Florida was home to eight percent of the nation's coastal population; by 2008, that number had already doubled to more than sixteen percent. STEVEN G. WILSON & THOMAS R. FISCHETTI, COASTLINE POPULATION TRENDS IN THE UNITED STATES: 1960 TO 2008, U.S. CENSUS BUREAU 5–6 (2010), <https://www.census.gov/prod/2010pubs/p25-1139.pdf> [<https://perma.cc/NH67-NTZR>].

⁴⁵⁷ Groundwater remains unprotected by the public trust doctrine in many states, although, this is an aspect of trust-related environmental protection that is evolving. For example, Hawaii's trust has long protected groundwater, *see* *RESTORING THE TRUST: AN INDEX*, *supra* note 49, at 8–9 n.62, and California courts have recently recognized the application of the trust to groundwater resources that are tributaries of trust-protected navigable waterways. *Env't L. Found. v. State Water Res. Control Bd.*, 237 Cal. Rptr. 3d 393, 399–403 (Cal. Ct. App. 2018) (concluding that the public trust doctrine protected groundwater tributaries of navigable waters), *cert denied*, 2018 Cal. LEXIS 9313 (Cal. 2018).

Faced with an inert public trust doctrine and environmental statutes that have allowed the ongoing degradation of state waterways large and small, environmental advocates have increasingly sought legal recognition for rights of nature principles. In a first for the nation, explicit reference to the rights of nature was recently included in the platform of one of the state's two main political parties, the Democrats. In October 2019, the Florida Democratic Party became the first state-level political party to incorporate the rights of nature into their platform, declaring "to adequately protect our waters, we support communities' rights in reclaiming home rule authority and recognizing and protecting the inherent rights of nature, as we have done for corporations . . ."⁴⁵⁸ One Democratic Party leader explained the impetus of the proposal:

Nowhere is it more apparent than Florida that current laws and policies have failed to protect our waters from recklessly-planned and poorly-managed human impact . . . Florida Democrats demonstrated the bold initiative necessary to change the conversation from "nature is property, to be used and abused for profit," to "nature is alive, and deserving of respect for its rights."⁴⁵⁹

This Section describes how the rights of nature debate has emerged and grown in Florida, from the flurry of local initiatives attempting to apply it to vulnerable waterways to the legislature's move to preempt any recognition of legal rights in nature, with special focus on the WEBOR.

a. Local Initiatives in Response to Ecological Disaster

The rights of nature movement emerged in Florida after several prolonged and highly publicized ecological disasters. In 2016, beaches on both the Gulf and Atlantic coasts were closed for most of July as a massive blue-green algae bloom blanketed Lake Okeechobee, the largest freshwater lake in the state.⁴⁶⁰ Lake Okeechobee, in turn, discharged the bloom and its polluted waters into the St. Lucie and Caloosahatchee Rivers, fouling both the Atlantic and Gulf coasts.⁴⁶¹ The algae was so

⁴⁵⁸ Powers, *supra* note 420.

⁴⁵⁹ Press Release, Cmty. Env't Legal Def. Fund, Florida Democrats Adopt Rights of Nature in Party Platform (Oct. 15, 2019) [<https://perma.cc/AFS7-CB73>].

⁴⁶⁰ USGS *Finds 28 Types of Cyanobacteria in Florida Algal Bloom*, USGS (May 31, 2017), <https://www.usgs.gov/news/usgs-finds-28-types-cyanobacteria-florida-algal-bloom> [<https://perma.cc/C9KV-RHB9>].

⁴⁶¹ Mayra Cuevas, *Toxic Algae Bloom Blankets Florida Beaches, Prompts State of Emergency*, CNN (July 1, 2016, 7:18 PM), <https://www.cnn.com/2016/07/01/us/florida-algae-pollution/index.html> [<https://perma.cc/SRF3-3P9Q>].

thick that state leaders began referring to it as “guacamole-like,” a reference to its color and consistency, and emergency declarations were made for four South Florida counties.⁴⁶²

In a separate crisis in 2018, Florida’s southwest coast along the Gulf of Mexico struggled to cope with the longest, largest “red tide” algal bloom in a decade. Distinct from blue-green algae, red tide occurs in salt water and is caused by another type of algae, *K. brevis*.⁴⁶³ Red tides are naturally occurring, but they are exacerbated by nutrient pollution and can cause harm on contact or inhalation by swimmers and marine life.⁴⁶⁴ Dead fish and sea turtles littered the beaches in Lee and Collier counties, alarming residents and discouraging tourism.⁴⁶⁵ In the same year, on the southeast Atlantic coast, beaches were once again impacted by blue-green algae blooms. These “harmful algal blooms” (HABs) sickened beachgoers, killed marine life, and shuttered small businesses.⁴⁶⁶ Floridians have been deeply dismayed as HABs increasingly appear to be the new normal, impairing 82% of all lakes in the state, more than 50% of the assessed rivers, and 32% of Florida’s bays.⁴⁶⁷ Concern over the issue cuts across conventional political interest groups, deeply alarming environmentalists, harming homeowners with residences along Florida’s ample waterways, frustrating recreationalists prevented from enjoying the state’s renowned beaches and waterways, and terrifying the business owners

⁴⁶² Oliver Milman, *Florida Declares State of Local Emergency over Influx of ‘God-Awful’ Toxic Algae*, GUARDIAN (June 30, 2016, 12:09 PM), <https://www.theguardian.com/us-news/2016/jun/30/florida-emergency-toxic-algae-treasure-coast> [<https://perma.cc/YFM8-G7GE>]; Pam Wright, *10 Things to Know About Florida’s Harmful Algae Blooms*, WEATHER CHANNEL (July 18, 2016), <https://weather.com/science/nature/news/florida-algae-crisis> [<https://perma.cc/CW6Y-GP5E>].

⁴⁶³ *Florida Red Tide FAQs*, MOTE MARINE LAB’Y & AQUARIUM, [https://mote.org/news/florida-red-tide#Has%20coastal%20\(nutrient\)%20pollution%20caused%20the%20Florida%20red%20tide](https://mote.org/news/florida-red-tide#Has%20coastal%20(nutrient)%20pollution%20caused%20the%20Florida%20red%20tide) [<https://perma.cc/2KG8-CH5J>].

⁴⁶⁴ *Id.*

⁴⁶⁵ Chad Gillis, *National Weather Service Extends Beach Hazard Advisory Through Thursday*, NEWS-PRESS (July 31, 2018, 7:39 AM), <https://www.news-press.com/story/news/2018/07/30/red-tide-caloosahatchee-lake-okeechobee-sanibel-naples/864721002> [<https://perma.cc/5HD7-FZM5>]; Shannon Sims, *A Red Tide on Florida’s Gulf Coast Has Been a Huge Hit to Tourism*, N.Y. TIMES (Sept. 7, 2018), <https://www.nytimes.com/2018/09/07/travel/florida-red-tide-tourism-gulf-coast.html> [<https://perma.cc/CT9Z-R6C4>].

⁴⁶⁶ Pam Wright, *Florida Algae Blooms Send People to Hospital, Kill Marine Wildlife*, WEATHER CHANNEL (July 31, 2018), <https://weather.com/science/environment/news/2018-07-31-florida-algae-blooms-red-tide-health-wildlife> [<https://perma.cc/V63J-5P6H>].

⁴⁶⁷ *Waters Assessed as Impaired Due to Nutrient-Related Causes*, EPA, <https://www.epa.gov/nutrient-policy-data/waters-assessed-impaired-due-nutrient-related-causes> [<https://perma.cc/V23R-MYQ3>] (noting that, in Florida’s most recent Water Quality Assessment Report, only twenty percent of rivers were assessed).

that depend on water-related tourism, the central driver of Florida's economy.

In 2019 and 2020, a flurry of rights of nature initiatives sprang up in Florida, mostly by residents and environmentalists attempting to protect local waterways threatened by algal blooms, other forms of pollution, and water withdrawals for commercial purposes, including consumer bottled water. These included efforts to protect the Indian River Lagoon in Brevard County, the Kissimmee River in Osceola County, the Caloosahatchee River near Fort Myers, the Santa Fe River near Gainesville, and Pensacola Bay in the upper northeast corner of the state.⁴⁶⁸

Each of the measures was inspired by specific ecological crises. The Santa Fe River Bill of Rights was inspired by a proposal to increase groundwater withdrawals for Nestlé water bottling from one of the Santa Fe River's springs.⁴⁶⁹ The Indian River Lagoon, a 156-mile-long estuary, struggles with nutrient pollution and persistent harmful algal blooms.⁴⁷⁰ The Lagoon is also connected to Lake Okeechobee through the St. Lucie Canal, and in periods of wet weather, lake water is diverted into the canal and estuary to prevent flooding.⁴⁷¹ These discharges are highly polluted, alter estuarine salinity, and routinely carry toxic blue-green algae blooms to the coast.⁴⁷² Very similar facts inspired the effort to protect the Caloosahatchee River on Florida's Gulf Coast, which is also impacted by polluted freshwater releases from Lake Okeechobee, as well as restricted flows during periods of drought.⁴⁷³

⁴⁶⁸ Press Release, Cmty. Env't Legal Def. Fund, Florida: Flurry of Rights of River Ballot Initiatives Proposed to Save Drinking Water, Ecosystems (Sept. 11, 2019) [<https://perma.cc/4H8B-EA3M>].

⁴⁶⁹ Greg Allen, *The Water Is Already Low at a Florida Freshwater Spring, but Nestlé Wants More*, NPR (Nov. 8, 2019, 6:00 AM), <https://www.npr.org/2019/11/08/776776312/the-water-is-already-low-at-a-florida-freshwater-spring-but-nestl-wants-more> [<https://perma.cc/4867-9WCM>].

⁴⁷⁰ INDIAN RIVER LAGOON—FACTS AND FIGURES, HARBOR BRANCH, <https://www.fau.edu/hboi/meh/IRL.Fact.Sheet.pdf> [<https://perma.cc/8MXA-YYRF>]; Brian Lapointe et al., *Nutrient Over-Enrichment and Light Limitation of Seagrass Communities in the Indian River Lagoon, An Urbanized Subtropical Estuary*, 699 SCI. TOTAL ENV'T 1 (2020), <https://www.sciencedirect.com/science/article/pii/S0048969719340458>.

⁴⁷¹ Max Chesnes, *What Are Lake Okeechobee Discharges? A Multimedia Primer and Historical Data*, TREASURE COAST NEWSPAPERS (Mar. 11, 2021, 4:25 PM), <https://www.tcpalm.com/story/news/local/indian-river-lagoon/2021/01/07/lake-okeechobee-discharges-into-st-lucie-indian-river-lagoon-graphic/6567907002> [<https://perma.cc/CE5H-U3D9>].

⁴⁷² *Id.*

⁴⁷³ *The Ripple Effect*, CONSERVANCY SW. FLA. [<https://perma.cc/Y566-4WRY>] (providing overview of ecological impacts from Lake Okeechobee discharges and altered hydrology).

The Kissimmee River was once a shallow and meandering 103-mile river with a significant floodplain as wide as three miles.⁴⁷⁴ In the 1960s, the U.S. Army Corps of Engineers channelized the river for flood control, dredging a thirty-foot-deep canal that destroyed much of the area's unique ecosystems.⁴⁷⁵ Since the 1990s, the U.S. Army Corps and local Water Management District have begun restoring portions of the river, but local environmental advocates allege that these efforts have been insufficient and responded with a rights of nature initiative, the Kissimmee River Bill of Rights.⁴⁷⁶ As local organizer Barbara Cady explained to the public, "Our river was destroyed in the name of flood control, killing the wildlife it supported. A Kissimmee River Bill of Rights will ensure that this living breathing ecosystem will never be assaulted again."⁴⁷⁷

Of all these efforts, however, the most successful to date was recently formalized by Orange County to protect the Wekiva and Econlockhatchee Rivers, addressed below.

b. Orange County, WEBOR, and Senate Bill 712

The Wekiva and Econlockhatchee Rivers run through Orange County in central Florida, north of Orlando. For decades, citizens have raised alarms about declining water levels and increasing nutrient pollution from septic tanks, agricultural waste, and lawn fertilizer.⁴⁷⁸ In 2020, Orange County made national news when it enacted a county charter amendment to grant legal protections directly to the Wekiva and Econlockhatchee Rivers.⁴⁷⁹ The resulting Wekiva River and Econlockhatchee River Bill of Rights, or WEBOR, recognizes the right of the Wekiva and Econlockhatchee rivers to "exist, [f]low, to be protected against [p]ollution and to maintain a healthy ecosystem" while creating standing for citizens of Orange County to bring actions on behalf of the rivers.⁴⁸⁰ After eleven public hearings, the 2020 Charter

⁴⁷⁴ *Kissimmee River*, S. FLA. WATER MGMT. DIST., <https://www.sfwmd.gov/our-work/kissimmee-river> [<https://perma.cc/2VW9-QXNL>].

⁴⁷⁵ *Id.*

⁴⁷⁶ Tamia Streeter, *Legislation Proposed to Grant Kissimmee River Rights*, NEWS STAR (Sept. 15, 2019), <https://www.thenewsstar.com/story/news/2019/09/15/legislation-proposed-grant-kissimmee-river-rights/2333791001> [<https://perma.cc/FPG4-HV29>].

⁴⁷⁷ Cmty. Env't Legal Def. Fund, *supra* note 468.

⁴⁷⁸ Rebecca Renner, *In Florida, A River Gets Rights*, SIERRA (Feb. 9, 2021), <https://www.sierraclub.org/sierra/2021-2-march-april/protect/florida-river-gets-rights> [<https://perma.cc/Y62X-6VKM>] (discussing the sharply declining water level and increasing pollution load).

⁴⁷⁹ *Id.*; ORANGE COUNTY, FLA., CHARTER art. VII, § 704.1(A)-(B).

⁴⁸⁰ *Id.*

Review Commission approved WEBOR to appear on the ballot in November 2020.⁴⁸¹

Roughly eight months before the election, and before the proposed amendment had even qualified for the ballot, the Florida Legislature moved decisively to preempt it and all other rights of nature efforts in Florida, enacting statutory language clarifying that

[a] local government regulation, ordinance, code, rule, comprehensive plan, charter, or any other provision of law may not recognize or grant any legal rights to a plant, an animal, a body of water, or any other part of the natural environment that is not a person or political subdivision . . . or grant such person or political subdivision any specific rights relating to the natural environment not otherwise authorized in general law or specifically granted in the State Constitution.⁴⁸²

It was an impressive legislative feat, requiring swift coordination. In recent years, the Florida Legislature has preempted many local environmental protection efforts, including statewide preemption of local plastic-bag bans,⁴⁸³ local polystyrene foam foodware bans,⁴⁸⁴ local plastic straw bans,⁴⁸⁵ and local reef protection ordinances banning the sale and use of certain chemical sunscreens found to damage coral reefs.⁴⁸⁶ However, the statewide legislative effort to preempt rights of nature ordinances stands out for the speed with which the legislature acted.

At the time the legislature acted, approximately half-a-dozen rights of nature initiatives had been proposed at the municipal level, but none had actually qualified for the ballot, and only WEBOR was close to succeeding. Yet within the two months of state legislative session, identical language prohibiting local governments from taking any action to “recognize or grant any legal rights to a plant, an animal, a

⁴⁸¹ 2020 ORANGE CNTY. CHARTER REV. COMM’N, RIGHTS OF THE WEKIVA RIVER AND ECONLOCKHATCHEE RIVER COMMITTEE (2020), <https://www.occompt.com/wordpress/wp-content/uploads/2020/01/2020-01-22-Rights-of-the-Wekiva-River-and-Econlockhatcee-River-Final-Report.pdf> [<https://perma.cc/PT3E-NVUW>].

⁴⁸² FLA. STAT. § 403.412(9)(a) (2020) (proposed as Senate Bill 712).

⁴⁸³ § 403.7033 (2020).

⁴⁸⁴ § 500.90 (2016).

⁴⁸⁵ H.R. 771, 2019 Leg., Reg. Sess. (Fla. 2019). The bill was subsequently vetoed by Governor Ron DeSantis. Letter from Ron DeSantis, Governor, to Laurel M. Lee, Fla. Sec’y of State (May 10, 2019), <https://www.flgov.com/wp-content/uploads/2019/05/05.103.pdf> [<https://perma.cc/23SJ-T353>] (veto transmittal letter).

⁴⁸⁶ § 499.002(7) (2020); Samantha J. Gross, *Key West Banned Sunscreen to Protect Reefs. Florida Legislature Voted to Overrule That*, MIAMI HERALD (Mar. 10, 2020), <https://www.miamiherald.com/news/local/community/florida-keys/article241057161.html>.

body of water, or any other part of the natural environment” was incorporated into four separate bills, a clear indicator that the legislation was a top priority and destined for passage.⁴⁸⁷ Representative Blaise Ingoglia, the original House sponsor of the preemption, had urged the preemptive measure on grounds that the proposed rights of nature charter amendments in Florida would cause “chaos and will damage our tremendous economy” and framed them as creating the ability to sue on behalf of a fern or anthill.⁴⁸⁸ In the waning days of the session, the preemption language was amended onto SB 712, a massive water quality bill dubbed the “Clean Waterways Act.”⁴⁸⁹ The bill was signed into law on June 30, 2020, just weeks after WEBOR qualified for the ballot.

Despite the preemption, Orange County kept WEBOR on the ballot. In November, electors approved the charter amendment by nearly ninety percent.⁴⁹⁰ The margin of victory is noteworthy in a county that cleaves, like the rest of the state, fairly evenly along partisan lines, indicating bipartisan support for this novel legal idea.⁴⁹¹ Notwithstanding the overwhelming local endorsement, the future of WEBOR is unclear. Supporters argue that the preemption is unconstitutional and unenforceable. The ordinance seems vulnerable, but thus far, legal challenges to WEBOR itself have yet to emerge.

However, litigants have not hesitated to use the new ordinance in pursuit of its intended goal. In April 2021, local plaintiffs filed the first-ever WEBOR enforcement action on behalf of Lake Hart, Lake Mary

⁴⁸⁷ S. 712, 2020 Leg., Reg. Sess., at 48 (Fla. 2020), <http://laws.flrules.org/2020/150> [<https://perma.cc/YZ29-3E2R>] (amending Section 403.412 to include Subsection 9).

⁴⁸⁸ HB 1199, House-Judiciary Committee (Fla. Feb. 12, 2020), <https://www.myfloridahouse.gov/Sections/HouseSchedule/houseschedule.aspx?calendarListType=Interim&date=02-12-2020> [<https://perma.cc/8Z7Z-NP6G>] (click “Watch Archived Stream” under the “Judiciary Committee” subheader) (video of state house committee hearing that includes statement of Rep. Blaise Ingoglia, R-Spring Hill).

⁴⁸⁹ FLA. S. APPROPRIATIONS COMM., COMMITTEE MEETING EXPANDED AGENDA 2-3 (2020), <https://www.flsenate.gov/Committees/Show/AP/ExpandedAgenda/4919> [<https://perma.cc/YB77-LCN8>] (proposed committee substitute for CS/SB 712).

⁴⁹⁰ ORANGE CNTY., FLA. ELECTIONS, 2020 OFFICIAL RESULTS 7 (2020), <https://www.ocfelections.com/sites/default/files/media/forms/Election%20Records%20and%20Turnout/election%20records/10866-2020%20GENERAL%20ELECTION/10866-official-election-results-summary.pdf> [<https://perma.cc/HNL2-B7KG>] (showing that 89.2% voted yes and 10.8% voted no).

⁴⁹¹ Joseph Bonasia, *Voters Approve Charter Amendment and Make Florida the Epicenter of Rights of Nature*, FLA. TODAY (Nov. 6, 2020), <https://www.floridatoday.com/story/opinion/2020/11/06/florida-epicenter-rights-nature-opinion/6189196002> [<https://perma.cc/YY6Y-NVFJ>] (“In a county in which the breakdown of Democrats, Republicans, and Independents is 36.6%, 34.2% and 24.3%, respectively, the amendment results may reflect the sentiments of residents throughout the state.”).

Jane, Wilde Cypress Branch, Boggy Branch, Crosby Island Marsh, and a local rights of nature activist. The plaintiffs are attempting to use WEBOR to stop a 1,900-acre housing development in Orange County.⁴⁹² They argue that the proposed development violates the rights of the waters under WEBOR—Article 7 of the Orange County Charter, Section 704.1.⁴⁹³ Specifically, plaintiffs allege that the project violates the rights of the water bodies to exist, flow, and be free from pollution by proposing the dredge and fill of approximately 115 acres of Orange County waters and wetlands for road construction, development, and stormwater pond construction.⁴⁹⁴ The plaintiffs also allege that the destruction of wetlands and impacts to water quality violate the rights of the waters to “maintain a healthy ecosystem.”⁴⁹⁵ Whether the litigation will be successful remains to be seen, but the lawsuit has already gained broad national and international attention.⁴⁹⁶

Emboldened by their success in Orange County, advocates are currently proposing rights of nature ordinances in twenty-eight counties and municipalities throughout Florida.⁴⁹⁷ Advocates have also begun gathering signatures to qualify a statewide rights of nature citizen ballot initiative for the 2022 general election.⁴⁹⁸ The proposed ballot measure, “Florida Right to Clean Water,” recognizes a right to clean water for Floridians and an additional right to the waters themselves to be clean. Like WEBOR, the ballot measure proposes rights for waters to “exist, flow, be free from pollution, and maintain a healthy ecosystem.”⁴⁹⁹ The proposed amendment also grants any Florida

⁴⁹² Complaint, *Wilde Cypress Branch v. Beachline South Residential, L.L.C.* (Fla. 9th Cir. Ct. Apr. 26, 2021).

⁴⁹³ *Id.* ¶ 33.

⁴⁹⁴ *Id.* ¶¶ 21–24.

⁴⁹⁵ *Id.* ¶ 24.

⁴⁹⁶ See generally Isabella Kaminski, *Streams and Lakes Have Rights, A U.S. County Decided. Now They’re Suing Florida*, GUARDIAN (May 1, 2021), <https://www.theguardian.com/environment/2021/may/01/florida-rights-of-nature-lawsuit-waterways-housing-development> [<https://perma.cc/NYP9-AZNW>]; Anagha Srikanth, *Streams and Lakes Have Rights—And They’re Suing Florida*, HILL (May 3, 2021), <https://thehill.com/changing-america/sustainability/environment/551513-streams-and-lakes-have-rights-and-theyre-suing> [<https://perma.cc/Q7UA-KNUA>].

⁴⁹⁷ Efforts are currently underway in Leon County, Alachua County, Seminole County, Lee County, Palm Beach County, Santa Rosa County, Miami-Dade County, Pinellas County, St. Lucie County, Martin County, Volusia County, Maitland, Davenport, Haines City, Winter Springs, Pensacola, Apalachicola, Peace River, Satellite Beach, New Smyrna Beach, Altamonte Springs, Venice, Sarasota, Cocoa, Naples, Punta Gorda, and Northport. Telephone Interview with Chuck O’Neal, Chairman, Fla. Rts. of Nature Network (Jan. 5, 2021).

⁴⁹⁸ FL5.org, Ballot Title: Florida Right to Clean Water.

⁴⁹⁹ *Id.*

resident, governmental entity, and nongovernmental entity the right to sue for enforcement of the rights.⁵⁰⁰

5. North American Tribal Nations

Perhaps inspired by domestic and international examples, North American tribes and First Nations have recently acted formally to codify a number of diverse and far-reaching rights of nature laws. While these newly recognized rights may represent a significant shift in the legal landscape, for many tribes, they simply codify what they have always held to be true—that nature is sacred and that people and the environment are inextricable.⁵⁰¹

a. Ho-Chunk Nation and Menominee Tribe of Wisconsin

In 2015, the Ho-Chunk Nation of Wisconsin proposed an amendment to its Tribal constitution to affirm that “[e]cosystems, natural communities, and species within the Ho-Chunk Nation territory possess inherent, fundamental, and inalienable rights to naturally exist, flourish, regenerate, and evolve.”⁵⁰² In 2018, 86.9% of the General Council of the Ho-Chunk Nation voted to proceed with the rights of nature amendment.⁵⁰³ The proposed amendment still needs final approval from the full membership.⁵⁰⁴ In 2020, the Menominee Indian Tribe of Wisconsin asserted the rights of the Menominee River in an effort to stop proposed mining.⁵⁰⁵

⁵⁰⁰ *Id.*

⁵⁰¹ See generally James D K Morris & Jacinta Ruru, *Giving Voice to Rivers: Legal Personality as a Vehicle for Recognizing Indigenous Peoples’ Relationships to Water?*, 14 AUSTL. INDIGENOUS L. REV. 49, 58 (2010) (discussing the strong connections between Indigenous people and freshwater rivers).

⁵⁰² Resolution to Amend the Ho-Chunk Nation Constitution and Provide for Rights of Nature, Gen. Council Res. 09-19-15 (Ho-Chunk Nation 2015), https://d3n8a8pro7vhmx.cloudfront.net/honorearth/pages/2098/attachments/original/1446129806/HoChunk_RightsOfNature_Resolution_Sep2015.pdf?1446129806 [<https://perma.cc/A2VZ-N8QD>]; Press Release, Cmty. Env’t Legal Def. Fund, Ho-Chunk Nation General Council Approves Rights of Nature Constitutional Amendment (Sept. 17, 2018), <https://celdf.org/2018/09/press-release-ho-chunk-nation-general-council-approves-rights-of-nature-constitutional-amendment> [<https://perma.cc/PM2P-4C89>].

⁵⁰³ Cmty. Env’t Legal Def. Fund, *supra* note 502.

⁵⁰⁴ *Id.*

⁵⁰⁵ Amelia Cole, *Wisconsin Tribe Recognizes Menominee River Rights*, GREAT LAKES ECHO (Mar.13, 2020), <https://greatlakesecho.org/2020/03/13/wisconsin-tribe-recognizes-menominee-river-rights> [<https://perma.cc/MS8B-9954>].

b. Ponca Nation of Oklahoma

In 2017, the Ponca Nation of Oklahoma passed a statute recognizing the rights of nature to protect tribal lands from fracking.⁵⁰⁶ Casey Camp-Horinek, a Ponca Nation councilwoman, observed, “The Ponca Nation has chosen to follow the rights of nature, the immutable rights of nature by . . . recognizing that we as human beings are not separate from but part of this sacred system of life.”⁵⁰⁷

c. White Earth Band of Ojibwe in Minnesota

In 2018, the White Earth Band of Ojibwe, part of the Minnesota Chippewa Tribe, adopted legal rights for manoomin (wild rice) and the freshwater resources where it is found.⁵⁰⁸ This was the first law to recognize the rights of a plant species.⁵⁰⁹ The resolution asserts that manoomin has “inherent rights to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation.”⁵¹⁰ In August of 2021, the White Earth Band filed suit to stop the Minnesota Department of Natural Resources from issuing a water use permit for a new oil pipeline that it alleged would violate the protected rights of manoomin, in a suit currently pending in the White Earth Band of Obibwe’s Tribal Court.⁵¹¹ Uniquely, the protections also include a right to a healthy climate system and a right to be free from

⁵⁰⁶ Alex Brown, *Cities, Tribes Try a New Environmental Approach: Give Nature Rights*, PEW STATELINE (Oct. 30, 2019), <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/10/30/cities-tribes-try-a-new-environmental-approach-give-nature-rights> [https://perma.cc/GPC8-KN7N].

⁵⁰⁷ Casey Camp-Horinek, Councilwoman, Ponca Tribe of Okla., Keynote Address at the 2019 Bioneers Conference: Aligning Human Law with Natural Law (Oct. 20, 2019), <https://bioneers.org/casey-camp-horinek-aligning-human-law-natural-law-zstf1911> [https://perma.cc/XQ2X-Y4CA].

⁵⁰⁸ 1855 Treaty Auth., Resolution Establishing Rights of Manoomin, Res. 2018-05 (Dec. 5, 2018), https://whiteearth.com/assets/files/public_documents/Letter%20to%20Tim%20Walz%20re%20Rights%20of%20Manoomin.pdf [https://perma.cc/QK27-N7FY] (see same URL for subsequent citations); White Earth Rsrv. Bus. Comm., Res. 001-19-009 (Dec. 31, 2018); White Earth Rsrv. Bus. Comm. Res. 001-19-010 (Dec. 31, 2018).

⁵⁰⁹ *Advancing Legal Rights of Nature: Timeline*, CMTY. ENV’T LEGAL DEF. FUND, <https://celdf.org/rights-of-nature/timeline> [https://perma.cc/9E45-THJ6] (noting that the Rights of the Manoomin is the “first law to secure legal rights of a particular plant species”).

⁵¹⁰ White Earth Band of Ojibwe Res. 0001-19-0009 and 0001-19-101 (2018), https://whiteearth.com/assets/files/public_documents/Letter%20to%20Tim%20Walz%20re%20Rights%20of%20Manoomin.pdf (last visited July 30, 2021).

⁵¹¹ See Dan Gunderson, *Advocates Hope White Earth Wild Rice Case Will Boost ‘Rights of Nature,’* MINN. PUB. RADIO (Sept. 1, 2021, 5:43 AM), <https://www.mprnews.org/story/2021/09/01/advocates-hope-white-earth-wild-rice-case-will-boost-rights-of-nature> [https://perma.cc/WLH6-TRCE].

genetic engineering from “seeds that have been developed using methods other than traditional plant breeding.”⁵¹²

d. Yurok Tribe of California

In 2019, the Tribal Council of the Yurok Tribe of Northern California adopted a resolution establishing the rights of the Klamath River to “exist, flourish, and naturally evolve; to have a clean and healthy environment free from pollutants”⁵¹³ After adoption of the resolution, one member of the Yurok Tribal Council stated, “We are sending a strong message that we now have an additional legal mechanism to shield the Klamath against those who might harm our most sacred resource. It is and always will be our responsibility to defend this river by any means necessary.”⁵¹⁴

e. Innu Council of Ekuanitship and Minganie County, Quebec

As this Article goes to print, the Innu Council of Ekuanitship and the Minganie Regional County Municipality have granted legal rights to the Magpie River in northern Quebec.⁵¹⁵ Through tandem resolutions, the Indigenous council and municipality confer nine rights to the river, including the right to flow, the right to maintain its natural biodiversity, and the right to sue.⁵¹⁶ This is the first instance in which rights have been recognized in natural objects in Canada.⁵¹⁷

⁵¹² 1855 Treaty Auth., Resolution Establishing Rights of Manoomin, Res. 2018-05 § 1(a) (Dec. 5, 2018), https://whiteearth.com/assets/files/public_documents/Letter%20to%20Tim%20Walz%20re%20Rights%20of%20Manoomin.pdf [<https://perma.cc/QK27-N7FY>].

⁵¹³ *Testimony Regarding Natural Solutions to Cutting Pollution and Building Resilience: Hearing Before the H. Select Comm. on the Climate Crisis*, 116th Cong. 8 (2019) [hereinafter *Testimony Regarding Natural Solutions*], <https://docs.house.gov/meetings/CN/CN00/20191022/110110/HMTG-116-CN00-Wstate-MyersF-20191022.pdf> [<https://perma.cc/B5RH-X2NM>] (statement of Frankie Myers, V. Chairman, Yurok Tribe).

⁵¹⁴ *Tribe Passes Powerful Resolution*, YUROK TODAY (Yurok Tribe, Klamath, Cal.), May 2019, at 3 [<https://perma.cc/CD3W-LSNF>].

⁵¹⁵ See Jack Graham, *Canadian River Wins Legal Rights in Global Push to Protect Nature*, REUTERS (Feb. 24, 2021, 6:49 PM), <https://news.trust.org/item/20210224174810-i75ms> [<https://perma.cc/H5WY-6RXQ>]; see also Morgan Lowrie, *Quebec River Granted Legal Rights as Part of Global ‘Personhood’ Movement*, CBC (Feb. 28, 2021, 9:10 AM), <https://www.cbc.ca/news/canada/montreal/magpie-river-quebec-canada-personhood-1.5931067> [<https://perma.cc/4AUB-HCHT>].

⁵¹⁶ See Graham, *supra* note 515; see also Lowrie, *supra* note 515.

⁵¹⁷ See Graham, *supra* note 515; see also Lowrie, *supra* note 515.

In concluding this review of rights of nature initiatives in the United States, it is worth recalling the early presentation of the idea by Christopher Stone in his 1972 article, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*.⁵¹⁸ For Stone, the recognition of legal rights for natural objects was always about more than simply protecting natural resources. The movement is about “subordinating some human claims to those of the environment *per se*.”⁵¹⁹ This requires a sea change, a departure from the current anthropocentric worldview where humans exist separately from the natural world to one that recognizes the interconnectedness of nature and humanity and the intrinsic values of both. It comes as no surprise that the rights of nature movement isn’t there yet, but the recent spate of rights of nature amendments and resolutions signal an emerging change in consciousness. Each successive rights of nature effort nudges the concept a bit further into the consciousness of the U.S. legal system. As Thomas Linzey, Senior Legal Counsel for the Center for Democratic and Environmental Rights, has remarked, “In fifteen short years, rights of nature is no longer the fringe that it once was. . . . now it’s a movement.”⁵²⁰

III. COMPARING THE PUBLIC TRUST AND RIGHTS OF NATURE

Having introduced these two distinctive approaches to environmental protection, the Article now turns to analysis of important points of convergence and divergence between the public trust doctrine and the rights of nature movement. Both approaches can lay claim to long historical roots, though in wholly independent legal and philosophical traditions—the ancient Roman and early English and American common law traditions that gave rise to the public trust doctrine⁵²¹ and the various Indigenous cultures and philosophical traditions around the world in which the rights of nature perspective has long been central.⁵²² In some environmental contexts, it appears that

⁵¹⁸ See generally Stone, *supra* note 294.

⁵¹⁹ *Id.* at 490.

⁵²⁰ Alachua County, *Rights of Nature Workshop—Board of County Commissioners Discussion*, YOUTUBE (Feb. 12, 2020), <https://www.youtube.com/watch?v=jcXm53XcHmc> [https://perma.cc/VF66-RHJ3] (testimony of Thomas Linzey, at 27:15).

⁵²¹ See *supra* Section I.A.

⁵²² See *supra* Section II.A.

applying both doctrines would produce similar substantive results—although in other cases, due to important underlying differences, they would not.⁵²³ The most important drivers of these differences are the contrasting environmental ethics that animate them: in the case of the public trust doctrine, the anthropocentric ethic that places human needs at the center of the normative calculus, and in the case of the rights of nature movement, the biocentric ethic that deprivileges human concerns.

Nevertheless, there are also noteworthy similarities. As regards the resources each approach protects, for example, it is noteworthy that while both approaches are widely applicable in theory, each seems to take a special interest in waterways. This suggests that waterways are the most central and vulnerable components of the natural systems that environmental advocates seek to protect—and the most under-protected by conventional environmental laws. Indeed, both have attracted attention from environmental advocates who turn to them as a last resort when other legal strategies have failed or seem inapplicable. The modern trend toward increased appeals to both approaches in different legal systems suggests generalized public frustration with the limits of conventional environmental regulation to protect vulnerable natural systems and the desire to find a more foundational grounds for protection than the conventional cost-benefit analysis that undergirds much activity by the modern regulatory state.⁵²⁴

Perhaps relatedly, it is striking that both approaches seem to match failures in the judicial context with corresponding successes in the political context—meaning that even when environmental advocates lose on their cause of action in court, the litigation serves to galvanize success in related political advocacy. This suggests that both approaches can play similarly useful roles as component pieces of a wider strategy for environmental protection, one that considers the points of intersection and leverage between all three branches of government.

This Part considers the differences and similarities between the two approaches, beginning with their strikingly contrasting underlying environmental ethics. It then considers these points of overlap and what these combined features suggest more broadly about the limits, and failures, of conventional environmental law.

⁵²³ See *infra* Sections III.C.3–III.C.4.

⁵²⁴ *Circular A-4*, OMB (Sept. 17, 2003), https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4 [<https://perma.cc/R3QP-VU6M>] (discussing the role of the Office of Management and Budget in ensuring that the costs of regulations are justified by their benefits).

A. *Contrasting Environmental Ethics: Anthropocentrism vs. Ecocentrism*

Reflecting the different legal roots from which the two approaches begin, the most striking difference between the public trust doctrine and rights of nature movement is in the normative environmental ethic that animates each approach. The public trust doctrine reflects the anthropocentrism that underlies most of the common law traditions from which it stems, especially manifest in modern American regulatory law, which derives normative direction primarily in reference to human needs.⁵²⁵ By contrast, the rights of nature movement is squarely rooted in a biocentric ethic that considers human interests only as one component of the overall natural system, in which people are merely one constituent part.⁵²⁶ This Section discusses the critical differences between these underlying environmental ethics and their implications for environmental policy.

1. Anthropocentrism and the Public Trust

Anthropocentrism literally means that human concerns are placed at the center of the normative assessment as to whether an action is right or wrong.⁵²⁷ It follows from the ethic of utilitarianism as Jeremy Bentham first imagined it, defining what is right as whatever will provide the greatest good for the greatest number of people.⁵²⁸ As Professor William Baxter has memorably outlined for the context of environmental law, the anthropocentric approach to environmental ethics asks “what is good for people, not penguins”—considering the intrinsic value of human beings and the mere instrumental value of all else, and with reference only to the needs of human beings.⁵²⁹

The public trust doctrine begins with an anthropocentric premise, that certain public resource commons are so important (impliedly, to people) that they cannot belong to any one person in particular, and therefore must belong to all people together, held and managed by the

⁵²⁵ See *infra* Section III.A.1.

⁵²⁶ See *infra* Section III.A.2.

⁵²⁷ Sarah E. Boslaugh, *Anthropocentrism*, BRITANNICA (Oct. 28, 2013), <https://www.britannica.com/topic/anthropocentrism> [https://perma.cc/5XX2-WZFG].

⁵²⁸ Brian Duignan & Henry R. West, *Utilitarianism*, BRITANNICA (Nov. 20, 2020), <https://www.britannica.com/topic/utilitarianism-philosophy> [https://perma.cc/5S63-JESK].

⁵²⁹ WILLIAM F. BAXTER, PEOPLE OR PENGUINS: THE CASE FOR OPTIMAL POLLUTION 4–9 (1974).

state as trustee for the public benefit.⁵³⁰ As discussed in Part I, the doctrine probably originated as a means of preventing private monopolies over critical natural resources that people depend on for navigation, commerce, sustenance, sanitation, recreation, and implicitly, such ecosystem services as water purification, flood control, fish and wildlife habitat, and others.⁵³¹ While traditional trust values relating to commerce and navigation remain protected under most versions of the doctrine, many jurisdictions have increasingly interpreted it to convey more rigorous environmental protections for the ecosystem services associated with trust resources, especially waterways.⁵³² Jurisdictions that have moved in this direction have done so even when environmental protection values conflict with present-day commercial interests. This is often on grounds that the public interest must account for the needs of future generations, which sometimes requires that trust resources be protected against the short-sighted needs of the present generation.

In a recent high-profile example, as discussed in Section I.C.3., Michigan Governor Gretchen Whitmer invoked the public trust doctrine in November of 2020 to repeal a nearly seventy-year-old easement permitting two oil pipelines along the Straits of Mackinac connecting Lake Huron and Lake Michigan, following prolonged and unremedied concerns about potential damage from equipment failure.⁵³³ The Office of the Governor announced that “[t]he state is revoking the 1953 easement for violation of the public trust doctrine. This body of law recognizes the State of Michigan as the ‘trustee’ of the public’s rights in the Great Lakes and lays upon the state legal obligations to protect those rights from any impairment.”⁵³⁴ In a statement, the governor explained that “[t]he continued use of the dual pipelines cannot be reconciled with the public’s rights in the Great Lakes and the State’s duty to protect them” and that the pipeline operators had imposed “on the people of Michigan an unacceptable risk of a catastrophic oil spill in the Great Lakes that could devastate our economy and way of life.”⁵³⁵

⁵³⁰ Ryan, *A Short History*, *supra* note 1, at 137.

⁵³¹ *See supra* Part I.

⁵³² *See supra* Section I.B.2.

⁵³³ Flesher, *supra* note 163.

⁵³⁴ State of Mich. Off. of the Governor, *supra* note 164.

⁵³⁵ *Id.* (“The state found that the 1953 easement violated the public trust doctrine from its inception because the easement does not make the necessary public trust findings. Moreover, the state also found that the continued use of the dual pipelines cannot be reconciled with the public’s

In defending this dramatic and controversial move, Governor Whitmer explicitly recognized the multiple sources of value in the Great Lakes and her obligation to protect the interests of future generations in management decisions involving them, noting that “in Michigan, the Great Lakes define our borders, but they also define who we are as people.” Her press release continued:

The Great Lakes are home to 21% of the world’s fresh surface water. They supply drinking water for 48 million people, including 5 million here in Michigan, and support 1.3 million jobs that generate \$82 billion in wages annually across the US. In Michigan, the Great Lakes support over 350,000 jobs. An oil spill in the Great Lakes would put families and small businesses across the region at risk.⁵³⁶

In this striking example, the public trust doctrine was invoked to protect the Great Lakes ecosystem into the future, and against powerful present economic interests in fuel transport. Nevertheless, Whitmer’s focus remains squarely on the interests of her constituents—the people of Michigan, and perhaps their neighbors—in drinking water, jobs, and even personal identity. Reference to the role of the Great Lakes in defining Michiganders as a people epitomizes modern appeals to the public trust doctrine to protect environmental values that are often left out of regulatory cost-benefit analysis—but even so, defending the environmental components of human identity remains an anthropocentric goal. The protection of natural systems for the benefit of future generations of *people* belies the public trust doctrine’s anthropocentric perspective, centered around the satisfaction of human needs. Even if the substantive outcome is a management decision that protects the overall natural system, it is still an anthropocentric move if the ethical point of reference is the *human* interests in that system.

The baked-in anthropocentrism of the public trust doctrine is to be expected in the context of the many legal systems throughout the world committed to the good-governance principle of meeting the needs of the governed, which, itself, is far preferable to the alternatives that are even less defensible by democratic standards, like systems that

rights in the Great Lakes and the State’s duty to protect them. Transporting millions of gallons of petroleum products each day through two 67-year old [sic] pipelines that lie exposed along the entire span of a busy shipping channel presents an extraordinary and unacceptable risk. The dual pipelines are vulnerable to anchor strikes, similar dangerous impacts, and the inherent risks of pipeline operations.”). The statement goes on to list examples in which the pipelines were accidentally struck by commercial vessel anchors and repeated efforts by the state to win cooperation by the pipeline operators in meeting its obligations under the easement to avoid potential harm. *Id.*

⁵³⁶ *Id.*

prioritize the needs of a tyrannical autocrat or a feudally privileged royal class. Anthropocentrism is the mainstream in American law, which, by design, is generally grounded in the conventional police power of the state to protect the public health, safety, and welfare.⁵³⁷ The very basis for the legitimate exercise of sovereign authority on individuals—from providing public education to prosecuting crimes—rests on the promise that such authority will be used non-arbitrarily to protect the people of the land.⁵³⁸ Especially in recent decades, American law has been purposefully oriented around anthropocentrism in the form of Bentham utilitarianism, as recognized forthrightly in modern tort, contract, and property law. The inclusion of utility elements in the Restatement of Torts reasonableness standard,⁵³⁹ the doctrine of efficient breach of contract,⁵⁴⁰ and such property law doctrines as common law nuisance⁵⁴¹ all attest to this. The dominance of utilitarianism in American law has been especially overt since the advent of the Law and Economics movement in the 1980s, which advanced consideration of utilitarianism and wealth maximization as an ethical framework for legal decision-making.⁵⁴²

Indeed, in his consequential 1993 Executive Order 12866, still in effect today, President Clinton explicitly recommitted federal regulation to its longstanding goals of protecting the health, safety, environment, economy, and well-being of the American people, and he mandated formal cost-benefit analysis for all regulatory activity, to ensure that these goals are accomplished without imposing

⁵³⁷ See, e.g., Erin Ryan, *Environmental Federalism's Tug of War Within*, in *THE LAW AND POLICY OF ENVIRONMENTAL FEDERALISM: A COMPARATIVE ANALYSIS* 355, 372 (Kalyani Robbins ed., 2015) (discussing the police power).

⁵³⁸ Cf. Kate Brown, *What Is Power Under the Rule of Law?*, A.B.A. (Mar. 3, 2021), https://www.americanbar.org/groups/public_education/law-day/law-day-2021/what-is-power-under-the-rule-of-law- [<https://perma.cc/EY66-6KUM>] (“Under the rule of law, power is the sovereign will of the people expressed as non-arbitrary laws that—theoretically, if not perfectly in practice—apply to everyone equally.”).

⁵³⁹ RESTATEMENT (SECOND) OF TORTS § 828 (AM. L. INST. 1979) (balancing the social utility of the harmed and harmful uses of land in determining liability for incompatible uses).

⁵⁴⁰ See, e.g., *Lake River Corp. v. Carborundum Co.*, 769 F.2d 1284, 1289 (7th Cir. 1985) (explaining Judge Richard Posner’s view that individuals who breach inefficient contracts are not acting wrongfully when their choice advances overall social utility).

⁵⁴¹ See, e.g., *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870 (N.Y. 1970) (requiring payment of permanent damages rather than enjoining operation of a factory that rendered neighboring homes unlivable but stabilized the regional economy).

⁵⁴² See, e.g., Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103 (1979) (introducing the new discourse).

unreasonable costs on society.⁵⁴³ The cost-benefit analysis used to justify federal regulation weighs the benefits promised by the proposed regulatory action against the costs of providing them, as measured by the corresponding positive and negative impacts on the American people, generally as quantifiable in dollar terms.⁵⁴⁴

In the United States, as in most other nations, environmental regulations follow the same pattern. The growing importance of cost-benefit analysis to justify federal action under Executive Order 12866 has especially vexed advocates for the noncommercial values of natural systems because it is hard to quantifiably assess the ecological values of natural systems that are protected from extraction, development, and recreation.⁵⁴⁵ Environmental economists and other advocates have developed an elaborate vocabulary to cope with such non-priced environmental values as clean air, remote wilderness, or nonmarketable ecosystem services.⁵⁴⁶ They have called for assessment of the existence values of natural resources, which recognize the value people place on maintaining the very existence of a natural resource (even a distant one they may never visit in person); the option values of resources, which recognize the value people place on having the option to one day enjoy a resource, even if they never actually do; and bequest values, which recognize the value people place on knowing that their children or future generations will be able to enjoy a natural resource.⁵⁴⁷ They have also called attention to the very real costs of replacing critical ecosystem services provided by natural resources, such as flood control, carbon sinks, water purification, and pollination.⁵⁴⁸ Yet these values are not always given sufficient attention in casual cost-benefit analyses.⁵⁴⁹ Even

⁵⁴³ Exec. Order No. 12866, 58 Fed. Reg. 51735 (Sept. 30, 1993) (mandating cost-benefit analysis of regulatory activity to ensure that the federal regulatory system “protects and improves [the American people’s] health, safety, environment, and well-being and improves the performance of the economy without imposing unacceptable or unreasonable costs on society”).

⁵⁴⁴ *Id.*

⁵⁴⁵ See, e.g., David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 *ECOLOGY L.Q.* 545 (1997). But see Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 *HARV. ENV’T L. REV.* 433 (2008) (discussing the advantages of cost-benefit analysis in environmental contexts).

⁵⁴⁶ See, e.g., Catherine M. H. Keske, *How to Value Environmental and Non-Market Goods: A Guide for Legal Professionals*, 39 *DENV. J. INT’L L. & POL’Y* 423 (2011).

⁵⁴⁷ *Id.* at 427–28.

⁵⁴⁸ James Salzman, Barton H. Thompson, Jr. & Gretchen C. Daily, *Protecting Ecosystem Services: Science, Economics, and Law*, 20 *STAN. ENV’T L.J.* 309, 310–12 (2001).

⁵⁴⁹ See MICHAEL A. LIVERMORE & RICHARD L. REVESZ, *REVIVING RATIONALITY: SAVING COST-BENEFIT ANALYSIS FOR THE SAKE OF THE ENVIRONMENT AND OUR HEALTH* (2020).

the term “ecosystem service” implies anthropocentrism, as people are the primary intended beneficiaries of the service.

But even before the rise of regulatory cost-benefit analysis, most American environmental and natural resources law has long been oriented toward utilitarian goals and mediated by anthropocentric ethics. The vast majority of U.S. public lands, held by the United States Forest Service and the Bureau of Land Management,⁵⁵⁰ are managed under a Multiple-Use and Sustained-Yield directive that privileges a handful of anthropocentrically valuable uses, from the extraction of valuable resources like minerals, timber, and wildlife to the provision of enjoyable recreational opportunities like camping and hiking.⁵⁵¹ Congress has defined the “Multiple Use” directive in anthropocentric terms, clarifying that it requires “the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people”⁵⁵² Fisheries management under the Magnuson-Stevens Fishery Conservation and Management Act⁵⁵³ similarly prioritizes utilitarian concerns about maximizing the sustainable yield of a fishery⁵⁵⁴ and protecting the interests of fishing-based economies and the communities that surround them,⁵⁵⁵ with only recent and ambiguous protection for fishery habitat and ecosystem values.⁵⁵⁶

⁵⁵⁰ CONG. RSCH. SERV., R40225, FEDERAL LAND MANAGEMENT AGENCIES: BACKGROUND ON LAND AND RESOURCES MANAGEMENT (2009) (reporting that the majority of public lands are managed by the Forest Service and Bureau of Land Management for “multiple use and sustained yield”).

⁵⁵¹ Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. § 1732(a) (requiring the adoption of multiple-use principles for certain public lands managed by the Department of the Interior); Multiple-Use Sustained-Yield Act of 1960 (MUSYA), 16 U.S.C. § 529 (requiring the adoption of multiple-use principles for certain public lands held by the Department of Agriculture).

⁵⁵² 43 U.S.C. § 1702(c); *see also* 16 U.S.C. § 531 (providing a similar definition in application to United States Forest Service lands).

⁵⁵³ 16 U.S.C. §§ 1801–1891.

⁵⁵⁴ 16 U.S.C. § 1851(a)(1) (requiring that fishery management plans prevent overfishing); 16 U.S.C. § 1802(34) (defining overfishing as that which “jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis”).

⁵⁵⁵ 16 U.S.C. § 1851(a)(8) (requiring fishery managers to account for the interests of fishing communities, provide for their sustained participation in the fishery, and “to the extent practicable, minimize adverse economic impacts on such communities”).

⁵⁵⁶ 16 U.S.C. § 1851(a)(9) (requiring managers to minimize bycatch mortality in fisheries). The overwhelming majority of the ten national standards that Regional Management Councils must uphold in issuing management plans are focused on economic factors rather than environmental factors. *See* 16 U.S.C. § 1851(a). For further discussion, *see also* Erin Ryan, *Fisheries Without Courts: How Fishery Management Reveals Our Dynamic Separation of Powers*, 32 J. LAND USE & ENV'T L. 431 (2017).

Modern water allocation laws in both the eastern⁵⁵⁷ and the western⁵⁵⁸ United States include explicit consideration of the public interest, and the public interest is calculated in utilitarian terms close to those identified in the Second Restatement of Torts, Section 828.⁵⁵⁹ In Idaho, the water code requires that water managers give consideration to the public interest in “fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality”⁵⁶⁰—a list that tracks many of the values associated with the modern public trust doctrine—but as the “aesthetic beauty” factor suggests, they remain assessed from the human vantage point.

In the same way, the public trust doctrine is unambiguously anthropocentric because it is rooted in the protection of the public interest in trust resources, in which the public interest is unapologetically registered in human terms. As some environmentalists have long critiqued, the doctrine essentially treats natural resource commons as public property for public use and enjoyment.⁵⁶¹ Even the environmentally protective California public trust doctrine, made internationally famous by its role in a 1983 decision protecting the Mono Lake ecosystem against water withdrawals to Los Angeles, privileges human values.⁵⁶² In the Mono Lake case, the California Supreme Court clarifies that in meeting the state’s obligations under the doctrine, the water agency must balance the public trust values of ecology, scenery, and recreation in the Mono Basin against

⁵⁵⁷ As regards the eastern riparian states, see, for example, WATER RES. PLAN. & MGMT. DIV., AM. SOC’Y OF CIVIL ENG’RS, REGULATED RIPARIAN MODEL WATER CODE § 1R-1-01 (Joseph W. Dellapenna ed., 1997) (setting forth the obligation of the state in protecting the public interest in water resources); *see also id.* § 1R-01-02 (requiring the state to allocate water rights efficiently, productively, and sustainably “in the satisfaction of economic, environmental, and other social goals, whether public or private, with the availability and utility of water being extended with a view of preventing water from becoming a limiting factor in the general improvement of social welfare”).

⁵⁵⁸ As regards the western prior appropriation states, see, for example, ALASKA STAT. § 46.15.080(b) (1966) (setting forth an example of the modern public interest requirement that must be satisfied in many prior appropriation states before new water rights are granted); IDAHO CODE § 42-1501 (1978) (listing public interest elements for consideration when assigning water rights); IDAHO CODE § 42-203A(5)(e) (requiring a showing that a proposed new water use is in the local public interest).

⁵⁵⁹ *See* RESTATEMENT (SECOND) OF TORTS § 828 (AM. L. INST. 1979).

⁵⁶⁰ IDAHO CODE § 42-1501 (1978) (listing public interest elements for consideration when assigning water rights).

⁵⁶¹ *See, e.g.,* Lazarus, *supra* note 12 (critiquing the public trust doctrine for adopting the vocabulary of property law instead of a more protective stewardship ethos); Ryan, *The Historic Saga*, *supra* note 1, at 620 (discussing the “green dissent”).

⁵⁶² Nat’l Audubon Soc’y v. Super. Ct., 658 P.2d 709 (Cal. 1983); *see also* Ryan, *The Historic Saga*, *supra* note 1, at 620–21.

countervailing public interests in transferring its water hundreds of miles to the south for uses associated with economic and residential development in Los Angeles.⁵⁶³ While the state may not slight its obligation to consider public trust values and protect them from short-sighted destruction as much as “feasible,” the court explained, ecological values in flowing waters must sometimes give way to other pressing human interests:

The prosperity and habitability of much of this state requires the diversion of great quantities of water from its streams for purposes unconnected to any navigation, commerce, fishing, recreation, or ecological use relating to the source stream. The state must have the power to grant nonvested usufructuary rights to appropriate water even if diversions harm public trust uses. Approval of such diversion without considering public trust values, however, may result in needless destruction of those values. Accordingly, we believe that before state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests.⁵⁶⁴

Under the public trust doctrine, natural resource commons must be protected—including the wildlife and ecosystems within them—but the touchstone for arbitrating among competing values remains their importance to human beings.

2. Biocentrism, Ecocentrism, and the Rights of Nature

By contrast, the rights of nature movement is rooted unapologetically in an environmental ethic of biocentrism, and even ecocentrism. Biocentric ethics deprivilege human interests in the normative assessment of environmental management choices, considering instead the interests of all living things.⁵⁶⁵ Through the biocentric ethical lens, the ecosystem should be protected not just for the useful services they provide us, but as the necessary sustaining conditions for all living things within it.

For example, when the White Earth Band of the Minnesota Chippewa Tribe assigned rights to a species of wild rice in 2018, the move reflected a biocentric ethic that considered the rights of the living

⁵⁶³ *Nat'l Audubon Soc'y*, 658 P.2d at 728.

⁵⁶⁴ *Id.* at 712.

⁵⁶⁵ See, e.g., NICHOLAS AGAR, *LIFE'S INTRINSIC VALUE: SCIENCE, ETHICS, AND NATURE* 63 (2001).

plants as worth consideration beyond their utility to people.⁵⁶⁶ Expanding the biocentric critique of anthropocentrism even further, ecocentrism deprivileges the interests of living things to offer equal regard for the well-being of both the biotic and abiotic components of nature, including the weather, watershed, and nonliving components of an ecosystem.⁵⁶⁷ From the ecocentric perspective, ecosystems should be protected not for the services they provide living things, but for their own intrinsic value. When the California Yurok Tribe ascribed legal personhood to the Klamath River in 2019, it represented a more ecocentric move, recognizing not just the rights of the living things that depend on the river, but of the entire river system itself.⁵⁶⁸

As suggested in Part II, biocentric and ecocentric approaches have long been rooted in ancient Indigenous cultures around the world, but these ethics have also made important appearances in Western legal conversations beginning at least a century ago. For example, John Muir, the champion of unmediated nature often credited as the intellectual architect of the National Park System, urged greater biocentric sensibility among the general public when he urged that even the most seemingly hostile members of the natural kingdom must be seen as valuable in and of themselves, without reference to their usefulness to people:

Nevertheless, again and again, in season and out of season, the question comes up, "What are rattlesnakes good for?" As if nothing that does not obviously make for the benefit of man had any right to exist; as if our ways were God's ways. Long ago, an Indian to whom a French traveler put this old question replied that their tails were good for toothache, and their heads for fever. Anyhow, they are all, head and tail, good for themselves, and we need not begrudge them their share of life.⁵⁶⁹

Expanding on Muir's insights, naturalist Aldo Leopold powerfully challenged the prevailing anthropocentrism of public lands management in the 1949 classic of environmental literature *A Sand*

⁵⁶⁶ See *supra* note 508 and accompanying text.

⁵⁶⁷ See, e.g., J. Stan Rowe, *Ecocentrism: The Chord That Harmonizes Humans and Earth*, 11 TRUMPETER 106 (1994) ("Ecocentrism goes beyond biocentrism with its fixation on organisms, for in the ecocentric view people are inseparable from the inorganic/organic nature that encapsulates them.").

⁵⁶⁸ See *Testimony Regarding Natural Solutions*, *supra* note 513.

⁵⁶⁹ John Muir, *Chapter II: The Yellowstone National Park*, SIERRA CLUB, https://vault.sierraclub.org/john_muir_exhibit/writings/our_national_parks/chapter_2.aspx [<https://perma.cc/TE6F-LL3J>] (digitized version of original work JOHN MUIR, OUR NATIONAL PARKS (1901)).

County Almanac, in which he set forth the “land ethic.”⁵⁷⁰ Through this gentle manifesto toward greater ecocentrism in American land management, Leopold sought to expand the ethical obligations we recognize toward other people to also include other members of the “biotic community,” a concept we might translate today as the overall ecosystem, but which he summarized then as “the land.”⁵⁷¹ With reference points in ancient Greek mythology, Leopold analogized to the expansion of ethical obligations that once applied only among free people to also include enslaved people—seeing them no longer as chattel property, but as people to whom others owe an ethical obligation.⁵⁷² Then, he called for a similar expansion of the community to whom we owe an ethical obligation to embrace not only the people with whom we share the world, but the entire biotic community. He exhorted us to “quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient.”⁵⁷³ In the end, Leopold offered a land ethic for environmental management as something tethered to human interests only to the extent that we are part of the overall biotic community: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”⁵⁷⁴

As a member of the U.S. Forest Service, Leopold struggled with the short-sighted anthropocentrism of many forest management plans that he helped implement. Leopold’s personal land ethic appeared pragmatic and forgiving at times, striving to win recognition for biocentric or ecocentric concerns at all amidst the overwhelmingly anthropocentric approach of the day. In his land ethic, people seem to maintain a somewhat privileged role, though as stewards of the environmental values that we alone can protect or destroy.⁵⁷⁵ To better perform this role in his own life, he eventually founded the Wilderness Society, dedicated to the land ethic’s goal of preserving the biotic

⁵⁷⁰ ALDO LEOPOLD, *A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE* (1949).

⁵⁷¹ *Id.* at 201–26.

⁵⁷² *Id.* at 201–04.

⁵⁷³ *Id.* at 224.

⁵⁷⁴ *Id.* at 224–25.

⁵⁷⁵ Earlier writings showed greater tolerance for the displacement of nature so long as not all of it was lost to human development. ALDO LEOPOLD, *A PLEA FOR WILDERNESS HUNTING GROUNDS* (1925), reprinted in ALDO LEOPOLD’S *SOUTHWEST* 155, 159 (David E. Brown & Neil B. Carmony eds., 2003) (noting that it might be legitimate to develop five out of six vacant lots for housing, “but when we build houses on the last one, we forget what houses are for. The sixth house would not be development at all, but rather it would be mere short-sighted stupidity”).

community in the wild places thus far spared from human development.⁵⁷⁶

Later environmental ethicists have set forth purer biocentric and ecocentric manifestos, grounded in principles that bend less easily for the pragmatic concerns that Leopold faced while working aside fellow forest managers in the Department of Agriculture. One such example is the Deep Ecology movement, an environmental ethic that further deprivileges humanity in a vision of biocentric equality among all members of Leopold's biotic community.⁵⁷⁷ Inspired by Rachel Carson's *Silent Spring*, the groundbreaking call to arms for the modern environmental movement,⁵⁷⁸ Norwegian philosopher Arne Naess first set forth the principles of Deep Ecology in 1973.⁵⁷⁹ Deep Ecologists do not privilege human interests in normative assessment; they consider human beings as merely one component of the overall biosphere, in which all things "have an equal right to live and blossom and to reach their own individual forms of unfolding and self-realization"⁵⁸⁰ As a movement, Deep Ecologists rue the commodification of nature under industrial capitalism and fear that damage to natural systems since the industrial revolution portends social and ecological collapse.⁵⁸¹ Taken to its full conclusion, Deep Ecology advocates for foundation-level ideological, economic, and technological change.⁵⁸²

The Deep Ecologists hold that the survival of any part of the biosphere is dependent upon the well-being of the entirety, critiquing the anthropocentric narrative of human supremacy and rejecting the human role as a "steward" of nature, because that sets humans apart from nature. In their exposition on Deep Ecology, environmentalists George Sessions and Bill Devall set forth the core principles of the ethic, emphasizing its break with the anthropocentric norms of the day:

1. The well-being and flourishing of human and nonhuman Life on Earth have value in themselves These values are

⁵⁷⁶ See *Our History*, WILDERNESS SOC'Y, <https://www.wilderness.org/about-us/our-team/our-history> [<https://perma.cc/VPF5-32V9>]; see also *Aldo Leopold*, WILDERNESS SOC'Y, <https://www.wilderness.org/aldo-leopold> [<https://perma.cc/SDV7-ZMEB>].

⁵⁷⁷ Arne Naess, *The Shallow and the Deep, Long-Range Ecology Movement: A Summary*, 16 INQUIRY 95 (1973).

⁵⁷⁸ RACHEL CARSON, *SILENT SPRING* (1962).

⁵⁷⁹ Naess, *supra* note 577.

⁵⁸⁰ BILL DEVAL & GEORGE SESSIONS, *DEEP ECOLOGY: LIVING AS IF NATURE MATTERED* 67 (1985).

⁵⁸¹ See generally *id.*

⁵⁸² *Id.* at ix-x.

independent of the usefulness of the nonhuman world for human purposes.

2. Richness and diversity of life forms contribute to the realization of these values and are also values in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy *vital* needs.
4. The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.
5. Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.⁵⁸³

The Deep Ecologist's ethic thus begins with a similar principle to the land ethic, but where the land ethic frames human beings as stewards of the land, Deep Ecology frames them as beings with no more right to the resources of the land than any other member, be it a rattlesnake or a scorpion. For the Deep Ecologists, "[t]he right of all the forms [of life] to live is a universal right which cannot be quantified. No single species of living being has more of this particular right to live and unfold than any other species,"⁵⁸⁴ making it a statement not just of ethics, but of rights—and in this respect, echoing much of the vocabulary of the rights of nature movement.

More recently, philosopher Thomas Berry articulated a set of core principles for ecocentrism that would inspire a school of Earth Jurisprudence, providing further fortification for the emerging rights of nature movement.⁵⁸⁵ After clarifying that the natural world "gets its rights from the same source that humans get their rights, from the Universe that brought them into being," Berry declared that "[e]very component of the Earth community, both living and non-living has three rights: the right to be, the right to a habitat or place to be, and the right to fulfill its role in the ever-renewing process of the Earth

⁵⁸³ *Id.* at 65–70.

⁵⁸⁴ ARNE NAESS, *ECOLOGY, COMMUNITY AND LIFESTYLE: OUTLINE OF AN ECOSOPHY* 166 (David Rothenberg trans., Cambridge Univ. Press 1989).

⁵⁸⁵ See Takacs, *supra* note 287, at 556–57 (describing the origins of Thomas Berry's statement of principles and its impact on later advocates for the rights of nature movement).

Community.”⁵⁸⁶ By his conception, environmental rights “are based on the intrinsic relations that the various components on Earth have to each other,” in which “[e]ach component of the Earth community is immediately or mediately dependent of every other member of the community for the nourishment and assistance it needs for its own survival.”⁵⁸⁷ The ideals he set forth in these principles inspired contemporary theorists and activists who would soon apply them in rights of nature advocacy.⁵⁸⁸

While most environmental laws in the United States are anthropocentric in orientation, a few take a more biocentric approach, albeit more land ethic than Deep Ecology. The Endangered Species Act⁵⁸⁹ is perhaps the best example because it has historically placed the continued existence of species over countervailing economic concerns—even those with no apparent use or sentimental appeal to human beings—at least in some parts of the statute. When Congress first enacted the law, species were to be protected for their intrinsic value, no matter the cost. For example, Section 7 of the Act prohibits federal agencies from taking any action likely to jeopardize the continued survival of a species, and in almost all cases, without regard to economic factors.⁵⁹⁰

On the other hand, other portions of the law are less biocentric. For example, after the Act was invoked to prevent completion of the eighty-million-dollar Tellico Dam project on the Tennessee River,⁵⁹¹ the Act was amended to create a special committee of the heads of the federal natural resource agencies (the so-called “God Squad”), authorized to overrule a jeopardy determination in extreme cases where applying the law would unduly adversely affect the public interest.⁵⁹² In this move, Congress explicitly created an anthropocentric failsafe to preempt extremely expensive biocentric decisions. In addition, Section

⁵⁸⁶ THOMAS BERRY, *THE ORIGIN, DIFFERENTIATION, AND ROLE OF RIGHTS*, Principles 4–5 (2001), <http://www.ties-edu.org/wp-content/uploads/2018/09/Thomas-Berry-rights.pdf> [<https://perma.cc/G437-GT87>].

⁵⁸⁷ *Id.* at Principle 9.

⁵⁸⁸ See Takacs, *supra* note 287, at 556–57 (discussing Berry’s impact); CORMAC CULLINAN, *WILD LAW: A MANIFESTO FOR EARTH JUSTICE* (2d ed. 2011) (building on Berry’s ideals).

⁵⁸⁹ 16 U.S.C. §§ 1531–1544.

⁵⁹⁰ 16 U.S.C. § 1536(a)(2).

⁵⁹¹ *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 166, 171–72 (1978) (holding that construction on the eighty-million-dollar Tellico Dam project on the Tennessee River must be halted to protect the snail darter, an endangered species of perch living in the river).

⁵⁹² Eric M. Yuknis, *Would a “God Squad” Exemption Under the Endangered Species Act Solve the California Water Crisis?*, 38 B.C. ENV’T AFF. L. REV. 567, 575–78 (2011) (explaining the creation and functioning of Endangered Species Committee, or “God Squad”).

4 has been amended to allow economic factors to be taken into account when deciding whether to list the critical habitat that resource agencies determine should be preserved to protect an endangered species.⁵⁹³

Modeled after the Endangered Species Act, the Marine Mammals Protection Act of 1972 has a similar biocentric orientation, although there, too, biocentric concerns may be overridden by compelling anthropocentric priorities.⁵⁹⁴ As enacted in 1972, the law sets forth an ambitious “zero mortality” conservation goal to prevent the depletion of marine mammal populations as bycatch or in competition with commercial fishing operations.⁵⁹⁵ However, later amendments in 1994 enabled routine incidental takes of marine mammals by fishing operations if doing so will not disadvantage the species,⁵⁹⁶ creating a loophole that has effectively swallowed the rule.⁵⁹⁷

Another natural resource law premised on the ecocentric and biocentric aspirations of, respectively, *A Sand County Almanac* and *Silent Spring* is the Wilderness Act of 1964,⁵⁹⁸ designed to protect wild ecosystems as yet “untrammelled by man, where man himself is a visitor who does not remain.”⁵⁹⁹ In its statement of purpose, Congress explicitly prioritized the preservation of the lands in their comparatively wild state, clarifying that the law was enacted “to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition”⁶⁰⁰

Even so, Congress clarified that the objective was to preserve these wild lands for the enjoyment of present and future generations, noting that

these [lands] shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation

⁵⁹³ 16 U.S.C. § 1533(b)(2).

⁵⁹⁴ 16 U.S.C. §§ 1361–1423h.

⁵⁹⁵ 16 U.S.C. § 1371(a)(2) (“[I]t shall be the immediate goal that the incidental kill or incidental serious injury of marine mammals permitted in the course of commercial fishing operations be reduced to insignificant levels approaching a zero mortality and serious injury rate.”).

⁵⁹⁶ 16 U.S.C. § 1373(a).

⁵⁹⁷ Susan C. Alker, *The Marine Mammal Protection Act: Refocusing the Approach to Conservation*, 44 UCLA L. REV. 527, 551 (1996).

⁵⁹⁸ 16 U.S.C. §§ 1131–1136.

⁵⁹⁹ 16 U.S.C. § 1131(c).

⁶⁰⁰ 16 U.S.C. § 1131(a).

of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness⁶⁰¹

While the Act may protect intact natural systems over time, it is therefore still grounded in anthropocentrism. Similarly, amendments to the Fisheries Management Act now exhort ecosystem-based management, somewhat tempering the overwhelming anthropocentric focus of the other factors that fishery management councils must heed when deciding what kinds of fishing to allow.⁶⁰² That said, it is always in the service of promoting the maximum sustained yield, the maximum amount of fish that can be taken out of the system without reducing its capacity to produce fish over time, for human needs. So, it too, in the end, remains an overwhelmingly anthropocentric management approach.

B. *Doctrinal Similarities in the Larger Political Context*

Comparing the public trust doctrine and rights of nature approaches to environmental protection yields striking contrasts, but also surprising commonalities. While the differences in underlying theory are powerful, the two approaches also reveal unexpected points of overlap in what they focus on, when advocates appeal to them, and the kind of work each doctrines does within the larger political context.

1. Duality or False Dichotomy?

When analyzing the distinct public trust and rights of nature approaches to environmental protection, the contrast is most vivid in the duality of these underlying ethical frameworks and the practical implications of those differences.

For some environmental advocates, the core theoretical challenge associated with the public trust doctrine is the dangerous indeterminacy of its anthropocentrism, leading to practical concerns over how strongly it will protect environmental values when they are pitted against competing human interests, such as the exploitation of natural

⁶⁰¹ *Id.*

⁶⁰² See 16 U.S.C. § 1882(f) (requiring a regional ecosystem research study on the “integration of ecosystem considerations” in management plans); 16 U.S.C. § 1867 (requiring a “cooperative research and management program” and prioritizing data collection to address bycatch, habitat conservation, stock assessments, etc.).

resources for economic development.⁶⁰³ For others, the more daunting challenges flow from unfinished theoretical development in the rights of nature movement, especially regarding who speaks for nature when nature cannot speak for itself. This leads to the core practical challenge of uncertainty regarding who should be legally privileged to act on behalf of the non-human components of a protected ecosystem—especially when human spokespeople disagree on what nature’s rights require, be it more solar arrays or more desert tortoise habitat, more wind farms or migratory birds, or which of two competing endangered species should take priority.⁶⁰⁴ It is perhaps noteworthy that the core theoretical challenge for each approach boils down to different forms of indeterminacy.

Yet contrasting the anthropocentric and ecocentric orientations of these two ethical approaches also begs interesting questions about the significance of the distinction on the ground, when they are applied in real legal controversies. For one thing, we must query whether the advocates organizing under each of these banners truly see the world in strictly anthropocentric or biocentric terms. William Baxter clearly does, and the Deep Ecologists might, but what about the non-theorist citizens who are bringing actual lawsuits and ballot initiatives? Even Aldo Leopold seems to waiver on the question at times—and so, it would seem, do many of us.

When pressed, many ordinary people will give voice to both ethics simultaneously, even though they are, strictly speaking, mutually exclusive ethical directives.⁶⁰⁵ It is highly plausible that many of the atmospheric trust champions passionately advocating for the expansion of the public trust doctrine to protect the atmospheric commons against greenhouse gas pollution⁶⁰⁶ would subscribe to a rights of nature perspective if it were legally available to them, just as many of the Tamaqua, Pennsylvania, advocates for the Sewage Sludge Ordinance that assigned civil rights to nature⁶⁰⁷ probably also subscribe to the public trust principles enshrined in the Pennsylvania Constitution’s

⁶⁰³ See Lazarus, *supra* note 12 and accompanying text.

⁶⁰⁴ See, e.g., Mauricio Guim & Michael A. Livermore, *Where Nature’s Rights Go Wrong*, VA. L. REV. (forthcoming 2021) (critiquing rights of nature approaches as theoretically problematic and difficult to implement).

⁶⁰⁵ After decades of teaching environmental ethics to hundreds of law students, I can personally attest to this phenomenon.

⁶⁰⁶ See, e.g., *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev’d*, 947 F.3d 1159 (9th Cir. 2020); see also Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 60–64 (discussing the atmospheric trust movement).

⁶⁰⁷ See *supra* Section II.D.1.a.

Environmental Rights Amendment.⁶⁰⁸ Behavioral economics has demonstrated that human beings are not nearly as rational as we like to think we are, and that we often hold inconsistent beliefs at the same time.⁶⁰⁹ Our tolerance of cognitive dissonance, in which people hold inconsistent ideas simultaneously, has been well documented in the social science literature.⁶¹⁰ My own experience teaching hundreds of law students environmental ethics over nearly two decades has demonstrated this for me personally time and time again (and if I am honest, I can hardly claim not to demonstrate the same behavior myself).⁶¹¹

Moreover, it oversimplifies the rights of nature movements in many parts of the world to see them as purely ecocentric or biocentric enterprises, in contrast to anthropocentrism, when some follow from cultural traditions that lovingly anthropomorphize important components of the ecosystem that the movement seeks to protect. Some people, and some cultures, hold a Gaia conception of nature as a person.⁶¹² For example, when the Māori people of New Zealand assign legal personhood to a river system, it is because they consider the river part of their family.⁶¹³ They see the river system as not just a legal person, but a person—their grandmother, so to speak.⁶¹⁴ If the river is part of the people, and the people are part of the river, then the bifurcation between people and nature that the anthropocentric/ecocentric dichotomy presumes begins to break down.

⁶⁰⁸ PA. CONST. art. I, § 27 (“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”).

⁶⁰⁹ Cf. RICHARD H. THALER, *MISBEHAVING: THE MAKING OF BEHAVIORAL ECONOMICS* (2015) (reviewing how behavioral economics revealed the many fallacies and irrationalities of human thinking).

⁶¹⁰ See generally LEON FESTINGER, *A THEORY OF COGNITIVE DISSONANCE* (1957).

⁶¹¹ See *supra* note 605.

⁶¹² See, e.g., JAMES LOVELOCK, *GAIA: A NEW LOOK AT LIFE ON EARTH* 9–10 (1979) (“[T]he entire range of living matter on Earth, from whales to viruses, and from oaks to algae, could be regarded as constituting a single living entity, capable of manipulating the Earth’s atmosphere to suit its overall needs and endowed with faculties and powers far beyond those of its constituent parts. . . . [Gaia can be defined] as a complex entity involving the Earth’s biosphere, atmosphere, oceans, and soil; the totality constituting a feedback or cybernetic system which seeks an optimal physical and chemical environment for life on this planet.”).

⁶¹³ Catherine J. Iorns Magallanes, *Nature as an Ancestor: Two Examples of Legal Personality for Nature in New Zealand*, 10 VICTORIA U. WELLINGTON LEGAL RSCH. PAPERS 1, 1–3 (2020) (observing that plants, animals, and natural features are treated as “kin” by the Māori).

⁶¹⁴ *Id.*

Perhaps the most important lesson in reviewing the plethora of rights of nature movements erupting across the nation and the globe is that they are not one thing—there is so much variety among these efforts, let alone the unfinished definition that characterizes many of them—that it is more accurate to see them not as “the rights of nature movement,” but, though less poetically, as “a series of loosely related movements for reconceptualizing legal protections for different components of nature.” Indeed, the same thing can be said of the rapidly evolving public trust principles across the globe—which brings us to among the most important observations in this comparative analysis, which is that both of these unfolding legal movements are mosaics, and not monoliths.

2. Mosaics, Not Monoliths

Doubtlessly obvious by now, one key parallel between the public trust doctrine and the rights of nature movement is the enormous doctrinal variety each has spawned in different jurisdictional contexts. As demonstrated in Parts I and II, neither approach means just one thing—there is enormous variation in the public trust doctrine as it has independently developed in the states, and even more variation in what the rights of nature mean to different movements in different parts of the world. Neither can be understood as a monolith—instead, both are mosaics of related but diverging legal doctrines.

For example, in Colorado, the public trust doctrine barely protects navigational and commercial values in waterways,⁶¹⁵ while in Hawaii, the doctrine protects all water in the state for purposes that range from navigational access to environmental protection,⁶¹⁶ and in Pennsylvania, it protects all natural resources in the state, even beyond waterways.⁶¹⁷ Meanwhile, although Ecuador has assigned constitutional protection for nature,⁶¹⁸ New Zealand and India have focused on protecting specific waterways,⁶¹⁹ Santa Monica protects sustainability interests,⁶²⁰ and the Minnesota White Earth Band of Ojibwe protects individual plant species of wild rice.⁶²¹

⁶¹⁵ See *supra* notes 104–08 and accompanying text (discussing Colorado law).

⁶¹⁶ See *supra* notes 95–98 and accompanying text (discussing the Hawaiian doctrine).

⁶¹⁷ See *supra* notes 61, 99 and accompanying text (discussing Pennsylvania’s trust).

⁶¹⁸ See *supra* notes 264–66 and accompanying text (discussing Ecuador’s constitution).

⁶¹⁹ See *supra* notes 388–89 (New Zealand), 403–07 (India) and accompanying text.

⁶²⁰ See *supra* notes 451–52 and accompanying text (discussing Santa Monica’s ordinance).

⁶²¹ See *supra* notes 508–12 and accompanying text (discussing the protection of manoomin).

This rich variety is a result of the ongoing doctrinal development described above, which points to another important shared feature of the two approaches: their propensity to evolve pragmatically, sometimes rapidly, in response to changing legal circumstances. Moreover, because neither approach means just one thing, both are less absolutist than they may at first appear, leaving open the possibility of multiple meanings and the contradictory impulses that motivate some advocates who appeal to them.⁶²² Doctrinal variety not only diffuses the absolutism that can accord more dogmatic approaches, but it also adds to the core theoretical challenges of indeterminacy, discussed above, that both approaches feature for different reasons.⁶²³

3. A Special Focus on Waterways

Another key similarity is that while both public trust and rights of nature principles have been applied to protect various natural resources and ecosystems, the predominant focus in both legal contexts has been waterways.

The public trust doctrine is overwhelmingly focused on the protection of water and waterways.⁶²⁴ This repeated emphasis has been evident since the ancient Roman recognition of the sea and its shores as public commons, to the Magna Carta's specific protection of public navigation, to the early English and American doctrines of sovereign ownership of submerged lands and resources, to the more recently articulated protections for groundwater, recreational access to waterways, and the ecological values associated with them.⁶²⁵ Similarly, while different communities have established rights of nature protection for resources ranging from full ecosystems to wild rice, the majority thus far have been applied to river systems.⁶²⁶ Testifying to this, Professor David Takacs entitles his recent review of international rights of nature initiatives simply *We Are the River*.⁶²⁷

The shared emphasis of the public trust and rights of nature on protecting waterways likely reflects the intrinsic centrality of water and waterways to the ecosystems and natural resources that advocates see as needing protection. Just as likely, it suggests something important

⁶²² See *supra* Section III.A.3 (discussing the possibility of a false dichotomy).

⁶²³ See *supra* Section III.A.3 (discussing indeterminacy).

⁶²⁴ See *supra* Section I.B.2; see also Ryan, *A Short History*, *supra* note 1, at 149–50.

⁶²⁵ See *supra* Part I. See generally Ryan, *A Short History*, *supra* note 1.

⁶²⁶ See *supra* Section II.C.

⁶²⁷ See generally Takacs, *supra* note 287.

about the shortcomings of conventional environmental law to protect them. In this regard, both approaches reflect efforts by communities of interest to better protect the most critical and legally vulnerable aspects of natural systems—the water.

4. Arguments of Last Resort and Intuitive Appeal

To that point, both public trust and rights of nature principles are routinely invoked as arguments of last resort, by constituents who are openly unsatisfied with the level of protection conventional environmental law has provided for the critical natural resources they see under siege. As one Floridian told the press after passage of the WEBOR rivers Bill of Rights ordinance, the “mandate . . . demonstrates that an overwhelming majority of Orange County citizens have lost faith in a state government and a regulatory system that have failed to protect the basic rights of people as well as the natural world.”⁶²⁸

In this respect, both approaches function, as much as anything else, as signaling tools for legal desperation. Indeed, the Mono Lake advocates in California did not appeal to the public trust doctrine until all other legal avenues had been explored,⁶²⁹ just as the Kissimmee River Bill of Rights initiative in Florida was launched only after all other legal options had failed.⁶³⁰ In the end, the Mono Lake advocates had more luck than those seeking to protect the Kissimmee River, but all were desperate before trying these novel strategies.

Yet in both public trust and rights of nature contexts, environmental advocates appeal to these strategies not only because they are desperate, but because they are drawn to the seemingly straightforward principles at their core. These novel legal strategies offer hope for saving beloved natural resources that advocates feel have been underprotected by conventional environmental law and peremptory cost-benefit analyses that fail to account for the full array of values at stake. But even beyond that, they turn to public trust and rights of nature strategies because the ideas at the center of these approaches, from their perspective, make sense to them.

Public trust and rights of nature principles seem able to speak to lay people on an intuitive plane that conventional environmental law cannot always reach. At their core, both principles reduce to the premise that vulnerable natural systems should be protected against

⁶²⁸ Bonasia, *supra* note 491.

⁶²⁹ See *supra* notes 146–57 and accompanying text.

⁶³⁰ See *supra* notes 474–77 and accompanying text.

annihilation in service of short-sighted economic interests. The intuitive draw of the public trust doctrine was evident in the nationwide coalition of 36,000 young people inspired to join the atmospheric trust project (even as the litigation struggled to make headway in court),⁶³¹ just as the intuitive appeal of the rights of nature movement was demonstrated by the ninety percent of voters in a politically divided Florida county that supported the Orange County WEBOR rivers Bill of Rights initiative (even as the state legislature voted to preempt it).⁶³²

5. Leveraging the Political Arena

A related feature that both concepts hold in common is that while they have not always resulted in legal successes, they very often facilitate political successes. That is to say, even where public trust and rights of nature advocacy has failed to produce the results sought in court, the movements have succeeded in building public awareness and concern to accomplish their goals in the political arena. For example, the atmospheric trust movement has not been terribly successful in court so far, but it has resulted in notable political successes, for example, the gubernatorial creation of a climate action plan in the State of Massachusetts, and galvanized public advocacy for climate governance, especially among the young.⁶³³

Similarly, even though the rights of nature-oriented Community Bill of Rights ordinance enacted by Pennsylvania's Grant Township was struck down in federal court, the community nevertheless accomplished its substantive goal.⁶³⁴ The rights of nature ordinance galvanized public opinion against the injection well that PGE was seeking to use for fracking wastewater. Even after the original ordinance was invalidated in court, the community doubled down on a Home Rule Charter that incorporated many of the original provisions, and it continues to protest the injection well.⁶³⁵ In the end, the Pennsylvania Department of Environmental Protection bowed to public pressure and rescinded the well permit, citing the Home Rule Charter's ban on injection wells, and doubtlessly heeding the public outcry that was

⁶³¹ See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 63–64 (discussing the 36,000 youth who signed an open amicus brief in support of *Juliana v. United States*).

⁶³² See *supra* note 491 and accompanying text.

⁶³³ See Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 62–63.

⁶³⁴ See *supra* Section II.D.1.c.

⁶³⁵ Ryan, *Mono Lake to the Atmospheric Trust*, *supra* note 1, at 62–63.

facilitated by the clear principles it had set forth in its rights of nature proclamations.

Indeed, there is an important, dynamic relationship between judicially enforceable constraints on political branch decision-making, such as those set forth in public trust and rights of nature lawmaking, and the larger political process. As one of us has written previously:

The *Juliana* case recalls one of the most powerful features of the public trust doctrine, one that implicates the separation of powers controversy, but with a twist. It is the way that the doctrine enables citizens to use the levers made available by the horizontal separation of powers to increase their efficacy in democratic participation, by invoking judicial review of legislative or executive action that violates legal rules. This is a feature of our democratic design, hallowed in the United States since *Marbury v. Madison*. The *Juliana* plaintiffs may not succeed in their lawsuit, but the very act of bringing it, and generating so much public support for their claim, puts pressure on the political branches in ways that amplify their voices as individual voters and constituents.⁶³⁶

When public trust and rights of nature advocates fail in the judicial sphere but succeed politically, it may be construed not as a design flaw in the system, but instead as a design feature. Scholars are beginning to study the overlooked importance of litigation loss as a galvanizing force in political movements that are later successful, such as the campaigns for LGBTQ and religious rights.⁶³⁷ Failed campaigns for environmental rights, under the banners of both the public trust and the rights of nature, may well prove another example.

6. The Emotional Element

Finally, it is important to acknowledge that both the public trust and rights of nature approaches do more than just appeal to advocates on an intuitive level, based on principle—they also do so on an emotional level. These relatively open-ended doctrines, by virtue of being ill-defined and open to legal evolution, have allowed people to pour into them all their hopes and dreams for the kind of environmental protection unavailable to them under conventional environmental

⁶³⁶ *Id.* at 63.

⁶³⁷ Douglas NeJaime, *Winning Through Losing*, 96 IOWA L. REV. 941 (2011) (analyzing the productive function of litigation loss toward successful social movements).

regulation. As these doctrines become flexible reservoirs for advocates' uniquely unsatisfied hopes and dreams, so are they pushed to evolve further in different directions, completing the spiral of their rapid differentiation and development.

Even beyond that, both approaches appeal to something emotional in people that goes beyond whether the idea is actionable in court. Each gives voice to concerns that are otherwise underserved in the legal system and resource management regimes. Advocates have reacted to the various Rivers Bill of Rights movements in Florida and the *Juliana* atmospheric trust litigation in the same way—not just intuitively, but emotionally, and almost spiritually. As noted, the core premises of these approaches speak to ordinary people on levels that conventional legal doctrines do not. They engage people unsatisfied with existing legal resources and looking for new tools and vocabulary. Advocates speak about their efforts with the zeal of a mission that goes beyond ordinary legal advocacy. For example, in his statement of principles that would inspire the Earth Jurisprudence movement, Thomas Berry referred not only to “the physical need of humans[,] but also the wonder needed by human intelligence, the beauty needed by human imagination, and the intimacy needed by human emotions for personal fulfillment.”⁶³⁸

Whatever one's critique may be of either the public trust doctrine or the rights of nature movement—or both—one would be wise to heed the critique this level of engagement suggests for the rest of environmental law. While conventional environmental laws like the Clean Air and Water Acts have made important strides in containing pollution, they are not designed to protect public natural resource commons of the sort the public trust and rights of nature initiatives are now targeting. Conventional environmental law is not working in many such cases, especially with regard to waterways, and the rise of these novel legal strategies reveal that the people most impacted by these failures are getting restive.

C. *Comparative Analysis: Florida as a Living Laboratory*

Having reviewed the core differences and similarities between the public trust doctrine and rights of nature movement, it is worth exploring at least one jurisdiction where both approaches are actively in play, in order to compare how these two different frames of reference provide different answers to similar questions of environmental

⁶³⁸ See BERRY, *supra* note 586.

management. Florida is not the only living laboratory for analyzing the two approaches simultaneously; as noted in Section II.D.1, both approaches have surfaced in Pennsylvania's disputes over fracking, and Hawaii's strong public trust doctrine has long marinated in the Polynesian cultural traditions that gave rise to the rights of nature movement in related cultures, such as the New Zealand Māori.⁶³⁹ However, rights of nature principles are developing more rapidly in Florida than anywhere else in the nation, so this Section explores the interplay between the Florida public trust and unfolding rights of nature movement.

1. Florida as a Living Laboratory to Assess Both Approaches

The Florida rights of nature initiatives and the political pushback they have engendered provide a unique opportunity to analyze the drivers of the broader American movement, and to contrast it with a conventional example of a public trust doctrine that has not developed to protect environmental values.

Florida boasts more coastline than any state in the union, and a higher percentage of submerged inland area than all but six others,⁶⁴⁰ making the public trust doctrine an especially important aspect of Florida law. However, and as noted in Part I above, Florida's public trust doctrine protects only the traditional trust values of navigation, commerce, fishing, and swimming; it has never been interpreted to protect the ecological values associated with waterways.⁶⁴¹

Moreover, the Florida public trust provides no protection for groundwater resources.⁶⁴² This is true for most American states, but Florida sits atop two of the largest freshwater aquifers in the world, and they are intricately interwoven with countless square miles of surface waters throughout the state. Furthermore, the process of common law development that enabled the California public trust to extend to

⁶³⁹ See *supra* Section II.C.2.a.

⁶⁴⁰ Caitlin Dempsey, *Interesting Geography Facts About Florida*, GeographyRealm (Oct. 3, 2020), <https://www.geographyrealm.com/interesting-geography-facts-about-florida> [https://perma.cc/F4UQ-ZFNJ] (noting that Florida has the longest coastline in the contiguous United States at 1,350 miles, not including its many barrier islands); Caitlin Dempsey, *Which States Have the Highest Percentage of Water Area?*, GEOGRAPHYREALM (Nov. 10, 2015), <https://www.geographyrealm.com/which-states-have-the-highest-percentage-of-water-area> [https://perma.cc/3Q2C-85JM] (chart showing relative state surface area covered by water).

⁶⁴¹ See *White v. Hughes*, 190 So. 446, 448–51 (Fla. 1939); *Adams v. Elliot*, 174 So. 731, 734 (Fla. 1937).

⁶⁴² *State ex rel. Ellis v. Gerbing*, 47 So. 353, 355 (Fla. 1908).

groundwater tributaries of navigable waters seems unlikely in Florida, where the doctrine appears to have calcified in its 1960s common law form after being codified in statute and the state constitution.⁶⁴³ As vulnerable waterways have become increasingly stressed by the demands of development and extraction, local advocates seeking to protect them have turned to the rights of nature to cope with harms unprotected by the public trust doctrine.

Like other jurisdictions described in Part II, nearly all rights of nature initiatives in Florida have focused on waterways, targeting issues of both water quality and water quantity. These efforts may be understood as a sincere response to the underlying biocentric principles of the rights of nature movement, but they may also be understood as pragmatic “gap fillers” in legal strategy, picking up where the public trust doctrine’s protection of environmental values has fallen short (and as noted above, for many advocates, they may represent both). Unlike the public trust doctrine, rights of nature principles are not limited by questions of whether the waterway is navigable or underground.

In addition, and unlike public trust arguments in Florida, rights of nature arguments are not forced to shoehorn ecological protections into a doctrine that has historically protected only anthropocentric values. Thomas Linzey, Senior Legal Counsel for the Center for Democratic and Environmental Rights, has observed the uniqueness of Florida’s position in the rights of nature movement, noting that “[i]n the U.S., Florida is really now is the new front line for whether the system is capable of transitioning to this new rights based protection for ecosystems. . . . [T]ime will tell whether obedience to the old system is stronger than the need to transcend that system and save places”⁶⁴⁴

2. The Failed Santa Fe River Bill of Rights

Although it was unsuccessful, one rights of nature campaign that showcases these challenges was the Santa Fe River Bill of Rights initiative (SAFEBOR). The Santa Fe River runs through north-central Florida along the Cody Scarp, an abrupt break in elevation where the

⁶⁴³ See *supra* notes 73–77 and accompanying text (discussing the Florida Constitution)

⁶⁴⁴ Alachua County, *supra* note 520; Alachua County, *Rights of Nature Workshop—Board Commissioners Discussion*, YOUTUBE, at 26:52 (Feb. 11, 2020), <https://www.youtube.com/watch?v=jcXm53XcHmc&feature=youtu.be&fbclid=IwAR0hIt-> [<https://perma.cc/QZV6-CFY3>].

panhandle meets the peninsula.⁶⁴⁵ The river disappears in and out of the karst-limestone formation at this geological juncture, uniting above-ground flows and underground caves that have been home to wildlife and human settlements for thousands of years.⁶⁴⁶ However, water quality in the river has declined markedly in recent years, due both to nutrient loading and groundwater pumping that has substantially lowered the water table.⁶⁴⁷

In 2019, SAFEBOR was crafted in response to these ongoing water quality concerns, proposed phosphate mining, and a proposal by the Nestlé Corporation to increase withdrawals for its bottled water operations from underground wells at Ginnie Springs, a main tributary source of the Santa Fe River northeast of Gainesville.⁶⁴⁸ River flow was already reduced by groundwater pumping, down twenty-eight percent from historical levels.⁶⁴⁹ At the time, Seven Springs/Nestlé⁶⁵⁰ already held a permit for withdrawals of up to 1.1 million gallons a day, though only a quarter of that amount was being withdrawn.⁶⁵¹ When the permit came up for renewal, Seven Springs sought permission to withdraw the full amount, which one local opponent of the permit calculated as four hundred gallons per minute.⁶⁵²

⁶⁴⁵ *Santa Fe River and Sink*, FLA. STATE PARKS, <https://www.floridastateparks.org/learn/santa-fe-river-and-sink> [<https://perma.cc/G2QB-YQPY>] (describing the location and geology of the river).

⁶⁴⁶ *Id.*

⁶⁴⁷ Robert Knight, *The Santa Fe River Is Being Polluted, Depleted*, GAINESVILLE SUN (Nov. 7, 2019, 2:02 AM), <https://www.gainesville.com/opinion/20191107/robert-knight-santa-fe-river-is-being-polluted-depleted> [<https://perma.cc/EK49-4HHJ>].

⁶⁴⁸ Thomas Linzey, *It's Time for New Laws to Protect Florida's Waters*, GAINESVILLE SUN (Jan. 30, 2020, 2:01 PM), <https://www.gainesville.com/opinion/20200130/thomas-linzey-its-time-for-new-laws-to-protect-floridas-waters> [<https://perma.cc/8F9D-88U6>].

⁶⁴⁹ Allen, *supra* note 469.

⁶⁵⁰ Seven Springs Water Company holds the water use permit and sells the water to Nestlé for bottling. See Richard Luscombe, *Nestlé Plan to Take 1.1m Gallons of Water a Day from Natural Springs Sparks Outcry*, GUARDIAN (Aug. 26, 2019, 1:00 AM), <https://www.theguardian.com/business/2019/aug/26/nestle-suwannee-river-ginnie-springs-plan-permit> [<https://perma.cc/785Y-X5RB>].

⁶⁵¹ *Id.*; Ray Carson, *Battle Over the Springs, Withdrawal Permit Bring Controversy*, ALACHUA CNTY. TODAY (Jan. 25, 2020), <https://www.alachuatoday.com/news-featured/latest/4146-battle-over-the-springs-withdrawal-permit-brings-controversy> [<https://perma.cc/L38B-7Q42>] (“The permit allowed them [Seven Springs Bottling Plant] to withdraw up to 1.152 million gallons a day[,] . . . but as a smaller local plant, their average withdrawal has been a quarter of that amount, peaking at under 270,000 gallons per day for the past four years.”).

⁶⁵² Reagan Fink, *Gainesville Residents Protest Seven Springs Water Permit at Ginnie Springs and Santa Fe River*, WUFT NEWS (Nov. 4, 2019), <https://www.wuft.org/news/2019/11/04/gainesville-residents-protest-seven-springs-water-permit-at-ginnie-springs-and-santa-fe-river> [<https://perma.cc/9V58-N8X7>].

Advocates for SAFEBOR did not argue that Seven Springs/Nestlé are violating the terms of the permit; instead, they alleged that the problem was the permit itself, as two board members of Our Santa Fe River, a local nonprofit supporting SAFEBOR, put it, the river and springs were “slowly but surely being bled to death under the watch of previous and current water managers.”⁶⁵³ From their perspective, the state has allowed the commodification of a public resource to the detriment of an entire river system and all constituent components of the ecosystem, including significant declines in spring flow, nutrient pollution, and algae blooms.⁶⁵⁴ SAFEBOR organizers needed 18,094 signatures to qualify for the ballot but only managed to gather approximately 4,000.⁶⁵⁵ Accordingly, the initiative failed.

Patently, SAFEBOR illustrates the serious weaknesses of rights of nature initiatives to protect waterways. As discussed further below, rights of nature proponents have yet to grapple with the difficult questions of who will speak for rights-holders and the extent of the rights they seek to protect. Constitutional concerns arise when state and municipal actors seek to regulate navigable waterways, which are avenues of interstate commerce, impressed with the federal navigational servitude and other federal interests under the Supremacy Clause and Commerce Clause. And the biocentric underpinnings of the rights claimed fit poorly within the overwhelmingly anthropocentric legal system, provoking resistance among conventional jurists. In a memo that is illustrative of many of these concerns, the Alachua County Charter Review Commission General Counsel wrote the Commission members on the subject of SAFEBOR:

I came to the abiding conclusion that the proposals, while seemingly well meaning, ran so far afield and so utterly ignored the existing structure and restrictions of Florida and federal environmental law, local government law, and constitutional law in so many ways, that I could not anticipate any reasonable

⁶⁵³ Merrilee Malwitz-Jipson & Jim Tatum, *Santa Fe River, Springs Being Bled to Death*, GAINESVILLE SUN (Aug. 21, 2019, 2:57 PM), <https://www.gainesville.com/opinion/20190908/editorial-dont-stop-with-safebor-to-protect-santa-fe> [<https://perma.cc/8228-9T84>].

⁶⁵⁴ Editorial, *Don't Stop with SAFEBOR to Protect Santa Fe*, GAINESVILLE SUN (Sept. 8, 2019, 2:01 AM), <https://www.gainesville.com/opinion/20190908/editorial-dont-stop-with-safebor-to-protect-santa-fe> [<https://perma.cc/8228-9T84>].

⁶⁵⁵ John Moran, *The Case for Rights of Nature: Next Steps for the SAFEBOR Campaign*, OUR SANTA FE RIVER (Apr. 5, 2020), <https://oursantaferiver.org/nature-3> [<https://perma.cc/9H6P-D82V>].

outcome other than their invalidation upon challenge, along with not accomplishing anything significant for the effort.⁶⁵⁶

These weaknesses help explain the substantial pushback against rights of nature initiatives like SAFEBOR from other legal actors within the state, ranging from the legislature that acted to preempt them,⁶⁵⁷ to conventional environmental advocates who regard them with skepticism.⁶⁵⁸

But SAFEBOR also illustrates the most significant shortcomings of Florida's public trust doctrine, potentially illuminating why advocates turned to the controversial rights of nature approach instead. First, as noted, the Florida public trust doctrine has not been understood to protect groundwater resources. While opponents of the Nestlé withdrawals could fight the consumptive use permits on statutory obligations to consider the public interest in negative ecological impacts, the public trust doctrine itself was not directly implicated because the source at issue—the underground wells at Ginnie Springs—are not a navigable waterway. This is not a limitation of the public trust doctrine in all permutations; the doctrine has evolved in other states, such as Hawaii and California, to deal expressly with this problem.⁶⁵⁹ In a relatively recent development, California extended trust protections to the groundwater tributaries of the Scott River, a navigable waterway,⁶⁶⁰ by following the precedent of the Mono Lake case, in which the court protected non-navigable surface water tributaries because withdrawals would impact the trust-protected navigable waterway downstream.⁶⁶¹

Secondly, and also unlike the doctrine in states like Hawaii and California, Florida's public trust doctrine has not explicitly included the protection of ecological values. If the withdrawals implicated traditional

⁶⁵⁶ Memorandum from Wade C. Vose, Gen. Couns., to the Alachua Cnty. Charter Rev. Comm'n 1 (Apr. 8, 2020), <https://www.alachuacounty.us/CharterReview/Documents/Memo%20-%20AC%20CRC%20-%20Alternatives%20to%20Rights%20of%20Nature%20Proposals%20-%2004-08-2020.PDF> [<https://perma.cc/2DPA-QBDF>].

⁶⁵⁷ See *supra* Section II.D.4.b.

⁶⁵⁸ Nick Kilvert, *There's a Growing Push to Give Nature Legal Rights, but What Would That Mean?*, ABC NEWS (Mar. 16, 2019, 12:17 AM), <https://www.abc.net.au/news/science/2019-03-16/rights-of-nature-science/10899778> [<https://perma.cc/9S3D-S5ZD>] (recounting criticism that existing environmental laws should be enforced rather than turning to novel rights of nature protections).

⁶⁵⁹ See *supra* Section I.B.2.

⁶⁶⁰ *Env't L. Found. v. State Water Res. Control Bd.*, 237 Cal. Rptr. 3d 393, 399–403 (Cal. Ct. App. 2018) (concluding that the public trust doctrine protected groundwater tributaries of navigable waters), *cert. denied*, 2018 Cal. LEXIS 9313 (Cal. 2018).

⁶⁶¹ See *generally* Nat'l Audubon Soc'y v. Super. Ct., 658 P.2d 709 (Cal. 1983).

concerns of navigability on the Santa Fe, then public trust protections might prove helpful. But if the negative impacts are limited to ecological concerns for the health of the waterway and its surrounding ecosystem, then there is little recourse under the current Florida doctrine. If the public trust doctrine in Florida were extended to perform the same role, then perhaps these advocates would have strategically turned to the lower hanging fruit of an established doctrine to protect the threatened waterway, rather than testing a comparatively novel legal theory in rights of nature.

However, by a separate twist of fate, it seems unlikely to impact the Florida public trust. As noted in Part I, Florida's public trust was a forward-leaning common law doctrine at the turn of the last century, and the doctrine was considered so important to the state that in 1968, it was incorporated directly into the state constitution, which the Florida Supreme Court later characterized as "largely a . . . codification of the public trust doctrine contained in our case law."⁶⁶² At first blush, it might seem that elevating the doctrine into the constitution would strengthen it, but as Professor Alexandra Klass has warned in her scholarship on this issue, that is not always the case.⁶⁶³ As Klass describes happened in Minnesota, it is possible that the constitutional codification of Florida's public trust doctrine effectively froze it at its 1960s-era stage of development, preventing it from continuing to evolve in response to emerging public concerns through conventional common law process—as the doctrine famously went on to do in states like California and New Jersey.⁶⁶⁴

Nevertheless, as Professor Robin Kundis Craig has observed, some case law suggests that Florida's public trust doctrine might continue to be expanded to include other uses.⁶⁶⁵ If the Florida public trust doctrine ever did evolve to adopt more environmentally protective features, and rights of nature initiatives in Florida were to recover from the current legislative preemption, then—if only as a thought experiment—it is

⁶⁶² *Coastal Petrol. Co. v. Am. Cyanamid Co.*, 492 So. 2d 339, 344 (Fla. 1986).

⁶⁶³ See generally Klass, *supra* note 78 (exploring how codification of the common law public trust doctrine may restrict its evolution and viability as a tool for environmental protection).

⁶⁶⁴ See *supra* Section I.B.2. It is perhaps coincidental that there are no serious attempts to leverage rights of nature initiatives in New Jersey, and the only initiative in California has attracted little attention, perhaps because it is unnecessary due to the state's more environmentally protective public trust doctrine.

⁶⁶⁵ Craig, *Eastern Public Trust Doctrines*, *supra* note 22, at 36; see, e.g., *State v. Black River Phosphate Co.*, 13 So. 640, 648 (Fla. 1893) (recognizing public trust protection of "navigation and fishing, and other implied purposes"); *Ferry Pass Inspectors' & Shippers' Ass'n v. White's River Inspectors' & Shippers' Ass'n*, 48 So. 643, 645 (Fla. 1909) (recognizing public rights to "fishing and bathing and the like").

interesting to consider how the two approaches would compare in addressing the issues that SAFEBOR attempted to resolve.

3. What Do the Public Trust Doctrine and Rights of Nature Do Differently?

Under an environmentally protective version of the public trust doctrine, like California's, groundwater withdrawals that threaten public trust values in a navigable waterway would be protected (and in Hawaii, all groundwater would be). Moreover, an environmentally protective public trust could be applied to protect purely ecological concerns, as well as traditional values associated with navigability. If groundwater withdrawals threatened the navigability or recreational values on the connected surface water, or if ecological values associated with the trust resource were threatened, the public trust would be implicated and there would be a potential legal remedy to stem the harm—at least to the extent it is feasible to do so while also protecting competing public interests, such as access to drinking water.⁶⁶⁶ By contrast, rights of nature laws, at least as they have been envisioned in Florida, are written to be unapologetically protective of ecosystems, even where they compete with other public interests. For the sake of comparison, a typical domestic rights of nature ordinance would recognize the right of a water body to “flow,” “flourish,” or “maintain a natural ecosystem.”

In this comparison, one can easily imagine circumstances in which the public trust doctrine will be less protective than the rights of nature approach, even considering a protective California version of the public trust. The public trust doctrine might be sufficient to protect some public interests in the resource, but insufficient to protect ecological values where they conflict with other compelling public interests. For example, the public trust doctrine might protect river flows that are sufficient to protect kayakers and anglers, but it might balk at the anthropocentric flows needed to maintain the integrity of an ecosystem supporting endangered mussels. The rights of nature approach may be tangentially worried about kayakers but more wholesomely concerned about the mussels.

Even under an expanded public trust doctrine that applies to groundwater and protects ecological values, rights of nature principles would be implicated far earlier, at a more nature-protective threshold.

⁶⁶⁶ See generally *Nat'l Audubon Soc'y v. Super. Ct.*, 658 P.2d 709 (Cal. 1983).

Before litigants could invoke the public trust doctrine, they would need to affirmatively demonstrate potential impacts to cognizable trust values—for example, a loss of recreational access, impacts to a vulnerable species, or negative impacts on navigation. For the rights of nature, however, any alternation of flow or impact to the natural ecosystem, no matter the magnitude, could theoretically be sufficient to warrant a claim. Taken to its extreme, any alternation of natural flow could be held to violate the rights of nature—creating a potential conflict reminiscent of the anthropocentric pressure that historically caused the original English common law rule of natural flow riparian rights to give way to the more modern American reasonable use doctrine.⁶⁶⁷ It would be interesting to see, centuries later, if such a transformation could truly be unmade. Certainly, it would be a very uphill battle (or a very upstream journey).

4. Which Is Better?

Those seeking to protect natural resource systems, especially the waterways that are so often the subject of both approaches, may ask the bottom-line question—which one is better? Here, too, the answer remains unclear. The first problem we face in grappling with this question, of course, is that we have to be more specific. Which rights of nature initiative? Which public trust doctrine? As demonstrated amply in Parts I and II above, there is enormous jurisdictional variation in both arenas, as both approaches continue to differentiate and diversify along multiple axes simultaneously. One cannot speak of the public trust doctrine or the rights of nature movement as if either one is a monolith, when as noted above, they are emphatically mosaics.

But even beyond that, both mosaics suffer from inherent drawbacks that make it hard for observers to choose a clear winner. In part, and as demonstrated in Part III, it depends on the goals of the observer. Even from the purely pragmatic standpoint of providing more or less environmental protection, the answer remains unclear. Because anthropocentrism is human focused, the public trust doctrine can be a precarious vehicle for environmental protection, if public sympathies shift away from long-term environmental values in service of shorter-term economic needs. People clearing forests for agriculture in the Amazon are making an anthropocentric choice that will better their interests in the near-term, even though it will surely harm them over

⁶⁶⁷ See Ryan, *A Short History*, *supra* note 1, at 185–86.

time, especially for future generations. But if the arbiters of decision-making are human beings in the moment, the public trust doctrine is vulnerable to short-term decisions to pave paradise and put up a parking lot,⁶⁶⁸ whenever parking becomes short. As shown in Part II, environmental advocates have turned to the rights of nature movement repeatedly, and especially in Florida, when the public trust doctrine has proved insufficient to confer environmental protection, often because it has been interpreted narrowly or to prioritize other human interests.

Biocentrism, however, is equally problematic, because we do not fully understand who should be able to speak for nature in legal contexts. The early *Sierra Club v. Morton* case first framed this dilemma in terms of legal standing in court, denying natural objects independent standing to sue to prevent harm. Accordingly, an early move by rights of nature proponents was to secure legal personhood for natural objects, unquestionably providing them standing in court, independently of the people acting to protect them. But if we confer standing or legal personhood on natural objects who cannot speak for themselves, how do we reconcile the problem of voice? *Who speaks for nature?* As Professor Stone asked at the beginning of the American movement, *who speaks for the trees?*⁶⁶⁹

It is an especially puzzling problem because different people might come to very different conclusions about how to prioritize the interests of other members of the biotic community. Many believe that to protect nature, we must act quickly to foster wind energy generation to stabilize the climatic foundations of the overall biotic community,⁶⁷⁰ while others believe wind turbines cause unacceptable harm to vulnerable populations of birds and other wildlife whose habitat they disrupt.⁶⁷¹ In this scenario, who speaks for nature? The proponents of renewable energy or the proponents of birds? In an adversarial system such as that in the United States, the representational problem is compounded by procedural problems, as the first movers in litigation may determine

⁶⁶⁸ See Mitchell, *supra* note 13.

⁶⁶⁹ Cf. DR. SEUSS, *THE LORAX* (1971) (suggesting that the Lorax speaks for the trees).

⁶⁷⁰ See, e.g., International Renewable Energy Agency, *Renewable Energy: A Key Climate Solution*, <https://www.irena.org/climatechange/Renewable-Energy-Key-climate-solution> (last visited June 25, 2021) (“Renewables could supply four-fifths of the world’s electricity by 2050, massively cutting carbon emissions and helping to mitigate climate change.”).

⁶⁷¹ See, e.g., *Conventional Wind Energy—A Design Deadly for Birds*, AM. EAGLE FOUND., (2021), <https://www.eagles.org/take-action/wind-turbine-fatalities> [<https://perma.cc/L75K-LQVC>] (“Wind turbines present an ever-present danger to not only eagles and other birds of prey, but also to any migratory bird that passes through areas where wind turbine farms have been constructed.”).

how legal efforts to protect nature will unfold, even if they are not the best representatives.

This particular puzzle in the developing rights of nature movement is reminiscent of that between animal rights activists and conventional environmental advocates for wildlife. Conventional wildlife advocates protect populations, willing to sacrifice individual animals who may be harmed by a larger regulatory program in service of species preservation, as the Endangered Species Act anticipates through the safety valve of incidental take permits. By contrast, animal rights advocates protect individuals, treating each animal as an individual worthy of protection, and not just a representative of a larger species of biodiversity, just as human rights advocates fight for the sacred rights of individual human beings, rejecting utilitarianism that would sacrifice innocents in service of goals like swift justice or forced organ donation. When people speak for nature in a rights of nature regime, should they represent nature at the level of individual animals or plants or wetlands? Or are they representing the natural system as a whole, even if there are adverse consequences for individuals within those ecosystems?

And of course, in natural systems, there are always adverse consequences for individuals, as they compete for scarce resources within the food chain and other constraints of the habitat. To that end, what will rights of nature proponents say about those elements of the food chain that feed humans, and other non-endangered species? If wild rice should have rights, what about cows, pigs, and the deer and beavers who want to eat the wild rice? What about direct conflicts between the human and non-human members of the biotic community—if a bear attacks a hiker on a trail, whose interests should prevail?

Indeed, a common critique from conventional environmental lawyers is that the rights of nature movement is so patently inchoate—that it all seems very vague and unactionable, and if it is actionable, to what ultimate end? It has been anecdotally reported that now that rivers in India have rights, some people in India are suing a river for flooding their lands. If rivers are legal persons, do they have responsibilities as well as rights? How far does the legal personhood construct really go? Thus far, the rights of nature movement has not answered these questions, although they surely will have to be answered at some point. But even then, the answer will likely be different in different jurisdictions, representing different points in the constellation of differing axes of development.

Pragmatically speaking, the answers to the question of which approach is better may simply be a matter of path dependence. The better choice is the one that fits more seamlessly into the legal tradition

at hand, or the political circumstances of the day. The public trust doctrine continues to command force because it has been the law of the land for hundreds (if not thousands) of years in common law countries, especially the United States. The rights of nature commands force in Indigenous communities where that has been the prevailing norm for hundreds, and possibly thousands, of years. And in communities where conventional environmental tools have failed, rights of nature approaches may provide an opportunity to organize around the protection of a resource that has been failed by more conventional means. Even if the rights of nature approach fails in court, it has been effectively utilized to galvanize political support for the sought result, by persuading decision-makers in office to heed public concerns.

A more interesting question to explore in future work is whether there is value to be had in mixing and matching these approaches within one legal system. Can the two doctrines ever be used to support one another from these contrasting ethical approaches, or are they destined only to undermine one another? Perhaps more interesting still is the question of whether they may support one another asymmetrically. The public trust doctrine might provide oblique support to a rights of nature initiative, if only by constraining sovereign decisions to alienate a trust resource, but will rights of nature initiatives openly conflict with public trust principles by reorienting the discussion toward an ecocentric ethical perspective that is ultimately incompatible with the public trust?

For what it may be worth, a frequently observed feature of multi-level environmental governance within a federal system of governance is the advantage of redundancy of multiple sources of authority. History has shown that it is very useful to have two or more available avenues for environmental protection when the path is blocked for political reasons at one level on the jurisdictional scale. The scholarship on environmental federalism is especially cognizant of this benefit, previously described as the “regulatory backstop” feature of American federalism.⁶⁷² It may be that simultaneous efforts toward environmental protection rooted in both of these environmental ethics can provide a paradoxical source of checks and balance in natural resource protection. Even if the redundancy cannot be legally or philosophically justified, because the two underlying ethical frameworks are fundamentally irreconcilable, there may still be political advantages to redundancy.

⁶⁷² Ryan, *supra* note 537, at 364.

CONCLUSION

This Article has presented a comprehensive analysis of two contrasting approaches to environmental protection—the public trust doctrine and the rights of nature movement—each with ancient roots but made new once again, as environmental advocates increasingly turn to them to protect environmental rights and values left behind by conventional environmental, property, and constitutional law. Parts I and II have reviewed how both approaches are under active states of legal development, each evolving across multiple axes in different jurisdictions that relate to the scope of legal protections, the legal mechanism of protection, and the underlying purpose of protections. They also review the rise in public trust and rights of nature principles worldwide, as nations across the globe struggle to address the problem of missing environmental rights in conventional constitutional systems. In many cases, advocates have turned to either or both approaches to resolve the same problems, in many cases seeking the same substantive results. But Part III shows that the two approaches operate from fundamentally different ethical frameworks.

This comparative analysis between the public trust doctrine and rights of nature movements raises important questions for future research, which this Article only just begins to touch on. The most critical issue we raise is how these different approaches will provide different answers to the same legal questions. The Florida example gives us one context in which to analyze this, but in other states where both principles are in play, what results would we see if we applied these opposing legal frameworks to the same environmental problem? How much will boil down to the level of economic activity that each approach will allow, and how will the answer differ across jurisdictions? How much will the answers change depending on the different axes along which the two approaches deviate?

In looking to the future, there are also compelling questions about how the public trust and rights of nature regimes will interact. Hawaii provides an example where the state's strong public trust doctrine is at least partly informed by Native Hawaiian legal principles, which share some of the rights of nature values that are common to wider Polynesian cultures, including the New Zealand Māori people who have led on rights of nature initiatives. This will be a good place to look for how these doctrines coexist and work together, and for the interplay between subsistence and environmental justice values in both traditions. Florida provides an example of a state with an environmentally weak public trust doctrine in which the rights of nature movement has arisen to fill

gaps left open by the inability of the public trust doctrine to protect environmental values of surface waters, and groundwater altogether. Yet Pennsylvania provides an example of a state with an environmentally strong public trust doctrine, where rights of nature initiatives have also emerged to fill gaps.

In the end, the public trust doctrine is oriented toward anthropocentric injuries, but it has been in legal operation for hundreds of years, if not more, and it has been steadily evolving to address ecological concerns in many jurisdictions. In theory, rights of nature initiatives may provide even more robust ecological protections, but at least domestically, they largely remain inchoate, untested (and, at least at the moment, illegal in states like Florida). At this early stage of development for the rights of nature, it is hard to assess which is the better approach. The answer probably hinges on deep philosophical questions about one's underlying goals or pragmatic factors like path dependence within the larger context of an existing legal system.

Ultimately, rather than choosing between the two, environmental advocates may appreciate that the doctrines offer different but complimentary layers of protection. The public trust may remain a primary tool for protecting traditional values associated with navigability and public enjoyment, but where the public trust doctrine fails to address groundwater withdrawals or ecological concerns, rights of nature principles can be invoked to protect an aquifer, or a habitat, or biodiversity. It is possible that, in the end, the doctrines may offer complimentary protections that are simply aimed at different goals, with the public trust doctrine protecting water resources for human needs and the rights of nature protecting water resources for their inherent ecological value.

At this moment in time, with both doctrines actively evolving, it is hard to predict the answers to all these questions, though it will be fascinating to witness them play out. While that happens, we can all hope that those shepherding the path of this unfolding law will find effective and principled means for protecting elements of the natural world thus far still vulnerable under existing environmental law.