

ARTICLES

SHOULD LAKES HAVE STANDING? A FRAMEWORK FOR AN EFFECTIVE SCHEME TO PROTECT THE GREAT LAKES ECOSYSTEM BASED ON PERSONHOOD RIGHTS

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I. INTRODUCTION

The Great Lakes (hereinafter also “Lakes”) make up the largest freshwater lake system in the world.² They straddle eight states and two countries, and provide life and livelihoods for millions of people and innumerable flora and fauna.³ The Lakes were heavily polluted during the age of industrialization, but their health has recovered thanks in large part to statutes and treaties that took effect in the 1970s. Yet, in the 21st Century, the Lakes face novel challenges that threaten their health and that of the people and ecosystems that relies on them. Existing protective structures have been unable to respond to these challenges, and the Lakes need new protections to ensure their health.

Rights of Nature laws, first theorized in mainstream legal circles in the 1970s, grant substantive rights to environmental features and are in effect around the globe.⁴ The United States has yet to adopt these laws on a large scale, but some municipalities have adopted a version of these laws. Such local efforts have been largely unsuccessful in the face of legal challenges.

The Lake Erie Bill of Rights (“LEBOR”) is one example that was passed by Toledo, Ohio in response to frustration over legislative refusal to remedy harmful algal blooms in Lake Erie. This article will argue that the drafters of

2. *About the Lakes*, GREAT LAKES COMM. <https://www.glc.org/lakes/> (last visited January 5, 2024).

3. *See Great Lakes Facts and Figures*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (Jan. 27, 2023), <https://www.epa.gov/greatlakes/great-lakes-facts-and-figures>.

4. *See e.g. infra* notes 174-179.

the LEBOR were correct in their advocacy for a grant of substantive rights to the Lake, but the specificities of the ordinance are what led to its failure.

Section II will introduce the past, present, and significance of the Great Lakes, focusing on the contemporary threats to the Lakes' health. Section III will examine the history and contents of the LEBOR, looking carefully at its constitutional inadequacies and other causes of its failure. Section IV will provide an overview of the governance structure of the Lakes that remains after the fall of the LEBOR. Section V will consider three possible approaches to future Great Lakes protection. Section VI will conclude that a federal grant of rights to the Lakes implemented through Professor Christopher Stone's guardianship and trust framework is the most effective possible solution.

II. AN OVERVIEW OF THE GREAT LAKES

The importance of the Great Lakes to the past, present, and future of North America is commensurate to the Lakes' grandiosity. The Lakes contain approximately 84% of North America's supply of fresh surface water, and 21% of the world's supply.⁵ The Lakes themselves and the surrounding land account for 7% of American and 25% of Canadian agricultural production.⁶ Over 30 million people live in the Great Lakes Basin.⁷ A comprehensive chronicle of the economic impact the Lakes have on the development and industrialization of the region is outside the scope of this Article. However: North America would be unrecognizable in more than merely a geographic sense without the Lakes.⁸ The Lakes served as more than merely a conduit for industrialization: they were indispensable to the first instances of human habitation of North

5. *Id.*

6. *Id.*

7. *Id.*

8. See, e.g., David R. Allardice & Steve Thorp, *A Changing Great Lakes Economy: Economic and Environmental Linkages*, ENV'T CANADA & U.S. ENV'T PROTECTION AGENCY (1995). The Lakes served a vital role in distributing raw materials and manufactured goods efficiently over water that gave the region a massive advantage in the market. *Id.* at 5-6.

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America.⁹ Despite the era of industrialization in North America being well passed, the U.S. Great Lakes maritime economy still supports 311,000 jobs across a range of economic sectors, yielding approximately \$8.8 billion in wages.¹⁰ The history of the Lakes is inseparable from the history of North America itself, and the same is true of their future.

Despite this, environmental protection of the Lakes was historically, though perhaps unsurprisingly, a consideration secondary to their economic exploitation.¹¹ One such example is mercury: a byproduct of industrialization, and thus a major pollutant of the Lakes since industry cropped up on their shores.¹² Mercury permeates the bodies of the Lakes' marine inhabitants and increases in concentration as it moves up the food chain, ending up in the fish consumed by humans, leading to serious health effects.¹³ Anthropogenic mercury is released most prominently by the burning of fossil fuels, but also by waste incineration, cremation, and improper disposal of mercury cell batteries, to name a few.¹⁴

Leading up to the 1970s, untreated municipal sewage was pumped directly into the Lakes, contaminating the water so severely as to cause typhoid outbreaks in populations reliant on Lake water for drinking.¹⁵ The pollution was so severe that Lake Erie was famously declared “dead” due to its lack of oxygen and excessive nutrient content.¹⁶ Pursuant to each country's respective legislation, namely the Clean Water Act¹⁷ of the United States, and

9. See, e.g., *Native Americans in the Great Lakes Region*, MICH. STATE UNIV., <https://project.geo.msu.edu/geogmich/paleo-indian.html> (last visited Oct. 22, 2023).

10. *Great Lakes*, NOAA OFFICE FOR COASTAL MGMT., <https://coast.noaa.gov/states/fast-facts/great-lakes.html> (last updated Oct 20, 2023).

11. See *infra* notes 29-30.

12. *Mercury Contamination in the Great Lakes Basin*, GREAT LAKES COMM'N, Oct. 2021, at 3.

13. *Id.* at 5.

14. *Id.* at 2.

15. Kevin Bunch, *The Great Lakes Before the 1972 Water Quality Agreement*, INT'L JOINT COMM'N (April 19, 2022), <https://www.ijc.org/en/great-lakes-1972-water-quality-agreement>.

16. *Id.*

17. Clean Water Act, Pub. L. No. 92-500, 86 Stat. 816 (1972).

the Canada Water Act¹⁸ of Canada, both countries finally committed to protecting the Lakes' water quality, in part by controlling sewage effusion, in the 1970s.¹⁹ These pieces of national legislation were supplemented by the Great Lakes Water Quality Agreement,²⁰ a treaty between the two nations. This is not the end of the story however: sewage infrastructure in lakeside cities is proving unable to cope with the perfect storm of growing populations that continually increase sewage production, an outdated infrastructure that combines rain runoff and raw sewage, and stronger climate change-fueled storms.²¹ In total, twenty cities that border the Great Lakes released 92 billion gallons of untreated sewage into the Lakes as a result of sewage overflow in 2016.²² Given that climate change, population growth, and infrastructure degradation are ever increasing, this quantity will only grow without intervention.

The greatest present threat to the Lakes is phosphorous pollution. In the past, municipal sewage was the largest contributor to phosphorus pollution in the Great Lakes, but today, it accounts for only about 9%.²³ Now, agricultural storm water runoff has supplanted sewage overflow.²⁴ This is thanks in part to a quirk of the Clean Water Act: the Act requires permits that restrict pollutant effusion only for pollution discharged from point sources

18. Canada Water Act, R.S.C. 1985 c 11 (Can.).

19. Bunch, *supra* note 15.

20. Great Lakes Water Quality Agreement, Ca.-U.S., April 15, 1972, T.I.A.S. No. 7312; The agreement was amended multiple times throughout its history, most recently in 2012; entering into force in 2013. *See* Agreement Protocol on Great Lakes Water Quality, Ca.-U.S., Feb. 12, 2013, T.I.A.S. No. 13-212.

21. Dave Rosenthal, *Single Systems: The Great Lakes Cities' Sewer Designs Mean Waste in the Waters*, GREAT LAKES NOW (April 27, 2020), <https://www.greatlakesnow.org/2020/04/rust-resilience-sewer-wastewater-infrastructure/>.

22. *Id.*

23. Kristen Fussell et al., Summary of Findings and Strategies to Move Toward a 40% Phosphorus Reduction, OHIO SEA GRANT COLLEGE PROGRAM, at 3 (2017).

24. *Phosphorous Loading to Lake Erie*, ENV'T AND CLIMATE CHANGE CANADA, <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/phosphorus-loading-lake-erie.html> (last modified Dec. 15, 2021).

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(such as sewage plants),²⁵ but not for pollution discharged from non-point sources (such as agricultural runoff).²⁶

Phosphorus does not harm humans or aquatic fauna directly, but its presence does cause Harmful Algae Blooms (“HABs”).²⁷ These blooms yield a green scum of algae that detrimentally affects drinking water quality, fishing, and recreational use of the lake.²⁸ Moreover, HABs produce substances that are toxic to humans and other animal life, which lead to illness and death.²⁹

Because the drafters of the Clean Water Act declined to regulate nonpoint sources, such regulation is within the purview of state governments.³⁰ Despite being the last line of defense, Ohio lawmakers have chosen merely to adopt voluntary and aspirational measures to curb agricultural runoff,³¹ favoring economic protection of the state’s agricultural sector over the health of the lake.³²

As a result, HABs are most prevalent in the warm shallow waters of Western Lake Erie—near Toledo, Ohio.³³ In early August of 2014, tests detected dangerous amounts of myostatin in Toledo’s water supply, produced by an ongoing HAB in that area of the Lake.³⁴ Around 400,000 people were

25. 33 U.S.C. § 1311(b)(1)(A) (1972).

26. See 33 U.S.C. § 1362(14) (1972).

27. Jeffrey Reutter et al., *Lake Erie Nutrient Loading and Harmful Algal Blooms: Research Findings and Management Implications*, at 2 (2011), <https://legacyfiles.ijc.org/publications/June2011LakeErieNutrientLoadingAndHABSFinal.pdf>.

28. *A Balanced Diet for Lake Erie: Reducing Phosphorous Loadings and Harmful Algae Blooms*, INT’L JOINT COMM., at 2 (2014), [https://www.ijc.org/sites/default/files/2014%20IJC%20LEEP%20REPORT .pdf](https://www.ijc.org/sites/default/files/2014%20IJC%20LEEP%20REPORT.pdf).

29. *Id.* at 38.

30. See 33 U.S.C. § 1362(14) (excluding “agricultural stormwater discharges” from the reach of the statute); see also Kenneth Kilbert, *Distressed Watershed: A Designation to Ease the Algae Crisis in Lake Erie and Beyond*, 124 DICK. L. REV. 1, 10-15 (2019).

31. See OHIO REV. CODE § 939.02(E)(3); see also Shaun Hegarty, *Ohio EPA Takes the Next Steps to Protect Lake Erie Water Quality; Advocates Have Concerns*, WTVG-13, <https://www.13abc.com/2023/06/30/ohio-epa-takes-next-steps-protect-lake-erie-water-quality/> (Jun. 30, 2023, at 3:55 PM).

32. Kenneth Kilbert, *Lake Erie Bill of Rights: Stifled by All Three Branches Yet Still Significant*, 81 OHIO ST. L.J. 227, 230 (2020).

33. Reutter et al., *supra* note 27.

34. *5 Years Since the Toledo Water Crisis: A Timeline of What Happened*, WTOL-11 (Aug. 5, 2015) (Updated Aug. 2, 2019).

left without drinkable water for days.³⁵ Some vulnerable groups were even warned against bathing in the water.³⁶ In total, 60 people were hospitalized with gastrointestinal issues from drinking the contaminated water, but thankfully, no deaths were reported.³⁷

III. THE LAKE ERIE BILL OF RIGHTS

In early 2019, Toledo's frustrated residents resoundingly passed a ballot measure called the Lake Erie Bill of Rights.³⁸ The LEBOR grew out of the Rights of Nature Movement, a legislative philosophy that strives to protect environmental features by granting them substantive rights that are rooted in their own existence, not the rights of humans.³⁹ Though not the first piece of legislation of its type, the LEBOR is perhaps the most prominent, receiving national media attention.⁴⁰

The LEBOR, in its preamble, vocalizes the fear of Toledoans that Lake Erie is in "imminent danger of irreversible devastation due to continued abuse by people and corporations enabled by reckless government policies."⁴¹ It asserts that Toledoans' right to live healthy lives is intimately intertwined with the health of the Lake, and existing governmental policy has been unable to protect either, so the only way to do so is to extend the substantive rights of Toledo residents to the Lake itself.⁴² Specifically, it gives the Lake Ecosystem

35. *Id.*

36. *Id.*

37. *Id.*

38. James Proffitt, *Toledoans Pass the Lake Erie Bill of Rights, Granting Legal Standing for the Waterway*, GREAT LAKES NOW (Feb. 27, 2019) <https://www.greatlakesnow.org/2019/02/great-lake-gets-great-rights/>. The measure passed 61% to 39%, however turnout was only 9% of eligible voters. *Id.*

39. *See id.*

40. *See, e.g.*, Ryan Prior, *An Ohio City Has Voted to Grant Lake Erie the Same Rights as a Person*, CNN (Feb. 27, 2019) <https://www.cnn.com/2019/02/21/us/ohio-city-lake-erie-rights-trnd/index.html>.

41. TOLEDO, OH., MUN. CODE ch. XVII, § 253 (2019).

42. *Id.*

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the “right to exist, flourish, and naturally evolve.”⁴³ It also recognizes that Toledoans hold a “right to a clean and healthy environment,”⁴⁴ and to “self-governance in their local community.”⁴⁵

To enforce these rights, the LEBOR empowers Toledoans to act as guardians of the rights of the Lake and enforce them by bringing suit in its name.⁴⁶ The LEBOR declares invalid within the City of Toledo any permit, license, or similar authorization issued to a corporation by *any* governmental entity that would violate any of the specific prohibitions within the LEBOR or the rights it secures.⁴⁷ It further creates fines for violations that are the maximum permitted by the State,⁴⁸ and a strict liability scheme for harms and rights violations.⁴⁹ Finally, it attempts to deprive corporations of any rights that conflict or interfere with the rights recognized in the LEBOR, including the rights to assert preemption of the LEBOR or claim that the City lacks the right to adopt the ordinance.⁵⁰

Such a radical upheaval of the existing scheme of enforcing environmental protection garnered immediate scrutiny. In an outcome that was unsurprising to some Toledoans,⁵¹ the LEBOR was challenged by a farmer after its adoption, seeking to invalidate the ordinance.⁵² The State of Ohio later

43. § 254(a). The LEBOR defines the “Lake Erie Ecosystem” as “all natural water features, communities of organisms, soil as well as terrestrial and aquatic sub ecosystems that are part of Lake Erie and its watershed”. *Id.*

44. MUN. CODE § 254(b).

45. § 254(c).

46. § 256(d).

47. § 255(b).

48. § 256(a).

49. § 256(c).

50. MUN. CODE § 257(a).

51. “If not enforceable, it is very important symbolic messaging,” said Toledo attorney Terry Lodge. “Even if there’s not a result of a law we can immediately use, we look at it as a sign post [sic] of the only logical way we can approach the continued deterioration of the environment.” Laura Johnston, *Toledo’s Lake Erie Bill of Rights is Stuck in Court – But Inspiring Environmentalists Nationwide*, CLEVELAND.COM (Dec. 16, 2019) <https://www.cleveland.com/news/2019/12/toledos-lake-erie-bill-of-rights-is-stuck-in-court-but-inspiring-environmentalists-nationwide.html>.

52. Nicole Pallotta, *Federal Judge Strikes Down ‘Lake Erie Bill of Rights’*, ANIMAL LEGAL DEFENSE FUND (May 4, 2020) <https://aldf.org/article/federal-judge-strikes-down-lake-erie-bill-of-rights/>.

joined the suit against Toledo.⁵³ The LEBOR was subsequently invalidated by the United States District Court for the Northern District of Ohio.⁵⁴

The District Court’s decision was based on two primary findings: the rights that the LEBOR attempts to confer are impermissibly vague, and the City of Toledo exceeded its authority by attempting to implement some provisions of the legislation.⁵⁵

The court noted, first, that vagueness in a statute is a violation of the right to due process contained in the Fourteenth Amendment.⁵⁶ A law is unconstitutionally vague if “persons of common intelligence must necessarily guess at its meaning.”⁵⁷ Generally speaking, this means that if a law leaves an important element of its application without definition, or with a definition under which there is no basis for applying an objective standard to the conduct of party against whom it is enforced, then it is unconstitutional.⁵⁸ Vague laws violate the Fourteen Amendment because “they may trap the innocent by not providing fair warning, and they invite arbitrary enforcement by prosecutors, judges, and juries.”⁵⁹

Here, the court singled out the three substantive rights granted in the LEBOR as impermissibly vague.⁶⁰ First, the legislation offers “no guidance” to help a prosecutor, judge, or jury decide where the bounds of the Lake’s right to “exist, flourish, and naturally evolve” lie.⁶¹ The same is true of the citizens’ right to a “clean and healthy environment,” since “the line between clean and

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

54. *Pallotta*, *supra* note 52; *see id.* at 558.

55. *Drewes Farms*, 411 F.Supp. at 558.

56. *Id.* at 555-56 (citing *Roberts v. United States Jaycees*, 468 U.S. 609, 629 (1984)).

57. *Id.* at 556 (quoting *Roberts*, 468 U.S. at 629).

58. *See, e.g., id.* (citing *Coates v. City of Cincinnati*, 402 U.S. 611 (1971); *Belle Maer Harbor v. Charter Twp. of Harrison*, 170 F.3d 553, 555 (6th Cir. 1999)).

59. *Id.* (quoting *Grayned v. City of Rockford*, 408 U.S. 104, 108-09 (1972)) (internal quotations omitted).

60. *Drewes Farms*, 411 F.Supp. at 556-67.

61. *Id.* at 556.

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unclean, and between healthy and unhealthy, depends on who you ask.”⁶² The LEBOR’s fines provision falls for a similar but distinct reason: § 256(a) sets the maximum fine for violating Toledoans right to “self-governance in their local community” at “the maximum . . . allowable under State law for that violation,” but the drafters of the LEBOR failed to note that Ohio does not identify any such fine for violating this right at all.⁶³ As a result, it provides no guidance on the size of a fine that a judge should levy on a violator, and this provision is also unconstitutional.⁶⁴

Furthermore, the court took issue with provisions of the LEBOR that overstepped Toledo’s powers as a municipal government.⁶⁵ It voided the LEBOR’s stripping of the rights of violative corporations⁶⁶ because municipal laws are generally preempted (and thus unenforceable) when in conflict with state law.⁶⁷ This is a “textbook example of what municipal government cannot do.”⁶⁸ Because the LEBOR was preempted by state law and because it was unconstitutionally vague, it was not able to survive a challenge in federal court.

IV. THE PRESENT STATE OF GREAT LAKES ENVIRONMENTAL REGULATION

The LEBOR is well and truly dead, but there remains a complex web of interlocking regulations that govern the Lakes thanks to their grand size and importance to neighboring communities. The many layers of regulation are made necessary – and further complicated – by the sometimes-competing interests of the many jurisdictions that rely on the lakes.⁶⁹ This section will be

62. *Drewes Farms*, 411 F.Supp. at 556.

63. *Id.*

64. *See id.*

65. *Id.* at 557.

66. *See* § 257(a).

67. *Drewes Farms*, 411 F.Supp. at 557 (citing *In re Complaint of Reynoldsburg*, 979 N.E.2d 1229 (Ohio 2012); *Pa. Gen. Energy Co. v. Grant Twp.*, 139 F.Supp. 3d 706, 720 (W.D. Pa. 2015)).

68. *Id.*

69. Noah D. Hall and Benjamin C. Houston, *Law and Governance of the Great Lakes*, 63 DEPAUL L. REV. 723, 724 (2014).

limited to a discussion of regulation by United States jurisdictions, but Canada maintains its own domestic Lakes protection policies.⁷⁰

Perhaps the most powerful piece of legislation protecting the Lakes is the 1972 Clean Water Act.⁷¹ The Act is a complex piece of legislation with many functional mechanisms, but concisely speaking: it empowers the U.S. Environmental Protection Agency (“EPA”) to set “effluent limitations” that restricts the release and composition of pollutants.⁷² It then delegates to the states authority⁷³ to set “water quality standards” that control the flip side of effluent limitations, overall pollutant quantity.⁷⁴ It also grants to states the authority over those areas the effluent limitations cannot reach, namely “the cumulative impact of nonpoint sources, such as agricultural run-off and erosion from timber harvesting.”⁷⁵ The effluent limitations are enforced only on “point sources,”⁷⁶ which the Act defines as “any discernable, confined, and discrete conveyance” that discharges pollution “including . . . [a] pipe, ditch, [or] channel”⁷⁷ It specifically excludes “agricultural stormwater discharges and return flows from irrigated agriculture” from this definition.⁷⁸

The Lakes are also governed by international treaties, namely The Boundary Waters Treaty⁷⁹ and subsequent Great Lakes Water Quality Agreement.⁸⁰ The 1909 Boundary Waters Treaty created the International Joint Commission (“IJC”), which is made up of three appointees from each the

70. See generally Great Lakes Protection Act, 2015, S.O. 2015, c 24 (Can.).

71. Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act), Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. §§ 1251–1387 (2006)).

72. *Id.* §§ 1311, 1314.

73. The EPA may step in if state water quality standards are insufficient. Hall and Houston, *supra* note 69 at 736 n. 75.

74. Hall and Houston, *supra* note 69 at 736.

75. *Id.*

76. *Id.*

77. 33 U.S.C. § 1362(14).

78. *Id.*

79. Treaty Relating to Boundary Waters Between the United States and Canada, U.S.-Gr. Brit., Jan 11, 1909, 36 Stat. 2448 [hereinafter Boundary Waters Treaty].

80. Great Lakes Water Quality Agreement, U.S.-Can., Apr. 15, 1972, 23 U.S.T. 301.

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United States and Canada.⁸¹ The IJC has broad investigative powers and exercises them to great effect,⁸² but its adjudicative power is limited such that each party would be required to agree beforehand for the IJC's judgment to be binding.⁸³ The binding dispute resolution provision of the treaty has never been utilized.⁸⁴

The Great Lakes Water Quality Agreement ("GLWQA") is a 1972 executive agreement entered into in response to a troubling report of the health of the Lakes submitted by the IJC.⁸⁵ Unlike the Boundary Waters Treaty, the GLWQA exists primarily to address pollution.⁸⁶ Its primary concern was phosphorous pollution, and it set specific water quality standards, restrictions on effluence of sewage and industrial waste, and expanded the investigative role of the IJC.⁸⁷ The GLWQA was amended in 1978 "to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem".⁸⁸ It took a more holistic approach to water quality assurance by not just limiting pollutants, but "restor[ing] the ecological integrity of the Great Lakes."⁸⁹ The GLWQA was amended most recently in 2012, when it incorporated protections against invasive species and addressed concerns related to climate change.⁹⁰ Despite its promising goals, the GLWQA lacks enforcement provisions⁹¹ and its terms are not enforceable on private parties.⁹²

81. *Id.* art. VII.

82. Hall and Houston, *supra* note 69 at 731.

83. *Id.* (citing Boundary Waters Treaty, *supra* note 92, art. X, 36 Stat. at 2453).

84. Hall and Houston, *supra* note 69 at 731.

85. *Id.* at 732.

86. *Id.*

87. *Id.* at 733.

88. 1978 Great Lakes Water Quality Agreement, art. II, 30 U.S.T. at 1387.

89. Hall and Houston, *supra* note 69 at 734.

90. Protocol Amending the Agreement Between Canada and the United States of America on Great Lakes Water Quality, U.S.-Can., at annex 4-8, Sept. 7, 2012, available at www.ijc.org/sites/default/files/2018-07/GLWQA_2012.pdf.

91. Hall and Houston, *supra* note 69 at 734-35.

92. *Id.* at 735 (citing Lake Erie Alliance for the Prot. of the Coastal Corridor v. U.S. Army Corps of Eng'rs, 526 F. Supp. 1063, 1077 (W.D. Pa. 1981)).

V. ALTERNATIVE APPROACHES

Three potential solutions to the Great Lakes problem are readily identifiable: an expanded Public Trust Doctrine, State Constitutional Environmental Rights Amendments, and Rights of Nature Laws. Each claim to provide a solution to current inadequacies in Great Lakes protections and be more adaptable to changing circumstances, avoiding the holes in the protection provided by the Clean Water Act. Each will be considered in turn.

A. The Public Trust Doctrine

The Public Trust Doctrine (“Doctrine”) is an oft studied and indeed promising legal framework through which enhanced Lakes protection could be achieved. The Doctrine is rooted in the common law⁹³ and protects navigable waterways first and foremost,⁹⁴ but is frequently (though nonuniformly) applied to other natural features.⁹⁵ Under the Doctrine, a state holds its navigable waterways in trust for the benefit of its citizens, and has the concurrent fiduciary duty to protect the trust resources.⁹⁶ The Doctrine is not an absolute guard against deterioration of the trust resources, as the fiduciary duty imposed on the state often means balancing the benefits of incidental

93. See Camilla Brandfield-Harvey, *The Public Trust Doctrine: A Cracked Foundation*, GEO. ENVR. L. REV. (April 15, 2021) <https://www.law.georgetown.edu/environmental-law-review/blog/the-public-trust-doctrine-a-cracked-foundation/>; Jordan Farrell, *Offshore Wind Development in the Great Lakes: Accessing Untapped Energy Potential Through International and Interstate Agreement to Overcome Public Trust Concerns*, 42 NW. J. INT’L L. & BUS. 117, 127 (2021) (noting “there are 51 public trust doctrines” include each state and the federal government); but see Erin Ryan et al, *Environmental Rights for the 21st Century: A Comprehensive Analysis of the Public Trust Doctrine and Rights of Nature Movement*, 42 CARDOZO L. REV. 2447, 2498 (2021) (writing that SCOTUS seemed to indicate in dicta that there was no federal Public Trust Doctrine, though this would not make a meaningful difference in application).

94. See generally *Ill. Cent. R.R. Co. v. Ill.*, 146 U.S. 387 (1892).

95. See, e.g., Ryan et al., *supra* note 93 at 2461. “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.” *Id.*

96. *Ill. Cent. R.R.*, 146 U.S. at 457.

destruction from development against interests in preservation.⁹⁷ Unsurprisingly, development and destruction sometimes prevail in the state's balancing calculation.⁹⁸ Safeguards provided by the Doctrine are nonuniform between jurisdictions and sometimes toothless.⁹⁹ Further, its basis in the common law leaves it with some inefficacies in this context.¹⁰⁰

The Doctrine itself is a product of Roman and English law: the *Corpus Iuris Civilis* and *Magna Carta*, respectively.¹⁰¹ It first appeared (and was applied to the land beneath navigable waterways) in an 1821 New Jersey Supreme Court decision.¹⁰² The Doctrine was then formally adopted by the United States Supreme Court in 1894.¹⁰³

The Court's opinion in *Illinois Central Railroad* has been criticized as vague,¹⁰⁴ and has led to wide variance in its application between jurisdictions.¹⁰⁵ For example, California takes a broad approach to the Public Trust Doctrine.¹⁰⁶ In *National Audubon Society v. Superior Court*, the California Supreme Court held that the wellbeing of the trust resources must be considered before the state can take action that could damage it. The court ultimately held that, in this instance, the wellbeing of Lake Mono outweighed Los Angeles' legitimate need for drinking water.¹⁰⁷

97. Ryan et al, *supra* note 93 at 2542.

98. *Id.* at 2556.

99. See, e.g., Farrell, *supra* note 93 at 130-44; Ryan et al, *supra* note 93 at 2474.

100. This assertion stands so far as one assumes that only one of the solutions suggested in this section is possible. However, some scholars believe that a peaceful coexistence of the Public Trust Doctrine and Rights of Nature laws is possible. This is a compelling thought, but beyond the scope of this article. See Ryan et al, *supra* note 93 at 2556-57.

101. Brandfield-Harvey, *supra* note 93.

102. *Arnold v Mundy*, 6 N.J.L 1, 78 (N.J. 1821). "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." *Id.* at 78.

103. *Shively v. Bowlby*, 152 U.S. 1, 22 (1894) (holding that "submerged lands of the navigable waters of the State" are held by the state in trust for the benefit of the public.)

104. See Farrell, *supra* note 93 at 133-34.

105. See, e.g., *id.* at 130-44.

106. *Nat'l Audubon Soc'y v. Super. Ct.*, 658 P.2d 709, 728-29 (Ca. 1983).

107. *Id.* at 728-729.

Conversely, Colorado, is generally accepted to be the state with the most restricted Public Trust Doctrine. Though the state has title to navigable waterways under *Illinois Central Railroad*, the Colorado Supreme Court declared that there are no navigable waterways in the state,¹⁰⁸ and held that insofar as the Doctrine would apply in any circumstance, it would “not protect recreational values associated with waterways.”¹⁰⁹

The Public Trust Doctrine, even in its most protective interpretation, is still inherently anthropocentric and as such fails to fully address present threats to the Lakes. It considers the needs of “future generations” of humans as opposed to fundamental needs of the environment itself.¹¹⁰ Thus, the only costs that it captures are those that are directly injurious to humans and it may miss costs associated with destruction that lacks a clear link to human injury.¹¹¹ This in turn substantially increases the likelihood that a balancing test would favor environmentally destructive but economically profitable human development.¹¹²

In sum, the Public Trust Doctrine is a useful tool in the arsenal of environmentalists that seek to conserve waterways, but it has limits. It has had meaningful impact in protecting waterways in California, but its fractured nature, anthropocentrism, and jurisprudential vulnerabilities mean that it is an imperfect solution to protect the Great Lakes.¹¹³

108. Ryan et al, *supra* note 93 at 2469 (citing *In re German Ditch & Reservoir Co.*, 139 P. 2, 9 (Co. 1913)).

109. Ryan et al, *supra* note 93 at 2470 (citing *People v. Emmert*, 597 P.2d 1025, 1027 (Co. 1979)).

110. See Ryan et al, *supra* note 93 at 2542.

111. See *id.* at 2545.

112. *Id.* at 2555-56. “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.” *Id.* at 2570.

113. But see *supra* note 100.

SHOULD LAKES HAVE STANDING

B. State Constitutional Protections

One possible solution to protection of the Lakes is through state constitutional amendments. Three states have, at the time of writing,¹¹⁴ amended their constitutions to include an Environmental Rights Amendment (“ERA”) that protects “the inalienable right to clean air, clean water, and a healthy environment”.¹¹⁵ Pennsylvania’s ERA reads in its entirety:

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.¹¹⁶

ERA legislation tends to come about in times of perceived environmental crisis.¹¹⁷ In 1969, Representative Franklin Kury introduced Pennsylvania’s ERA to the General Assembly in response to the era’s reimagining of how the environment fit into the Commonwealth’s constitutionally protected rights and freedoms.¹¹⁸ Specifically, Representative Kury voiced concern that political

114. Early 2025 has seen a flurry of activity on this front: ERAs have been introduced in each of Nebraska, Hawaii, New Mexico, and Connecticut. *January 2025 Newsletter*, GREEN AMENDMENTS FOR THE GENERATIONS (January 31, 2025) <https://forthe generations.org/blog/2025/01/31/january-2025-newsletter/>; see also Robinson Twp. v. Commonwealth, 83 A.3d 901, 963 (Pa. 2013) for a more robust discussion of the ways in which environmental and political rights are protected constitutionally across the Union.

115. *Green Amendments in 2023: States Continue Efforts to Make a Healthy Environment a Legal Right*, NAT’L CAUCUS OF ENV. LEGIS., <https://www.ncelenviro.org/articles/green-amendments-in-2023-states-continue-efforts-to-make-a-healthy-environment-a-legal-right/> (last visited December 31, 2023); see PA CONST. Art. I § 27; MT CONST. Art. IX § 1; NY CONST. Art. I § 19.

116. PA CONST. Art. I § 27. Readers may notice that this language functions as a codification of the common law Public Trust Doctrine. Therefore, this section will focus only on the challenges unique to these codifications, not issues with the Doctrine itself.

117. See, e.g., *The People’s Right to a Clean Environment*, PA. DEPT. OF CONSERVATION AND NAT. RES. (May 12, 2021) <https://www.dcnr.pa.gov/GoodNatured/pages/Article.aspx?post=171>.

118. See John C. Dernbach and Edmund J. Sonnenberg, *A Legislative History of Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania, Showing Source Documents*, WIDENER L. SCH. LEGAL STUD. RSCH. PAPER SERIES NO. 14-18 at 7 (2014).

and civil freedoms were meaningless if Pennsylvanians' health was compromised by an impure environment, such that they could no longer live fruitful lives, nevertheless exercise political freedoms.¹¹⁹ This reasoning clearly resonated with Pennsylvanians, as they voted to ratify the amendment in 1971 by a 3-to-1 margin.¹²⁰

Despite their noble purposes and popular support, state ERAs are impeded by their vagueness.¹²¹ The history of judicial interpretation of Pennsylvania's ERA provides a representative case study of this phenomenon. In its first test, the Pennsylvania Supreme Court was divided on whether the amendment was self-executing and failed to articulate an actionable rule to this end.¹²² In a subsequent case, *Payne v. Kassab*, the Pennsylvania Supreme Court held that the ERA mandated only a balancing of interests in conservation and a challenged development project, and that this balancing was already completed as part of the normal regulatory process.¹²³ The Court further held that "the Commonwealth (via agency action) had an obligation to avoid any environmental harm if possible but, absent a feasible alternative to the proposed development, had to permit the land use."¹²⁴

In a 2012 plurality decision, *Robinson Township v. Commonwealth*, the court attempted to reverse course.¹²⁵ In *Robinson Township*, the court held

119. *Id.*

120. *The People's Right to a Clean Environment*, *supra* note 117.

121. To its credit, § 27 did directly lead to the creation of the PA Department of the Conservation of Environmental Resources. *The People's Right to a Clean Environment*, *supra* note 117.

122. *Robinson Twp. v Commonwealth*, 83 A.3d 901, 964 (Pa. 2013) (citing *Commonwealth v. Nat'l Gettysburg Battlefield Tower, Inc.*, 311 A.2d 588, 595-99 (Pa.1973)).

123. *Robinson Twp.*, 83 A.3d at 965 (citing *Payne v. Kassab*, 312 A.2d 86, 94 (Pa. Cmwlth. 1973)). The court adopted a factor test for challenges under § 27 that demonstrates its powerlessness without concurrent legislation: "(1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources? (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?" *Id.* at 966 (quoting *Payne*, 312 A.2d at 94).

124. *Id.* (citing *Payne v. Kassab*, 361 A.2d 226,272-73 (Pa. 1976)).

125. *Robinson Twp.*, 83 A.3d 901.

that a Pennsylvanian can bring an action under the ERA under either a theory that the Commonwealth infringed on the citizen's environmental rights or that the Commonwealth breached its duties as a trustee.¹²⁶ As the trustee, it has a duty "to prevent and remedy the degradation, diminution, or depletion of our public natural resources . . . with prudence, loyalty, and impartiality," stemming either from its own official action or private destruction.¹²⁷ Yet, after *Robinson Township*, Pennsylvania trial and appellate courts have simply ignored this new framework and have proceeded under *Payne*.¹²⁸

Montana's ERA is approximately the same age as Pennsylvania's and has followed a similar path. Montana's ERA, however, was interpreted for the first time in 2023.¹²⁹ In that case, a Montana court invalidated a state law as violating the ERA.¹³⁰ In December of 2024, the Supreme Court of Montana affirmed in *Held v. State* the trial court's ruling that state statutes that prohibited consideration of greenhouses gas emissions in environmental reviews violated citizens' constitutional right to a "clean and healthful environment."¹³¹ Though the outcome in *Held* is encouraging, it is difficult to declare Montana's ERA effective after 50 years of dormancy and one legal success.

126. *Id.* at 913.

127. *Id.* at 957.

128. *See, e.g.,* Pa. Env'tl. Def. Fund v. Commonwealth, 161 A.3d 911 (Pa. 2017) (observing that "The Commonwealth Court . . . determined that its prior decision in *Payne v. Kassab*, (Payne I), controlled the questions presented in the case at bar, even though the plurality in *Robinson Township* criticized the test announced in *Payne I* as 'lack[ing] foundation' in Section 27.") (internal citations omitted).

129. Jeff Neal, *Big (Sky) Climate Win*, HARV. L. TODAY (August 22, 2023), <https://hls.harvard.edu/today/young-climate-activists-land-tentative-win-in-montana-constitutional-case/>; *see* *Held v. State*, CDV-2020-307 (Mont. 1st Jud. Dist. 2023).

130. *Held v. State*, CDV-2020-307 at 102.

131. *Held v. State*, 560 P.3d 1235, 1260-61 (Mont. 2024).

Finally, New York's ERA is still in its infancy.¹³² Some challenges brought under it are pending,¹³³ but even questions as to whose actions may be challenged under the ERA are unresolved,¹³⁴ so it is not yet ripe for an academic analysis.

In sum, ERAs are hindered by their attempt to codify a broad and poorly defined right to a clean environment without specific procedural rights. Moreover, in the context of Lakes protection specifically, the efficacy of state-based measures is hindered by the very nature of Federalism: because of their massive size, the Lakes require uniform measures to prevent damage by every one of the states and countries that border them.¹³⁵ Furthermore, states are expressly forbidden from engaging in foreign policy,¹³⁶ so cooperation with Canada to achieve a truly comprehensive scheme is impossible if left to the states. Even if state ERAs were to function perfectly as intended by their well-meaning drafters, they would still be ineffective in ensuring the health of the Lakes.

C. Rights of Nature Laws

Professor Christopher D. Stone proposed in 1972 a novel and promising formula for environmental protection: the granting of substantive rights to environmental features that are distinct from those of humans and other legal entities.¹³⁷ Though seemingly radical, Stone sees this proposition as nearly

132. Michael Murphy et al, *Decisions Expansively Interpreting New York's Green Amendment Create Uncertainty*, BEVERIDGE & DIAMOND (January 4, 2023), <https://www.bdlaw.com/publications/decisions-expansively-interpreting-new-yorks-green-amendment-create-uncertainty/>.

133. See e.g., *Fresh Air For the East Side, Inc. v. N. Y.*, Index No. E2022-000699 (Sup. Ct. Monroe Cty. 2022); Michael B. Gerrard and Edward McTiernan, *New York's Green Amendment: The First Decisions*, N.Y.L.J. (March 8, 2023).

134. See Murphy et al, *supra* note 132.

135. See *supra* Part II.

136. See, e.g., *U.S. v. Curtiss-Wright Export Co.*, 299 U.S. 304, 316 (1936) (noting that federal powers over foreign affairs are innate, and the colonies never had these powers even before the formation of the United States).

137. Christopher D. Stone, *Should Trees Have Standing? Towards Legal Rights for Natural Objects*, 45 S. CALIF. LAW REV. 450, 456 (1972).

inevitable.¹³⁸ After all, our conception of who (or what) is deserving of rights has been expanding steadily as history moves inexorably forward.¹³⁹ Rights are not limited to persons, as decided by the law, but the inverse: the concept of a person is defined by the holding of rights and is thus ripe for reform.¹⁴⁰

Professor Stone's thesis is not nearly as shocking as it may first seem. Rights are not currently, nor have they been for quite some time, held exclusively by natural persons.¹⁴¹ For example, the United States Supreme Court held in 1809 that a bank may bring suit in its own name, enforcing its rights without a named human plaintiff.¹⁴²

Such a proposition naturally begs the question: what are rights that an environmental feature can hold in the first place? No entity, human or otherwise, holds absolute rights—any human may be imprisoned after a fair trial, for instance—so conferring rights to natural features should elicit in the reader no fear that cutting down a tree will be prohibited.¹⁴³ Legal efforts at environmental protection are consistently stymied by their anthropocentrism: judgments are limited to injury to humans that are cognizable under existing tort schemes.¹⁴⁴ However, reliance on this facet of tort law often allows polluters to escape fully paying for their destruction as the complexity of environmental systems makes causation challenging for a plaintiff to prove.¹⁴⁵

138. *Id.* at 450.

139. Prof. Stone notes, for instance, that for most of history, a “child was less than a person: an object, a thing”. The child’s destiny was inextricably linked with the will of his or her parents. *Id.* at 451.

140. *See, e.g.,* Stone, *supra* note 137 at 454 (observing that Jews were once governed as “men ferae naturae”, subject to “a quasi-forest law”). Furthermore, despite refusing to extend substantive rights to Black people and woman, for instance, the Founding Fathers of the United States indeed guaranteed, at least in their own minds, the “inalienable rights of all men” because “emotionally, no one felt that [Black people and members of other excluded groups] were men”. *Id.* at 455, n. 24.

141. Examples include “trusts, corporations, joint ventures, municipalities, Subchapter R partnerships, and nation states.” *Id.* at 452.

142. *Bank of U.S. v. Deveaux*, 9 U.S. 61, 91 (1809).

143. Stone, *supra* note 137 at 457.

144. *Id.* at 474; *see, e.g.,* *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992); *Sierra Club v. Morton*, 405 U.S. 727 (1972).

145. Stone, *supra* note 137 at 474.

Furthermore, there are often no damages attributed to pollution that decimates animal populations, DDT killing eagles for example, as courts fail to recognize this as a loss to a legal entity, regardless of the actual harm it may do, both to humans and the environment writ large.¹⁴⁶ Thus, Stone proposes a piece of legislation that designates environmental destruction as an invasion of a property interest, in the same mold as intellectual property and privacy.¹⁴⁷

Asserted substantive rights are meaningless without procedural rights that allow the holder to enforce them. One must confront the fact that an environmental rightsholder is unable to speak for itself. Yet, many existing legal entities (corporations, infants, incompetent adults), are also unable to speak for themselves, and still hold enforceable rights.¹⁴⁸ Stone posits that the best solution is to statutorily¹⁴⁹ treat the environment like an incompetent adult: through the judicial appointment of a guardian.¹⁵⁰ An appointed guardian would of course be empowered to bring suit either for injunctive relief or damages in the environmental feature's name, but a long-term guardian may serve the additional function of representing the feature at a legislative hearing that may impact it, or exercising a right of inspection "to bring to the court's attention a fuller finding on the land [or feature's] condition."¹⁵¹

Uncaptured damages to the environment still present a long term cost to humanity, since "the survival of any part of the biosphere is dependent on

146. *Id.* at 475.

147. *Id.* at 476.

148. *Id.* at 464.

149. *Id.* at 465. A legislative action to appoint a guardian is the most foolproof: though some courts have in the past declared that certain nonhumans met the requirements for guardianship, legislation implementing it directly would eliminate the need for "bold and imaginative" lawyering. *Id.*

150. Stone, *supra* note 137 at 464. In his view, "when a friend of a natural object perceives it to be endangered, he [would] apply to a court for the creation of a guardianship". *Id.* These "friends" would most likely be environmental groups such as the Sierra Club, as they have both the interest and access to legal counsel to be effective guardians. *Id.* at 466.

151. *Id.* at 466. This advantage is in contrast with the proposition of other scholars and activists who advocate for a loosening of standing requirements, which would not confer such benefits. *Id.*

the wellbeing of the entirety”¹⁵² yet this cost is uncompensated in an anthropocentric scheme.¹⁵³ Capturing and compensating these damages require courts to go beyond costs that are “presently cognizable”—something they are often hesitant to do.¹⁵⁴ Yet, there are still instances of judicial willingness that can provide a model: pain and suffering damages in personal injury suits.¹⁵⁵ Awards for pain and suffering are a clear example of courts making “implicit normative judgments” as to the value of a thing that inherently lacks a price that can be determined by the market.¹⁵⁶ Stone advocates for courts setting these normative damages “on the high side,” but allowing for adjustments downward in the case of “immediate human interests.”¹⁵⁷

Were an environmental entity to be awarded damages, Stone would have the moneys placed into a trust to be administered by the entity’s guardian as opposed to government treasuries.¹⁵⁸ Success on claims for injunctive relief in every instance one is brought is an unrealistic proposition. Therefore, a mechanism whereby an entity may be awarded monetary damages, even if its destruction is not entirely prevented, is a useful half measure.¹⁵⁹ The funds in the trust would be distributed to cover guardianship and legal fees, as well as

152. Ryan et al, *supra* note 93 at 2551. This is perhaps most obvious in an example like the extermination of wolves in Yellowstone National Park, which led to an overpopulation of their prey that wrought havoc on flora and water systems in the park. Darryl Fears, *Decline of Predators Such as Wolves Throws Food Chains out of Whack, Report Says*, WASH. POST (July 14, 2011). One way that Stone conceptualizes the function of the guardian is by viewing him as the “guardian of unborn generations, as well as the otherwise unrepresented, but distantly injured, contemporary humans.” Stone, *supra* note 137 at 475.

153. See *supra* notes 143-146.

154. Stone, *supra* note 137 at 475.

155. *Id.* at 478-79.

156. *Id.* at 479 (observing that pain and suffering present an odd legal and moral quandary: whether the pain and suffering to non-human life forms should be considered in the damage amount, particularly given ever growing scientific understanding of how non-human life forms experience consciousness).; See, e.g., Robert W. Elwood, *Pain and Suffering in Invertebrates?*, 52 INST. OF LAB’Y ANIMAL RES. J. 175, 175 (2012). Stone demurs on this specific subject but does say that he is “prepared to [consider nonhumans’ pain] in principle” if not necessarily execution. Stone, *supra* note 137 at 479.

157. Stone, *supra* note 137 at 479.

158. *Id.* at 480.

159. *Id.* at 481.

costs associated with “preserv[ing] the natural object as close as possible to its condition at the time the environment was made a rights holder.”¹⁶⁰

However, the value in the guardianship scheme would not lay solely in the right to bring claims and collect damages, as the procedural rights that accompany it would be of similar utility. Even in circumstances where environmental damage lays outside the scope of rights granted to the natural feature, and litigation is merely delaying the inevitable, the accompanying factfinding during discovery can steer future policy decisions toward environmental protection.¹⁶¹ The credible threat of litigation and an unfavorable judgment, even if ultimately fruitless, “may encourage the institution whose actions threaten the environment to really *think about* what it is doing”¹⁶²

Some skeptical readers may ask why humanity would ever leverage its own legal systems and institutions to protect environmental features, thus knowingly abdicating some of its own autonomy. As Stone puts it: “What’s in it for us?”¹⁶³ The same logic would naturally apply to the 19th Century grant of personhood rights to African slaves, yet one who objects to environmental personhood is unlikely to object to extending personhood rights to the enslaved.¹⁶⁴ Furthermore, environmental issues that face humanity—both in Stone’s time and the 21st Century—are larger than can be encompassed by anthropocentric schemes: oceans are warming and aquatic species are dying, sea levels continue to rise and wreak havoc on maritime cities, and severe weather events grow more frequent, to name just a miserable few.¹⁶⁵ The far-reaching social changes needed to reverse, or at least pause these worrying trends will involve “a serious reconsideration of our consciousness towards the

160. *Id.* at 480. It also solves the thorny issue of how to pay out damages caused by the environment. *Id.* at 481.

161. *Id.* at 484.

162. Stone, *supra* note 137 at 484 (emphasis original).

163. *Id.* at 491.

164. *Id.*

165. *Id.* at 492-93.

environment”.¹⁶⁶ In a roundabout way, Stone’s scheme that would see humanity shed some of its dominance is perhaps the only way that the rights and livelihoods we so value can be protected for future generations.¹⁶⁷

Prof. Stone’s philosophy gained widespread attention remarkably quickly after its publishing¹⁶⁸ and has demonstrated considerable staying power within environmental legal circles.¹⁶⁹ Its influence is seen no more clearly than in Justice Douglas’ famous dissent in *Sierra Club v. Morton*, which heavily cited Stone’s article.¹⁷⁰ *Morton* deals with an action brought by the Sierra Club seeking to enjoin the building of a ski resort and highway in the pristine Mineral King Valley, California.¹⁷¹ The Court found that Sierra Club lacked standing to bring suit under the Administrative Procedure Act since there was “no allegation in the complaint that members of the Sierra Club would be affected by the actions of [the developer] other than the fact that the actions are personally displeasing or distasteful to them”.¹⁷² Echoing Stone, Justice Douglas would have found standing for Sierra Club to assert the

166. *Id.* at 493.

167. *See* Stone, *supra* note 137 at 499. Since Stone’s time, an even more robust understanding has come to light about the interrelatedness of all terrestrial environmental systems—and humanity is of course not exempt from this system. *See, e.g.*, Wolfgang Cramer et al, Climate Change and Interconnected Risks to Sustainable Development in the Mediterranean, 8 *Nature Climate Change* 972, 972 (2018) (observing that climate change is exacerbated by more than merely air pollution, but also “changes in land use . . . and declining biodiversity”).

168. Emily Langer, *Christopher Stone, Environmental Scholar who Championed Fundamental Rights of Nature, Dies at 83*, WASH. POST (May 19, 2021, 6:07 P.M.), <https://www.legalbluebook.com/bluebook/v21/rules/16-periodical-materials/16-6-newspapers>.

169. “Few law professors write anything of interest to the general public. And those [who] do might, if they are lucky, capture the public’s attention for a year or maybe two. Chris[topher Stone] is the unicorn in the legal academy who at the beginning of his legal career wrote [a] law review article that remains a classic’ half a century later, Richard J. Lazarus, a Harvard Law School professor, wrote in an email.” *Id.*

170. *See Sierra Club v. Morton*, 405 U.S. at 742 (1972) (Douglas, J., dissenting). Justice Douglas was a lifelong outdoorsman and staunch defender of America’s wild spaces. One anecdote tells of a time he, as a sitting Supreme Court justice, successfully persuaded the Washington Post editorial board to reverse its support of the creation of a highway that would destroy a hiking path along the C&O canal by inviting reporters out for a hike of the entire trail with him. *Justice William O. Douglas*, NAT’L PARKS SERV., <https://www.nps.gov/people/justice-william-o-douglas.htm> (last updated June 9, 2022).

171. *Morton*, 405 U.S. at 729-30 (majority opinion).

172. *Id.* at 730 (quoting *Sierra Club v. Hickel* 433 F.2d 24, 33 (9th Cir. 1970)).

Valley’s rights, which he seemed to understand as inherent,¹⁷³ because “those people who have a meaningful relation to that [environmental feature]—whether it be a fisherman, a canoeist, a zoologist, or a logger—must be able to speak for the values which the [feature] represents and which are threatened with destruction.”¹⁷⁴ The interconnectedness of natural systems and human destiny was not lost on Douglas either.¹⁷⁵

Rights of Nature Laws gradually shifted from the pages of academic journals to reality as the 21st Century progressed. For instance, in 2021, the municipality of Mingaine and the Innu Council of Ekuanitshit each passed congruent resolutions that grant legal rights to the Magpie River, which flows through Côte-Nord, Quebec, Canada.¹⁷⁶ The resolutions adopt Stone’s guardianship structure that permits advocacy for the river’s interest, particularly in the face of dam building.¹⁷⁷ Similarly, New Zealand enacted the Te Urewera Act of 2014 that vests Te Urewera National Park with “all the rights, powers, duties, and liabilities of a legal person.”¹⁷⁸ The Rights must be exercised by an appointed “Te Urewera Board”.¹⁷⁹ Some board members are appointed by the Tūhoe Te Uru Taumatua tribal authorities and another bloc are appointed by the Wellington government.¹⁸⁰ Internationally, Rights of

173. See *id.* at 742-43 (Douglas, J., dissenting).

174. *Id.* at 743. Douglas did not, however, seem to embrace Prof. Stone’s guardianship concept: “Those who hike it, fish it, hunt it, camp in it, frequent it, or visit it merely to sit in solitude and wonder are legitimate spokesmen for it, whether they be few or many”. *Id.* at 744-45. Later in the dissent, he tempered this somewhat by saying, “those who merely are caught up in environmental news or propaganda and flock to defend these waters or areas may be treated differently [when deciding whether to confer standing]”. *Id.* at 752.

175. Douglas wrote: “the river as plaintiff speaks for the ecological unit of life that is part of it”. *Id.* at 743.

176. Morgan Lowrie, *Quebec River Granted Legal Rights as Part of Global ‘Personhood’ Movement*, CAN. BROAD. CORP. <https://www.cbc.ca/news/canada/montreal/magpie-river-quebec-canada-personhood-1.5931067> (last updated February 28, 2021).

177. *Id.*

178. Te Urewera Act 2014 s 11(1) (NZ).

179. *Id.* s 11(2)(a)

180. *Id.* s 21(1).

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Nature Laws often serve to codify indigenous conceptions of environmental protection.¹⁸¹

In the United States, some rights of nature law exist on the municipal level—like the LEBOR—but often they are invalidated when they are tested in court due to shoddy drafting and a faulty strategy focusing on legislation at the municipal level, robbing them of their potential. At the forefront of the Rights of Nature movement in the United States is the Community Environmental Legal Defense Fund (“CELDF”).¹⁸² The organization partners with municipalities and interest groups to draft and advocate for Rights of Nature Laws.¹⁸³ In addition to the LEBOR,¹⁸⁴ CELDF has had its ordinances successfully enacted across the country, largely in Rust Belt municipalities.¹⁸⁵ Its ordinances tend to lean toward anthropocentrism, framing the rights of the environment within the context of the citizen’s “Right to Local Self Government.”¹⁸⁶ Grant Township, Pennsylvania enacted one such ordinance, which was unsuccessful in its attempt to allow a local environmental group to intervene in a lawsuit on behalf of a threatened local watershed.¹⁸⁷ The ordinance was invalidated by a federal court on similar grounds as the LEBOR.¹⁸⁸ It later enacted a substantially similar home rule charter that confers on “natural communities and ecosystems within Grant Township . . .

181. See, e.g., *id.*; Lowrie, *supra* note 176; Ryan et al, *supra* note 93 at 2515 (discussing Bolivia’s codification of indigenous environmental values.).

182. See *About CELDF*, CMTY. ENV’T LEGAL DEF. FUND <https://celdf.org/about-celdf/> (last visited December 31, 2023).

183. *Id.*

184. *Lake Erie Bill of Rights!*, CMTY. ENV’T LEGAL DEF. FUND (January 27, 2019) <https://celdf.org/2019/01/lake-erie-bill-of-rights/#:~:text=The%20Lake%20Erie%20Bill%20of,rights%20to%20exist%20and%20flourish.>

185. See *Where we Work*, CMTY. ENV’T LEGAL DEF. FUND <https://celdf.org/where-we-work/> (last visited December 31, 2023).

186. HOME RULE CHARTER OF THE TWP. OF GRANT, IND. CNTY., Pa., Art. I § 102. (hereinafter “Grant Home Rule Charter”).

187. *Pa. Gen. Energy Co. v. Grant Twp. E. Run Hellbenders Soc’y, Inc.*, 658 F. App’x. 37, 42 (3d Cir. 2016).

188. See *Pa. Gen. Energy*, 2017 WL 1215444, at *37.; Grant Home Rule Charter Art. IV.; *Drewes Farm*, 411 F.Supp at 557.

the right to exist, flourish, and naturally evolve.”¹⁸⁹ It creates both a criminal offense enforceable by the Township and a cause of action by private citizens.¹⁹⁰ The Township did see a temporary legal victory when the DEP rescinded the fracking permit in 2020 citing prohibitions in the Charter.¹⁹¹ This victory was ultimately pyrrhic, because even though PGE permanently plugged the controversial well, the Charter was ultimately ruled unconstitutional for similar reasons to the LEBOR.¹⁹² In sum, Stone’s promising framework has been consistently let down by the CELDF’s formulaic strategy that pairs ineffectual drafting of right of nature ordinances with a strategy centered on municipalities that lack the authority to enact them to begin with.

VI. A FEDERAL STATUTORY GRANT OF RIGHTS TO THE LAKES

A different strategy to implement Rights of Nature laws holds more promise: federal legislation that grants substantive right to the Lakes in a way that more closely follows Stone’s vision than CELDF legislation. This article in no way attempts to argue that *Drewes Farms*, which invalidated the LEBOR, was wrongly decided—quite the contrary. The LEBOR’s inadequacies are both numerous and glaringly fatal, and as the court noted, “[it] is not a close call”.¹⁹³ Instead, the philosophy and policy motivations behind the LEBOR provide a compelling framework for federal legislation that would be able to overcome the failings of the LEBOR and adequately protect the Lakes. If subsequent drafters at the federal level can do so more carefully than the drafters of the

189. Grant Home Rule Charter Art. I § 106.

190. *Id.* Art. III § 303.

191. 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].

192. PGE, the fracking company, discovered a gas leak in the well and plugged it in 2023. Patrick Varine, *Injection Rejection: Indiana County Community Pushes Back Against Fracking Residue Well*, PITT. TRIBUNE-REV. (June 22, 2023 5:01 a.m.) <https://triblive.com/local/regional/injection-rejection-indiana-county-community-appeals-presence-of-fracking-residue-well/>.

193. *Drewes Farms*, 411 F.Supp. at 558.

LEBOR, and more in line with the principals enumerated in Stone's article, such legislation is the best tool to preserve the vitality of the Lakes.

First, judicially appointed guardians with the power to procedural rights—consistently missing from CELDF legislation¹⁹⁴—would serve a broad investigative function to monitor the health of the Lakes even without litigation.¹⁹⁵ Despite its near inability to actually enforce the terms of the Great Lakes Water Quality Agreement,¹⁹⁶ the IJC's investigative role has repeatedly led to shifts in public opinion and policy toward increased protections as a result of its findings.¹⁹⁷ A similarly well-funded party like the guardian,¹⁹⁸ particularly one that was not rendered powerless, holds similar if not greater potential. And because the grant would not be so narrow as to limit its reach to the discharge of specific substances like Clean Water Act, a substantive grant will be more capable of responding to as of yet unknown threats to the Lakes without additional legislative wrangling. It is also worth noting that the adoption of such a statute does not mean the displacement of extant measures like the Clean Water Act, merely an additional tool in the arsenal of those concerned for the Lakes.

Further, the creation of a Great Lakes Trust would function as a mechanism by which polluters can directly bear the cost of remedying their destruction.¹⁹⁹ The enforcement provisions of the Clean Water Act are disconnected from the actual costs of environmental destruction: the EPA is empowered to bring suit only for injunctive relief and impose penalties based on the *mens rea* of the polluter.²⁰⁰ The trust structure creates a neat closed loop

194. See generally TOLEDO, OH., MUN. CODE ch. XVII, § 253 (2019).; HOME RULE CHARTER OF THE TWP. OF GRANT, IND. CNTY., Pa., Art. I § 102.

195. Stone, *supra* note 137 at 484; see also Desmond Nichols, *After LEBOR: Can the Rights of Nature Movement Stand Back Up?*, 74 FLA. L. REV. 699, 727 (2022).

196. Hall and Houston, *supra* note 69 at 734-35

197. See *id.* at 732.

198. See Stone, *supra* note 137 at 466.

199. But see Stone, *supra* note 137 at 478-79 (discussing the challenges of estimating the monetary value of injuries).

200. Clean Water Act, Pub. L. No. 92-500, 86 Stat. 816 § 309(a) (1972); but see § 309(d) (providing additional factors to determine civil penalties in addition to mens rea).

where damages collected would be reinvested in the Lakes²⁰¹ as opposed to deposited in the U.S. Treasury with an unclear final destination. Thus, polluters are not only deterred, but the resultant environmental damage can be at least partially remedied.

Because of the grandiosity and economic importance of the Lakes, their protection by a grant of substantive rights could also be viewed as a merely a first step (albeit a significant one) in humanity's reorientation toward governance with an increased focus on how humans fit into grand environmental systems.²⁰² The sheer number of entities that interact with the Lakes,²⁰³ and who would now be forced to consider their rights and how human interactions impact them, would be a strong mental primer for how to view their interactions with other environmental features.²⁰⁴ Such a reformulation is vital for effective policy choices to reverse climate change and similar impending disasters.²⁰⁵

The LEBOR's implementation at a local level left it with virtually no chance of standing up to legal scrutiny.²⁰⁶ Legislation passed at the federal level is the most promising manner of implementing Stone's framework.²⁰⁷

The federal government exercises significant power over the Lakes through its Commerce Clause power.²⁰⁸ Congressional power to regulate influences on interstate commerce includes preventing environmental

201. See Stone, *supra* note 137 at 480.

202. See *id.* at 499.

203. See *supra* Part II.

204. See Stone, *supra* note 137 at 499.

205. See *id.*

206. *Drewes Farms*, 411 F.Supp. at 557.

207. But see Nichols, *supra* note 195 at 724 (arguing that a state constitutional implementation is most favorable because of the "difficulty of changing federal law"). Nichols' concerns are ultimately valid but given the massive potential benefits of a federal statute, I am unable to acquiesce to lesser.

208. "[The Congress shall have Power] To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes". U.S. CONST. ART. I, § 8, cl. 3.

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destruction.²⁰⁹ Such environmental regulation is among Congress's most expansive subsets of the Commerce Clause, and the United States Supreme Court has yet to delineate an upper bound to it.²¹⁰ Further, federal preemption of conflicting state law allows a piece of federal legislation to apply equally to the geographic area of the lakes,²¹¹ which would ameliorate instances like Ohio's refusal to adequately regulate pollution from nonpoint sources.²¹²

The Commerce Clause also grants the federal government exclusive right to regulate commerce with Native American tribes²¹³ and to execute treaties.²¹⁴ Since the 1980s, the Federal Government has dealt with the tribes on a "government to government basis,"²¹⁵ delegating primary environmental policymaking to the tribes within their territories, but with the EPA continuing to assist and manage their implementation.²¹⁶ One such program is the Chippewa Ottawa Resource Authority, which manages fisheries, protects water qualities, and fights invasive species through promulgation and enforcement of its own regulations.²¹⁷ Treaties and executive agreements both preempt conflicting state law.²¹⁸ Municipal and state government's lack of treaty power also prevents cooperation with Canada that would ideally expand the LEBOR to an international scale or a strengthening of the IJC into an effective regulatory body.²¹⁹ Federal treaty power also allows implementation

209. Hall and Houston, *supra* note 69 at 735 (citing *Hodel v. Va. Surface Mining & Reclamation Ass'n, Inc.*, 452 U.S. 264 (1981)).

210. *Id.*

211. See U.S. Const. Art. VI, cl. 2 (The Supremacy Clause). "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the Supreme law of the land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." *Id.*

212. See 33 U.S.C. § 1362(14); text accompanying *supra* note 31.

213. U.S. CONST. ART. I, § 8, cl. 3.

214. U.S. CONST. ART. II, § 2.

215. Hall and Houston, *supra* note 69 at 759 (citing Jacqueline Phelan Hand, Protecting the World's Largest Body of Fresh Water: The Often Overlooked Role of Indian Tribes' Co-Management of the Great Lakes, 47 NAT. RESOURCES J. 815, 817-18 (2007)).

216. *Id.*

217. *Id.* at 760 (citing Hand, *supra* note 215 at 822).

218. See, e.g., *Mo. v. Holland*, 252 U.S. 416 (1920).

219. See U.S. CONST. ART. II, § 2; Hall and Houston, *supra* note 69 at 731.

into American Indian territories,²²⁰ and across international borders, which would be impossible otherwise.

Another fatal flaw of the LEBOR was in its drafting: it is unconstitutionally vague.²²¹ Specifically, it lacks any measure which a judge could use to determine if a defendant had indeed violated the Lake's right to "exist, flourish, and evolve naturally" or what size fine to levy against a guilty defendant.²²² Thus, any subsequent statute that defined its contents based on objective measurements would necessarily overcome this challenge.²²³ A successful statute could, for example, create a civil cause of action to recover damages for injury to its property interest in itself in the case of release of a toxin detrimental to eagles that feed on fish in its waters, so long as the statute defines the "property interest" protected to explicitly include said bird populations.²²⁴ Similarly, if the statute included "clean water" with the protected property interest, it could define the bounds of that interest based on the list of harmful pollutants defined by the IJC in a given period.

Opponents of Rights of Nature laws often cite fears of a "flood of litigation" resulting from the passage of such statutes as a reason to oppose them.²²⁵ This fear is valid in an expanded standing approach that lacks a de jure guardian,²²⁶ but not so under Stone's guardianship approach. Given that only the guardian can bring suit in the Lake's name,²²⁷ he has an incentive to only bring suit against the most egregious polluters in order to conserve trust resources, as opposed to expending them on low value cases, or when the stakes

220. See U.S. CONST. ART. II, § 2. This is likely to be a compelling proposition, as Rights of Nature Laws are more familiar conceptualizations of many traditional indigenous culture's relation to the natural world. See, e.g., , Julian Brave Noisecat, *The Western Idea of Private Property is Flawed. Indigenous Peoples Have it Right*, THE GUARDIAN (March 27, 2017) <https://www.theguardian.com/commentisfree/2017/mar/27/western-idea-private-property-flawed-indigenous-peoples-have-it-right>.

221. *Drewes Farms*, 411 F.Supp. at 558.

222. *Id.* at 556.

223. See generally *FCC v Fox TV Stations, Inc.*, 567 U.S. 239 (2012).

224. See Stone, *supra* note 137 at 476.

225. See, e.g., *Morton*, 405 U.S. at 740.

226. See Stone, *supra* note 137 at 470-71.

227. *Id.*

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are otherwise low. Furthermore, a credible threat of litigation is often sufficient to scare potential defendants to change their actions, avoiding judicial involvement in the first place.²²⁸

VII. CONCLUSION

Professor Stone's philosophy articulated in *Should Trees Have Standing?* constructs a promising foundation on which to build the future of the environmental movement. However, in the United States, this promise has so far been squandered by activist groups that embrace only the broad strokes of Stone's philosophy, ignoring the vital procedural aspects and executory institutions like de jure guardianship and trust structures. Nor is their case helped by sloppy drafting.

The Lake Erie Bill of Rights is perhaps the most frustrating example: its structure and legislative acknowledges the need for comprehensive reform that complements the size and outsized importance of the Great Lakes and fills vital gaps in the nation's current regulatory structure.

Without a shift toward advocacy on the federal level, the generally popular²²⁹ movement is in real danger of being snuffed out. The movement should advocate for a federal statute that creates a guardianship structure, trust, and procedural rights like inspection during discovery to empower the Lakes, as a newly minted legal entity, to collect and utilize remote damages that would not be captured in a homocentric scheme.

Implementation at the federal level also provides an opportunity to use Constitutional treaty power to further empower the IJC, which can continue its investigative function and resolve international disputes that arise because of the novel regulatory scheme. Further, federal implementation would provide an opportunity to incorporate American Indian tribes into the novel scheme.

228. See *id.* at 481.

229. See, e.g., Michael Lee, *Movement to Give 'Nature' Same Rights as Humans Gains Steam in US*, Fox News (December 10, 2023) <https://www.foxnews.com/us/movement-give-nature-same-rights-humans-gains-steam>.

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Considering the ever more ominous threat posed by anthropogenic climate change, a scheme such as this would be adaptable to future challenges without needing explicit modification, merely adept lawyering. In the long run, it would not only foster a brighter future for the Lakes but help humanity in return by providing a pivot point to change how we mentally position ourselves in relation to our environment, perhaps playing a part to being to reverse course of Earth's destruction.