

People *and* Penguins: The Case for an Environmentally Conscious Property Law

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The development of environmental law starting in the mid-20th century involved constant tension with private property. Attempts to protect the dwindling natural resources, extinct species of animals, and ecosystems at risk have often encountered obstacles when they demanded interference with private property. Although the theoretical roots of private property do not justify its transformation into an environmental obstacle and, to a large extent, attach importance to environmental values in justifying private property rights, it was private property that stood at the forefront of legal conflicts that revolved around attempts to expand the environmental protection of natural resources.

The reason for turning private property into an obstacle to a proper environmental policy stems from adopting a concept according to which private property protects only human interests and values. In contrast, environmental interests that cannot be converted into human terms remain outside private property boundaries. This either-or concept, or as William Baxter termed it in 1974, “peoples or penguins,” harms the ability of courts and other decision-makers to implement a proper and effective environmental policy because it prioritizes human interests over those of nature and its resources.

This Article claims there is no reason for the decision-makers to be forced to choose between people and penguins since the interests of both humans and nature can normatively, and practically should, find expression in private property. Private property as a legal institution is an arena for value discussion as well as for making balances between values that are perceived as necessary for society. The exclusion of environmental values from the value clarification conducted to define the scope of property rights is not only a normative failure but also harms the ability to deal effectively and adequately with pressing environmental challenges. The internalization of environmental values into private property, along with human (owner

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freedom) and social values (such as efficiency and shared welfare), will enable a proper definition of property rights and will provide courts and other decision-makers with the means to formulate, and implement, a proper environmental policy.

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INTRODUCTION

When environmental threats intensify and the need for a normatively desired and practically effective environmental law increases, property law is often conceived as an obstacle to proper and efficient environmental policy. This is because environmental challenges often require government interference with private property in a way that limits the ability of the owners to use their property in the manner to which they are accustomed, thus harming their expectations as to the use of their property. The Supreme Court's recent ruling in *Sackett v. EPA*¹ demonstrates this tension.

The Sacketts purchased a plot of land near Priest Lake in Bonner County, Idaho in 2014 and prepared to build their home by backfilling their property with dirt and rocks.² A few months later, the Environmental Protection Agency ("EPA") informed the Sacketts that because their property contained protected wetlands, their backfilling violated the Clean Water Act ("CWA"). The compliance order required the Sacketts to "undertake activities to restore the Site."³ The EPA's instruction is part of a struggle to prevent environmental damage to wetlands. The Sacketts, for their part, claimed that they were interested in realizing their expectations as property owners to build their home on their property.⁴ The Supreme Court ruled that the EPA's interpretation of the term "waters of the United States" was incorrect, and therefore that the effects of this term on adjacent lands and corresponding restrictions were invalid.⁵ The five-to-four majority opinion held that "the CWA extends to only those 'wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right,' so that they are 'indistinguishable' from those waters."⁶ Nevertheless, *Sackett v. EPA* is just one of many examples of the tension between the desire to promote an effective environmental policy and the need to respect private property rights. When considering this tension, private property sometimes takes on the role of the villain.

Although private property is seen as an obstacle to formulating a proper environmental policy, the theoretical development of property law shows that environmental challenges and the importance of preserving natural resources

1. *Sackett v. EPA*, 598 U.S. 651 (2023).

2. *Id.* at 662.

3. *Id.*

4. Supplemental Complaint for Declaratory and Injunctive Relief at 7, *Sackett v. EPA*, No. 2:08-cv-00185-N-EJL, 2015 WL 6599237 (D. Idaho Apr. 27, 2015).

5. *Sackett*, 598 U.S. at 678–79.

6. *Id.*

played a significant role in shaping the right to property in the Western world.⁷ Some of the prominent property theories that have shaped Western legal thought on property not only recognized the importance of preserving the environment and natural resources, but also shaped the boundaries of property rights to preserve them.⁸ For example, the so-called Lockean proviso states that, while individuals have a right to appropriate private property from nature by mixing their labor with it, they can do so only “at least where there is enough and as good left in common for others.”⁹ Utilitarian theories of property, such as the one proposed by Garrett Hardin, described the depletion of natural resources as a tragedy and saw this as the main reason for establishing a private property regime.¹⁰ These essential insights, which have underlain prominent property theories for centuries, have been incorporated into some modern property theories, the most prominent of which is the progressive theory.¹¹ However, even property theories that refer to environmental values do so marginally when environmental considerations are conceived as one of the community’s many needs to which property owners are obligated.¹²

Currently, two prominent approaches dominate legal efforts to confront environmental challenges that require interference with private property. One approach proposes dealing with environmental challenges from the inside, integrating them into the value balance held within the right to property.¹³ According to this view, environmental values should be taken into account when defining the scope of a property right.¹⁴ Therefore, just as property owners are obligated to a certain extent to the needs of others, they must be seen as at least partially bound to assist with environmental challenges.¹⁵ This approach finds expression in the doctrine of public trust, which allows

7. See, e.g., JOHN LOCKE, SECOND TREATISE OF GOVERNMENT (Richard Cox ed., Harlan Davidson, Inc. 1982) (1689).

8. See, e.g., *id.*

9. *Id.* at 18.

10. Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243, 1244–45 (1968).

11. Gregory S. Alexander et al., *A Statement of Progressive Property*, 94 CORNELL L. REV. 743, 743 (2009) (“Property implicates plural and incommensurable values. Some of these values promote individual interests, wants, needs, desires, and preferences. Some promote social interests, such as environmental stewardship . . .”).

12. Gregory S. Alexander, *The Social-Obligation Norm in American Property Law*, 94 CORNELL L. REV. 745, 749 (2009) (“Property rights and their correlative obligations are cognizable as social goods, worthy of vindication by the state, only insofar as they are consistent with community and human flourishing more generally.”).

13. *Id.* at 796.

14. *Id.* at 799.

15. *Id.*

specific protection of natural resources and assumes public rights and limitations on private property concerning specific natural resources.¹⁶ However, this view, including how courts and other decision-makers interpret the public trust doctrine, reflects an anthropocentric view, which gives importance to human interests only.¹⁷ This way of thinking, therefore, assimilates the challenges of the environment into the internal property balance only insofar as these challenges can be converted into human values.

A completely different approach to dealing with the tension between environmental challenges and private property stems from an ecocentric view that assigns intrinsic value to all forms of life and nature and does not assign a unique role or value specifically to humans.¹⁸ Proponents of this approach suggest several mechanisms for dealing with environmental challenges. One such mechanism establishes the superiority of environmental challenges over property rights, arguing that while environmental challenges are certain and scientifically confirmed, the right to property is a social determination.¹⁹ Proponents of this view suggest that the certainty of environmental threats should prevail over social judgment.²⁰ Another mechanism adopted by the proponents of the ecocentric approach, which is gaining ground in American politics and law, calls for the recognition of the rights of nature.²¹ Although the rights of nature have been recognized among indigenous societies for

16. 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, 2467–69 (2021).

17. *Id.* at 2451 (“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.”).

18. Joe Gray et al., *Ecocentrism: What It Means and What It Implies*, 1 *ECOLOGICAL CITIZEN* 130, 130 (2018) (“Ecocentrism sees the ecosphere—comprising all Earth’s ecosystems, atmosphere, water and land—as the matrix which birthed all life and as life’s sole source of sustenance. It is a worldview that recognizes intrinsic value in ecosystems and the biological and physical elements that they comprise, as well as in the ecological processes that spatially and temporally connect them. So when human wants clash with the health of the Earth as a whole or any of its ecosystems, the former should, practically and ethically speaking, give way to the latter: human needs, like the needs of other species, are secondary to those of the Earth as the sum of its ecosystems.”).

19. See, e.g., David B. Hunter, *An Ecological Perspective on Property: A Call for Judicial Protection of the Public’s Interest in Environmentally Critical Resources*, 12 *HARV. ENV’T L. REV.* 311, 313 (1988); J. Peter Byrne, *Green Property*, 7 *CONST. COMMENT.* 239, 244–45 (1990).

20. Hunter, *supra* note 19, at 313 (“The public should have a right in the ecological integrity of land on which our survival depends.”).

21. Ryan et al., *supra* note 16, at 2500–13 (providing a comprehensive review of the origins and the characteristics of the rights of nature movement worldwide and in the United States).

centuries,²² in recent years, they have become one of the most significant political and legal instruments for dealing with environmental challenges.²³ Granting the rights of nature to environmental resources, ecological and biological systems, and animals provides them with a voice within the liberal discourse of rights. According to the ecocentric approach, the rights of natural resources and animals are balanced with the right to private property.

This Article reviews these two approaches to dealing with the tension between environmental challenges and property rights. Both fail to suggest a normatively desired and practically applicable framework to overcome or reduce this tension. The pressing environmental challenges and ongoing environmental damages, some of which are irreversible, pile up daily and no longer allow for theoretical trial and error. The looming environmental threat becomes more acute when a normatively appropriate, practically effective solution is waiting to be implemented.

Through understanding the established role of the environment and the preservation of its resources in the historical and theoretical development of property laws in the Western world, the Article proposes to integrate environmental values that call for the preservation of the environment and its protection from harm into the internal property value balance. Assimilation of environmental values into the value balance conducted when determining the scope of property rights by the decision-makers or when judicially resolving a property dispute will give these pressing challenges a place at the table. Just as social and human values are considered in the course of such a balancing, reflecting societal recognition that such values are significant and worthy of protection, so too should equally valuable environmental concerns enter into the property calculus.

This proposal establishes a proper normative infrastructure for considering the tension between property rights and environmental concerns because it allows society, judges especially, to weigh all considerations and balance all the values that find expression in the conflict. Furthermore, the framework also sharpens the role of property as an arena for reconciling conflicting values, whose limits, including the degree of protection extended to property owners, are socially determined. Just as society considers social and human factors, it can also consider environmental considerations, even if these cannot be converted into human and social terms. Incorporating environmental values into the value balance held within the right to property

22. *Id.* at 2502.

23. *See id.* at 2521–38 (providing a comprehensive review of legal action around the United States where parties have asserted the rights of nature).

strengthens the ability of courts and other decision-makers to provide a more appropriate result from a normative point of view after balancing all social, human, and environmental values.

Additionally, incorporating environmental values into the value balance conducted within a property right establishes an efficient and effective action mechanism for dealing with pressing environmental challenges and preventing irreversible environmental damage. Incorporating environmental values into the set of values according to which the scope of the right to private property is determined allows courts and other decision-makers to act quickly against the realization of environmental threats. In this sense, the internal property discussion provides coherent and rapid value balance and determination. Courts and other decision-makers will no longer be required to wait until the rights of nature mature politically or legally or until the right to property is balanced against external values and rights. Internalizing environmental considerations into the property value assessment, in this sense, removes the practical shackles from the hands of courts and other decision-makers and provides them with instruments to deal effectively with environmental challenges.

This Article is structured as follows: Part I illustrates the tension between attempts to formulate an effective environmental policy and the right to private property. This chapter illustrates the various instances in which dealing with environmental challenges requires government interference with private property. Part II suggests that the tension between environmental preservation and private property is not inevitable while illustrating how prominent property theories not only address the importance of preserving natural resources but also perceive the environment and its preservation as part of the factors shaping the scope of the right to private property.

Part III reviews the two approaches that currently dominate efforts to deal with environmental challenges, which require interference with private property. These are (1) the anthropocentric approach that calls for incorporating environmental values into the value balance held within the right to property, only as long as these can be converted into human values; and (2) the ecocentric approach, which considers environmental values as external to private property and offers mechanisms for balancing these values externally.

Part IV proposes to incorporate environmental values among those values balanced within the right to property. Incorporating environmental values into the internal balance of the right to private property allows for creating a desirable and pragmatic framework for dealing with the pressing environmental challenges without falling into the trial-and-error process that existing mechanisms engender. Part V discusses the practical implications of

implementing the proposal detailed in Part IV; among others, the possibility of rethinking the discrepancy between the state's police power and takings power and the elimination of the need to grant a designated right of standing to authorities or individuals before dealing with pressing environmental challenges.

I. IT'S COMPLICATED: WHY PRIVATE PROPERTY IS SEEN AS A VILLAIN
IN THE ENVIRONMENTAL NARRATIVE

In recent decades, the scientific, political, and social awareness of the importance of preserving natural resources and the severe consequences of actions that damage those resources on various ecological and biological systems have increased.²⁴ The rise of scientific and social awareness led to a discussion about the role of the law in dealing with environmental threats and how these threats, and the damages involved in their realization, affect legal doctrines in various fields.²⁵ The development of environmental laws in the United States shows the growing importance that courts and other decision-makers attach to environmental threats and the consequences of their realization on society.²⁶ At the same time, this extensive set of federal laws, state legislation, and federal, state, and local regulation often conflicts with legal doctrines rooted in the American legal tradition.²⁷ One of the most

24. A comprehensive series of polls conducted by Gallup starting in 1985 reveals that the American public is aware of the importance of environmental challenges, and most believe that environmental protection should be given priority, even at the risk of curbing economic growth. At the same time, alongside the awareness of the environmental challenges and the consensus among the scientific community regarding the consequences of global warming, the findings of the surveys reveal that the American public remains politically divided regarding the proper handling of these challenges. See *Environment*, GALLUP (2023), <https://news.gallup.com/poll/1615/Environment.aspx> [<https://perma.cc/4DRR-9CGF>].

25. For the development of American environmental law see Richard J. Lazarus, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law's First Three Decades in the United States*, 20 VA. ENV'T L.J. 75 (2001).

26. *Id.* at 78 ("These first-generation laws were also remarkably aspirational in scope and in their mandates. The standards, and corresponding deadlines for their accomplishment, were exceedingly ambitious, if not unrealistic. Indeed, as discussed below, although such ambitious laws necessarily made a strong symbolic societal statement regarding the importance of environmental protection and the need for fundamental change in humankind's relation to the natural environment, they also unwittingly triggered a pathological cycle of crisis, controversy, and public distrust, which has since hampered needed reform.").

27. *Id.* at 88.

prominent legal fields that experiences continuous conflicts with environmental law is property.²⁸

Environmental law often challenges property law when governments aiming to exercise environmental policies are required to interfere with private property. Such interference may take several forms. One prominent conflict between environmental decision-making and property law arises when governments aim to change land uses in a way that harms property owners' expectations regarding their use of their property. This conflict was at the center of the Supreme Court ruling in *Lucas v. South Carolina Coast Council*,²⁹ where the South Carolina legislature enacted a law that established new rules regarding the development of coastal zone land that qualified as a "critical area."³⁰ Lucas, who bought two residential lots on a South Carolina barrier island, intended to build single-family homes like those on the adjacent parcels.³¹ The legislative change "brought Lucas's plans to an abrupt end."³²

Whether the law for preserving coastal areas arose from ecological reasons only or included economic reasons (protecting the public from shoreline erosion and coastal hazards),³³ Lucas's case reflects a conflict between accommodating environmental challenges and private property rights. Although Lucas did not argue against the law's constitutionality, he filed a lawsuit contending that the Beachfront Management Act's construction bar affected the taking of his property without just compensation.³⁴ The *Lucas* Court examined the consequences of the new law on Lucas's right to property. It established a categorical rule that the owner's right to compensation for taking property must be recognized when the government creates a regulation that negates all economically beneficial use of a

28. *Id.* ("The emergence of environmental law in the United States underwent, especially in the second decade, a general process of assimilation as the teachings and values of environmentalism infused one category of legal rules after another, transforming our nation's laws in response to the public's demand for environmental protection. . . . It challenged . . . property law rules that promoted environmentally destructive activities . . .").

29. *Lucas v. S.C. Coastal Council*, 505 U.S. 1003 (1992).

30. *Id.* at 1007–08.

31. *Id.* at 1008.

32. *Id.*

33. *Id.* at 1024 ("It is quite possible, for example, to describe in *either* fashion the ecological, economic, and esthetic concerns that inspired the South Carolina Legislature in the present case. One could say that imposing a servitude on Lucas's land is necessary in order to prevent his use of it from 'harming' South Carolina's ecological resources; or, instead, in order to achieve the 'benefits' of an ecological preserve.").

34. *Id.* at 1009.

property.³⁵ The categorical rule established in *Lucas* is intended to refine what was established in one of the milestone rulings of the Supreme Court in *Village of Euclid v. Ambler Realty Company*.³⁶ In *Euclid*, the Supreme Court held that redetermination of land uses, and the practice of zoning, should be considered an exercise of the state police power.³⁷ However, *Lucas* also sharpens the conflict between environmental challenges and the right to private property and highlights the difficulties faced by decision-makers seeking to deal with environmental challenges that require intervention in private property. As Secretary of the Interior Rogers Morton argued: “Land use, in fact, is the key to all the rest of our environmental problems.”³⁸

A somewhat different manifestation of the tension between environmental challenges and the right to property arises in situations where authorities do not necessarily change land uses, but rather impose restrictions, permanent or temporary, on the ability of the owners to use their property. Temporary restrictions of this kind were the focus of the Supreme Court’s ruling in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*.³⁹ In *Tahoe-Sierra*, the Regional Planning Agency imposed two moratoria on development in the Lake Tahoe Basin while formulating a comprehensive land-use plan for the area.⁴⁰ The length of time in which both moratoria applied amounted to thirty-two months.⁴¹ The moratoria affected property owners in the Lake Tahoe Basin, as they could not develop their property during the period. They filed a compensation claim, arguing that the moratoria constituted, in practice, a taking of property under the Fifth Amendment.⁴² The Supreme Court rejected the property owners’ claim in *Tahoe-Sierra* because not every impairment of the ability to use the property should be considered a taking of property, regardless of its duration and scope.⁴³ However, the ruling once again manifests the tension between the

35. *Id.* at 1016 n.6 (“A statute regulating the uses that can be made of property *effects a taking if it ‘denies an owner economically viable use of his land.’*” (quoting *Keystone Bituminous Coal Ass’n v. DeBenedictis*, 480 U.S. 470, 495 (1987))).

36. *Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926).

37. *Id.* at 387 (“The ordinance now under review, and all similar laws and regulations, must find their justification in some aspect of the police power, asserted for the public welfare.”).

38. Rogers C.B. Morton, Letter to the Editor, *Secretary of the Interior on the Land Use Policy*, WASH. POST, Jan. 4, 1972, at A13.

39. *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Plan. Agency*, 535 U.S. 302 (2002).

40. *Id.* at 306.

41. *Id.*

42. *Id.*

43. *Id.* at 341–42; *see also id.* at 324 n.19 (“Of course, from both the landowner’s and the government’s standpoint there are critical differences between a leasehold and a moratorium.

recognized need to deal with the environmental challenges and the owners' property rights. As in *Lucas*, the desire to implement a policy that will benefit the environment often requires governmental interference with private property. Along with the fact that interference with constitutional rights should be done cautiously, this tension also serves as a barrier, or at least an obstacle, to proper and efficient environmental policy.

A third manifestation of the tension between efficient and proper environmental policy and private property finds expression in environmental requirements imposed by governments and local authorities on owners as a precondition to development or building permits.⁴⁴ Exactions can require owners to obtain approvals from various environmental authorities (such as state coastal councils and preservation action councils) or to convey to the government money or real property in exchange for the grant of a discretionary development permit.⁴⁵ In the latter case, the justification for the exaction is that the government can and will use the property to mitigate some public harm from the proposed development.⁴⁶ Exactions constitute a specific category within regulatory takings, and the Court established a different analysis to determine whether the conditions placed on property owners for development and construction constitute a taking.⁴⁷ *Nollan v. California Coastal Commission*⁴⁸ and *Dolan v. City of Tigard*⁴⁹ set forth unique rules for assessing when an exaction should be considered a taking, and therefore

Condemnation of a leasehold gives the government possession of the property, the right to admit and exclude others, and the right to use it for a public purpose. A regulatory taking, by contrast, does not give the government any right to use the property, nor does it dispossess the owner or affect her right to exclude others.”).

44. See, e.g., Timothy M. Mulvaney, *The Remnants of Exaction Takings*, 33 ENVIRONS: ENV'T L. & POL'Y J. 189, 229 (2010) [hereinafter Mulvaney, *Remnants of Exaction Takings*]; Timothy M. Mulvaney, *The State of Exactions*, 61 WM. & MARY L. REV. 169, 174 (2019) [hereinafter Mulvaney, *State of Exactions*].

45. See, e.g., Rachele Alterman, *Exactions American Style: The Context for Evaluation*, in PRIVATE SUPPLY OF PUBLIC SERVICES: EVALUATION OF REAL-ESTATE EXACTIONS, LINKAGE AND ALTERNATIVE LAND POLICIES 4, 4 (Rachele Alterman ed., New York Univ. Press 1988) (“Exactions are requirements placed on developers through land-use planning controls to supply some public facility or amenity as a condition for permitting development.”); Vicki Been, “Exit” as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine, 91 COLUM. L. REV. 473, 478–83 (1991); Mark Fenster, *Takings Formalism and Regulatory Formulas: Exactions and the Consequences of Clarity*, 92 CALIF. L. REV. 609, 623 (2004).

46. Been, *supra* note 45, at 482 (“[E]xactions serve to mitigate the negative effects a development may have on a neighborhood, such as increased traffic congestion, noise, and environmental degradation.”); Mulvaney, *State of Exactions*, *supra* note 44, at 187.

47. Mulvaney, *Remnants of Exaction Takings*, *supra* note 44, at 191–92.

48. *Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825 (1987).

49. *Dolan v. City of Tigard*, 512 U.S. 374 (1994).

when the government must pay compensation. In *Nollan*, the Supreme Court clarified that the exaction must have an “essential nexus” with the public harm sought to be alleviated.⁵⁰ In *Dolan*, the Court further described the contours of permissible exactions by declaring that the exaction must be roughly proportional to the harm imposed.⁵¹ Both of these rules, as established by the Court in *Nollan* and *Dolan*, were tested in *Koontz v. St. Johns River Water Management*.⁵² Coy Koontz requested a St. Johns River Water Management permit to develop more of his land than the original permit.⁵³ St. Johns conditioned the permit issuance on Koontz deeding the rest of his property into a conservation area as well as his providing some mitigation work on the surrounding areas.⁵⁴ Koontz agreed to the deed but not to the mitigation work.⁵⁵ St. Johns denied the permit application.⁵⁶ The Supreme Court ruled that the government may not conditionally approve permits unless the conditions are connected to the land use and approximately proportional to the effects of the proposed land use.⁵⁷ The ruling clarifies, once again, how the tension between environmental challenges and property rights thwart the ability of decision-makers to formulate, and implement, environmental policy.

Finally, another category of cases illustrates a slightly different manifestation of the tension between establishing a proper and effective environmental policy and respecting private property rights. In these cases, the government, citing environmental reasons, withdraws from or retracts an approval or permit previously given to any entity to use or develop the land such that that the retraction challenges the entity’s property right. In *Illinois Central Railroad Co. v. Illinois*,⁵⁸ a decision of the Illinois legislature to withdraw from the charter that the state had given a decade earlier to the Illinois Central Railroad Company was discussed, according to which the company was given the authority to “enter upon and take possession of and

50. *Nollan*, 483 U.S. at 837.

51. *Dolan*, 512 U.S. at 391 (“We think a term such as ‘rough proportionality’ best encapsulates what we hold to be the requirement of the Fifth Amendment. No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.”).

52. *Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595 (2013).

53. *Id.* at 601.

54. *Id.* at 602.

55. *Id.*

56. *Id.*

57. *Id.* at 606.

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

use any lands, streams and materials of every kind,” in exchange for the company building a new train depot, an outer harbor, and parks in Chicago.⁵⁹ In 1873, the Illinois Legislature repealed the Act and the charter, and a decade later, the Illinois Attorney General sued the company to stop the construction of the tracks, wharves, and other facilities along the lakefront.⁶⁰

The Court ruled that Illinois lacked the authority to grant title to submerged lands held in the public trust; therefore, the state’s charter given to the company was not valid from the outset.⁶¹ In addition to the ruling’s use of the public trust doctrine to protect natural resources,⁶² *Illinois Central* has become significant in that it illustrates an example of the conflict between environmental challenges and property rights. The right to private property in *Illinois Central* was considered an obstacle to implementing an effective and appropriate environmental policy. Another example of such a property-related state withdrawal from previous obligations is Michigan Governor Whitmer’s decision to shut down pipelines through the Straits of Mackinac.⁶³ Whitmer’s revocation of a 1953 easement allowing Enbridge to operate dual pipelines for the transport of petroleum and other products constitutes an interference with private property rights in the name preserving natural resources. Like the Supreme Court in *Illinois Central*, the cancellation of the easement illustrates an understanding that private property may turn into an obstacle when environmental policy is implemented.

The increased public, political, and legal awareness of environmental threats sharpens the tension between the need to accommodate environmental threats and private property rights. It is not surprising, therefore, that private property is seen by many as a barrier or an obstacle to formulating a proper environmental policy. However, describing private property as a barrier or an obstacle to formulating and implementing a proper and effective environmental policy is puzzling if one considers the theoretical development

59. *Id.* at 440.

60. *Id.* at 433–34, 449.

61. *Id.* at 459 (“The soil under navigable waters being held by the people of the state in trust for the common use and as a portion of their inherent sovereignty, any act of legislation concerning their use affects the public welfare. It is therefore appropriately within the exercise of the police power of the state.”).

62. *Id.* at 459–60.

63. 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/news/press-releases/2020/11/13/governor-whitmer-takes-action-to-shut-down-the-line-5-dual-pipelines-through-the-straits-of-mackina> [https://perma.cc/D96P-3LMZ].

of this legal institution. Several prominent and influential theories in modern American legal thought view the environment and conservation as integral considerations in determining the scope and structure of property rights. However, these essential insights, which have underlain prominent property theories for centuries, have disappeared from the property discourse, leaving the environment and its resources as an external challenge to property.

II. WHEN PROPERTY CONSIDERED THE ENVIRONMENT: THE ROLE OF ENVIRONMENTAL CONSIDERATIONS IN PROMINENT PROPERTY THEORIES

The dual aims of preserving the environment and protecting natural resources are not foreign to property law. Despite the current positioning of private property as a barrier or obstacle to the formation of effective environmental policies, the environment and its resources have occupied property scholars in recent centuries. One prominent example of the role environmental considerations previously played in property theory appears in John Locke's theory of labor.

The Lockean labor justification for private property suggests that individuals may acquire property rights in a specific resource if they mix their labor with and join something of their own to a resource.⁶⁴ This theory justifies the removal of a particular resource from the common property of all human beings and its transformation into a privately owned property belonging to a particular individual by way of the individual power invested in the resource.⁶⁵ Locke's labor theory has become one of the most popular theories influencing the design of Western property law in general and American property law in particular.⁶⁶ Thus, this theory is still used to formulate intellectual property rights,⁶⁷ which protect inventors' and creators' fruits of labor.⁶⁸ However, the Lockean theory of property includes two conditions, which, despite their importance to how the property right was acquired and the extent of the protection afforded to it, received less attention

64. LOCKE, *supra* note 7, at 18.

65. *Id.* at 19.

66. GREGORY S. ALEXANDER & EDUARDO M. PEÑALVER, AN INTRODUCTION TO PROPERTY THEORY 35 (2012) ("No single person has had more of an impact on property thought in the English-speaking world than John Locke.").

67. See, e.g., Lior Zemer, *The Making of a New Copyright Lockean*, 29 HARV. J.L. & PUB. POL'Y 891, 892 (2006); Daniel Attas, *Lockean Justifications of Intellectual Property*, in INTELLECTUAL PROPERTY AND THEORIES OF JUSTICE 29, 29 (Axel Gosseries et al. eds., 2008).

68. See, e.g., Zemer, *supra* note 67, at 892; Attas, *supra* note 67, at 30.

in the design of the property rights. One condition—often termed the “Lockean proviso”—is that individuals have a right to appropriate private property from nature by mixing their labor with it, but they can do so only “at least where there is enough, and as good left in common for others.”⁶⁹ The second condition is that a person who seeks to expropriate a specific resource from the state of nature and make it his private property can do so only to the extent required of him and must not do so if the resource is depleted or spoiled.⁷⁰

Some believed that these conditions refute the Lockean theory of private property. For example, Robert Nozick argued, and to a considerable degree of justice, that the Lockean theory of private property is utopian since our world is constantly experiencing a lack of resources, so the Lockean conditions can never exist.⁷¹ Nevertheless, alongside the critique of Locke’s theory, these two conditions express recognition that the environment is not external to the formation of private property, but rather an integral consideration in determining the scope and scale of property. The first condition, which calls on individuals to leave enough resources for others, suggests that private property cannot exist in a world where natural resources are impoverished. The second condition calls for preventing the corruption of natural resources and for informed and measured consumption. While the Lockean labor theory of property considers the right to property a natural right,⁷² it is evident that this theory gives importance to natural resources and their preservation. Property rights do not justify damage to nature and its resources. Locke proposes a theory that balances the needs of humans to exist and thrive with their obligation to preserve nature and its resources.

In the centuries since John Locke proposed his theory of property, there has been a significant change in how property rights, as well as other human and civil rights, have been formulated and theoretically justified. The main change concerned the transition from the perception of rights as natural rights to the perception of them as a social construct.⁷³ This change in the perception of rights in general, and property rights in particular, also affected the various

69. LOCKE, *supra* note 7, at 18; *see also* ALEXANDER & PEÑALVER, *supra* note 66, at 37 (describing Locke’s duty of self-preservation and adjacent duty to help preserve others so long as the duty of self-preservation is not undermined).

70. LOCKE, *supra* note 7, at 20.

71. ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 178–80 (1974).

72. Walton H. Hamilton, *Property—According to Locke*, 41 YALE L.J. 864, 867 (1932).

73. Paul Jurczak, *The Nature of Property*, in INTRODUCTION TO PHILOSOPHY (Matthew Van Cleave ed., 2019), <https://pressbooks.online.ucf.edu/introductiontophilosophy/chapter/the-nature-of-property/> [<https://perma.cc/9C9Z-BVEY>].

justifications given to the rights and the extent of the protection they granted. The understanding that property rights are a consequence of social judgment and not a natural right required decision-makers, as well as courts, to consider what social values justify granting a property right to individuals and, equally important, given such a right, what protection should be given to the owners against infringement of the right by others and the government.

The understanding that property rights, and the extent of the legal protection thereof, resulted from social determination led to a renewed conceptual thinking about the justifications for private property. One of the main justifications for private property was proposed by Garrett Hardin to deal with significant failures arising, according to Hardin, from common ownership of resources.⁷⁴ Hardin, who borrowed the term “Tragedy of the Commons” from William Forster Lloyd,⁷⁵ argued that individual self-interest would inevitably lead to the depletion of the shared resource.⁷⁶ While Lloyd’s example dealt with farmers’ interest in crowding the common pasture to feed their cows,⁷⁷ Hardin suggested that this logic of inevitable over-use applies to any commonly held resource, so long as the resource is finite and its consumption is unrestricted.⁷⁸ Hardin intended “tragedy” to capture the unintended but unavoidable destiny of ruin built into the unregulated use of shared resources.⁷⁹

Hardin’s justification for private property derives mainly from a utilitarian view. According to this view, to utilize natural resources effectively, the market failures that characterize a commons regime must be avoided as much as possible.⁸⁰ This concept has been criticized in the literature, and doubts have been raised, among other things, regarding the validity of Hardin’s assertion that a private property regime will necessarily be more efficient than a commons regime.⁸¹ Yet, at the same time, the tragedy of the commons reveals, once again, the importance given to natural resources and their preservation as part of the social construction of private property. Although

74. Hardin, *supra* note 10, at 1244–45.

75. *Id.* at 1244.

76. *Id.* (“Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.”).

77. WILLIAM FORSTER LLOYD, TWO LECTURES ON THE CHECKS TO POPULATION 31–32 (Oxford, S. Collingwood 1833).

78. Hardin, *supra* note 10, at 1244–45.

79. *Id.* at 1244.

80. *Id.* at 1245.

81. *See, e.g.,* ELINOR OSTROM, GOVERNING THE COMMONS 14 (Cambridge Univ. Press 1990).

it can be argued that Hardin and other utilitarians called for the preservation of natural resources for anthropocentric reasons, natural resources also occupied a significant place in thinking about private property rights and their allocation to individuals.

The reference to environmental values as an integral part of the property discourse continued in more modern conceptions of property. The most prominent of these conceptions consists of a progressive theory of property, whereby some proponents noted in a joint statement that “[p]roperty implicates plural and incommensurable values. Some of these values promote individual interests Some promote social interests, such as environmental stewardship, civic responsibility, and aggregate wealth.”⁸² This declarative recognition of environmental values being an integral part of the values promoted by private property has also been widely expressed when it comes to the impact of environmental values on property arrangements. For example, Joseph Singer and Jack Beermann argue that “[o]wnership of private property should advance the public interest, not stand in the way of the achievement of important public policies such as environmental regulation or public access to recreational and other natural resources.”⁸³ They add that “the bottom line is that property ownership simply does not include the right to destroy the environment.”⁸⁴ Similarly, Andre van der Walt expresses hope that “property, among other institutions and practices, can foster democratic forms of governance, advance social justice, promote citizenship, build sustainable and supportive communities, and enhance stewardship of the global environment and its natural resources.”⁸⁵ Gregory Alexander believes that American property law includes a social obligation norm, which in its robust version “requires some social vision, that is, some substantive conception of the common good that serves as the fundamental context for the exercise of the rights and duties of private ownership.”⁸⁶ Against this background, Alexander claims that “[v]irtually every environmental regulation, federal, state, and local, can be explained in terms of the civic version of the social-obligation norm.”⁸⁷ This assertion means that environmental regulation, which applies environmental values,

82. Alexander et al., *supra* note 11, at 743.

83. Jack M. Beermann & Joseph William Singer, *The Social Origins of Property*, 6 CAN. J.L. & JURIS. 217, 246 (1993).

84. *Id.* at 247.

85. Andre van der Walt, *Property, Social Justice and Citizenship: Property Law in Post-Apartheid South Africa*, 19 STELLENBOSCH L. REV. 325, 344 (2008).

86. Alexander, *supra* note 12, at 757.

87. *Id.* at 796.

does not infringe on private property but is an intrinsic part of its social construction.⁸⁸

However, progressive scholars' theoretical recognition of the importance of the environment and the reference to its values in the discourse of property remain marginal, mainly due to the reference to environmental values as instrumental, such that these values are converted into community interests. In this sense, the willingness to shape the scope of private property to refer to environmental values does not stem from recognizing the intrinsic importance of nature and its resources but rather from the social or economic meaning that damage to resources has over the community's interests.⁸⁹ The instrumental reference in the property discourse to the environment and its threats has led to the development of two approaches to protecting the environment and its resources, a task which requires intervention in private property. One, anthropocentric in nature, relies on the existing property discourse and seeks to protect natural resources by converting environmental values to human values. The other, ecocentric in nature, rejects the attempt to anchor environmental values in the property discourse and regards environmental values as external factors that must be balanced against private property. These two approaches differ from each other theoretically and ethically. Both, however, fail to provide a normatively appropriate and practically effective infrastructure for dealing with environmental threats.

88. Beermann & Singer, *supra* note 83, at 235 ("As environmental concerns, and concerns regarding other potential negative effects of over-development become more pressing, property owners should expect ever greater restrictions on rights traditionally thought of as incident to ownership.").

89. *See, e.g., id.* at 246 ("First, consider the obligations of the owner to the public. Rather than asking whether a law imposes too great a sacrifice in the owner's property rights, the Court should ask whether the regulation in question deprives the owner of an entitlement which that owner could rightly have expected to enjoy. Does ownership of property include the right to contribute to the destruction of the environment? The answer to this question is likely to be no."); Joseph William Singer, *The Ownership Society and Takings of Property: Castles, Investments, and Just Obligations*, 30 HARV. ENV'T L. REV. 309, 312 (2006) ("Liberals often adopt a similar model; they simply press for more expansive regulation of property to achieve competing social goals, such as racial equality or environmental protection."); Alexander, *supra* note 12, at 749 ("Property rights and their correlative obligations are cognizable as social goods, worthy of vindication by the state, only insofar as they are consistent with community and human flourishing more generally."); Carol M. Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 781 (1986) ("The argument that recreation or the contemplation of nature makes us more civilized and sociable has a very long pedigree in Western thought.").

III. ANTHROPOCENTRISM AND ECOCENTRISM: TWO PROMINENT VIEWS OF THE CATHEDRAL

While property law and environmental challenges are highly interrelated, the literature has developed two prominent views about this relationship. These views differ in their ethical bases and in how they perceive private property and its characteristics. This Part presents the two approaches to the relationship between private property and the environment. One approach is anthropocentric and provides superiority to humans and their needs. The second approach is based on an ecocentric perspective that assigns intrinsic value to all forms of life and nature and does not assign a unique role or value specifically to humans. Adopting each of these concepts expresses a different way of thinking about the right to private property and its role in dealing with environmental challenges.

A. *The Anthropocentric Perception of Private Property*

Property law has generated many interpretations that seek to provide an answer to the uniqueness of this legal branch. Among the different interpretations were those who saw property as a structured set of rules,⁹⁰ alongside those who saw it as a modular bundle of rights.⁹¹ In addition, some saw property as an arena where the owners could fully express their

90. See, e.g., EVERETT V. ABBOT, *JUSTICE AND THE MODERN LAW* 24–25 (Houghton Mifflin 1913) (“Property, ownership, title—these are merely synonyms in our law expressing the legal perception of a man’s natural right to be untrammelled in the physical control which he establishes over inanimate things and the lower animals. We are accustomed to regard these terms as denoting a bundle of rights. Accurately understood, however, they indicate merely a single right, and that the right of freedom.”); BRUCE A. ACKERMAN, *PRIVATE PROPERTY AND THE CONSTITUTION* 97–100, 113–67 (Yale Univ. Press 1977); Thomas C. Grey, *The Disintegration of Property*, 22 *NOMOS: AM. SOC’Y POL. LEGAL PHIL.* 69, 69 (1980) (“Most people, including most specialists in their unprofessional moments, conceive of property as *things* that are *owned* by *persons*. To own property is to have exclusive control of something—to be able to use it as one wishes, to sell it, give it away, leave it idle, or destroy it. Legal restraints on the free use of one’s property are conceived as departures from an ideal conception of full ownership.”).

91. See, e.g., JOHN R. COMMONS, *THE DISTRIBUTION OF WEALTH* 92 (New York & London, MacMillan & Co. 1893) (“Property is, therefore, not a single absolute right, but a *bundle of rights*. The different rights which compose it may be distributed among individuals and society—some are public and some private, some definite, and there is one that is indefinite. The terms which will best indicate this distinction are *partial* and *full* rights of property.”); J. E. Penner, *The “Bundle of Rights” Picture of Property*, 43 *UCLA L. REV.* 711, 712 (1996) (“The currently prevailing understanding of property in what might be called mainstream Anglo-American legal philosophy is that property is best understood as a ‘bundle of rights.’”).

freedom,⁹² or exercise their excluding power.⁹³ In contrast, others believed that property is an arena where different social values collide and, above all, that the freedom of property owners is limited due to their obligations to others.⁹⁴ These property concepts have in common that they all perceive property as a right based on an anthropocentric concept, that is, a concept that interprets or regards the world in terms of human values and experiences.⁹⁵ The anthropocentric focus of the property literature suggests that various property concepts gave meaning and legal importance only to human values. In this sense, pluralistic conceptions of property, such as those that rejected libertarian or utilitarian monism and held that the owner's freedom must be balanced with additional values, listed among those values only human

92. 2 WILLIAM BLACKSTONE, COMMENTARIES *2 (“There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe.”); C. Edwin Baker, *Property and Its Relation to Constitutionally Protected Liberty*, 134 U. PA. L. REV. 741, 744 (1986) (“People rely on, consume, or transform resources in many of their self-expressive, developmental, productive, and survival activities. These uses of resources are integral to a person’s liberty, viewed either as self-realization or as self-determination. Property rules determine when the community will recognize a person’s assertion of a right to use a particular resource for these purposes. Thus, the first function of property rules is to protect use values. The performance of this function can serve as a major support for individual liberty.”).

93. Oliver Hart & John Moore, *Property Rights and the Nature of the Firm*, 98 J. POL. ECON. 1119, 1121 (1990) (“We suppose that the sole right possessed by the owner of an asset is his ability to exclude others from the use of that asset.”); JAMES PENNER, THE IDEA OF PROPERTY IN LAW 71 (2000) (“[T]he right to property is the right to exclude others from things which is grounded by the interest we have in the use of things.”); Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 360 (2001) (“Property rights historically have been regarded as in rem. In other words, property rights attach to persons insofar as they have a particular relationship to something and confer on those persons the right to exclude a large and indefinite class of other persons (‘the world’) from the thing.”); Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275, 275 (2008) (suggesting that property is not about exclusion but about exclusivity so that the owner is the one who sets the agenda concerning the property, and as long as others accept this, they need not fear exclusion).

94. Alexander et al., *supra* note 11, at 743 (“Property implicates plural and incommensurable values.”); Alexander, *supra* note 12, at 749 (“Property rights and their correlative obligations are cognizable as social goods, worthy of vindication by the state, only insofar as they are consistent with community and human flourishing more generally.”); Gregory S. Alexander, *Pluralism and Property*, 80 FORDHAM L. REV. 1017, 1017 (2011); JOSEPH WILLIAM SINGER, ENTITLEMENT: THE PARADOXES OF PROPERTY 31 (2000) (“[P]roperty rights are related to a variety of values, such as autonomy, distributive fairness, economic efficiency, promotion of the general welfare, and social justice.”); Hanoch Dagan, *Pluralism and Perfectionism in Private Law*, 112 COLUM. L. REV. 1409, 1409 (2012).

95. SINGER, *supra* note 94, at 37 (“Property is defined not by reference to a fixed conception but by reference to human values.”); Alexander, *supra* note 12, at 749.

values, such as aggregate welfare, personhood, and labor.⁹⁶ When one of these values found expression in property right decisions or during a property dispute, pluralistic conceptions of property sought to balance the owner's liberty and these values. This balance redefined the limits of the property right and the extent of the protection to which the owners would be entitled insofar as the right was violated.⁹⁷

Pluralistic conceptions of property deal with challenges that require interference with private property similarly. First, the courts identify the challenge, which requires intervention in or limitation of private property rights. Then, the courts estimate the consequences of avoiding facing the challenge on both society and property owners. Finally, the courts determine the scope and scale of the authority to interfere with private property.⁹⁸

One of the prominent examples of the balance between private property rights and social needs and interests is changes in land use regulation. In a ruling from 1926, the Supreme Court stated that the regulation of land use, even though it harms private property, is part of the state's policing power. In *Village of Euclid v. Ambler Realty Company*, the village council passed a zoning ordinance dividing the village into several districts and defined the use and size of buildings permissible in each district.⁹⁹ The ordinance significantly restricted the potential use of Ambler Realty Company, which owned sixty-eight acres of land in the village.¹⁰⁰ In order to determine whether the regulation of land use infringed on the private property rights of Ambler Realty Company, the Supreme Court followed the three steps described above.

First, the Court recognized the challenge, which required interference with private property.¹⁰¹ In *Euclid*, the challenge identified by the Court was the need to enable the proper development of urban communities.¹⁰² The Court

96. SINGER, *supra* note 94, at 31 (“[P]roperty rights are related to a variety of values, such as autonomy, security, distributive fairness, economic efficiency, promotion of the general welfare, and social justice.”); Dagan, *supra* note 94, at 1412 (“[P]roperty is an umbrella for a set of institutions, serving a pluralistic set of liberal values: autonomy, utility, labor, personhood, community, and distributive justice.”); *see also* State v. Shack, 277 A.2d 369, 372 (N.J. 1971).

97. SINGER, *supra* note 94, at 37 (“Property is defined not by reference to a fixed conception but by reference to human values.”); Shack, 277 A.2d at 372 (“Property rights serve human values. They are recognized to that end[] and are limited by it.”).

98. *See* Alexander, *supra* note 12, at 798–99 (describing the “harm-prevention-versus-benefit-conferral conundrum” applied by courts).

99. *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 379–80 (1926).

100. *Id.* at 379.

101. *Id.* at 386–87.

102. *Id.*

in *Euclid* compared the regulation of land use that the village council requested to carry out to the need for traffic regulations. “[T]he great increase and concentration of population” raises new problems, “which require, and will continue to require, additional restrictions in respect of the use and occupation of private lands in urban communities.”¹⁰³ After identifying the social challenge, the Court pointed to the possible social failures insofar as local authorities cannot determine land use in a regulated manner. The Court asserted that, while in the past there was no need for land use regulation, today such regulation is inevitable.¹⁰⁴ Finally, the Court stated that interference with private property should be balanced with public welfare, and this balance led the Court to determine that in these cases—where the guarantee of public welfare is conditioned on interference with private property—such interference should be allowed.¹⁰⁵

The Court's decision in *Euclid* exemplifies the anthropocentric balance that courts employ concerning interference with property rights. On one side of the equation stands the owner's right to property, and on the other side stands a social need—explained by the courts in human terms: efficiency, economic incentives, and welfare.¹⁰⁶

Euclid and land use regulation is but one example of courts' attempts to balance between the need to deal with environmental challenges and to protect private property. The courts applied two other mechanisms to balance environmental challenges and private property: the public trust doctrine and taking laws. The origin of the public trust doctrine is in Roman law.¹⁰⁷ However, it has received increasing expression in American law to deal with environmental challenges,¹⁰⁸ and in a recent article, Erin Ryan et al. reviewed the origins of the public trust doctrine and the changes that have taken place in its definition and applications in American law over the past decades.¹⁰⁹ Using the public trust doctrine to deal with environmental challenges that may damage private property assumes that the state holds certain natural resource commons in trust for the public benefit.¹¹⁰ According to Ryan et al.,

103. *Id.*

104. *Id.* at 386.

105. *Id.* at 387 (“The ordinance now under review, and all similar laws and regulations, must find their justification in some aspect of the police power, asserted for the public welfare.”).

106. *See id.*

107. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 475 (1970).

108. *Id.* at 489–91.

109. *See* Ryan et al., *supra* note 16, at 2451–52.

110. *See id.* at 2452.

the history of the application of the doctrine suggests that it was used mainly to protect waterways.¹¹¹

However, how the courts used the public trust doctrine sharpens the anthropocentric view they adopted. Thus, in *Illinois Central Railroad Co. v. Illinois*, the Supreme Court ruled that the State of Illinois did not possess the authority to grant fee title to submerged lands where doing so would preclude the exercise of the public right to commercial navigation and fishing in navigable waters.¹¹² The operative result of this decision was a violation of the property right granted to the Illinois Central Railroad Company by the state and a determination that the state was prohibited from granting property rights that impair the ability of its citizens to use natural resources. However, alongside the environmental protection involved in this ruling, the justification for the decision was anthropocentric. It dealt with a balance between human values: the owner's liberty and the desire to allow others in society to enjoy fishing and commerce in those waters.¹¹³ In other words, the Supreme Court in *Illinois Central* balanced the liberty of property owners and their obligations to other individuals and society. Public trust, the court states, is a "title held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have the liberty of fishing therein freed from the obstruction or interference of private parties."¹¹⁴

This anthropocentric view of the public trust doctrine is also reflected in the judgments that applied the doctrine in the following decades. For example, the California Supreme Court ruled in *National Audubon Society v. Superior Court* 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

111. *Id.* ("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."); see also Erin Ryan, *A Short History of the Public Trust Doctrine and Its Intersection with Private Water Law*, 38 VA. ENV'T L.J. 135, 137 (2020).

112. *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 460 (1892) ("We hold, therefore, that any attempted cession of the ownership and control of the state in and over the submerged lands in Lake Michigan by the Act of April 16, 1869, was inoperative to affect, modify, or in any respect to control the sovereignty and dominion of the state over the lands, or its ownership thereof, and that any such attempted operation of the act was annulled by the repealing Act of April 15, 1873, which to that extent was valid and effective. There can be no irrevocable contract in a conveyance of property by a grantor in disregard of a public trust, under which he was bound to hold and manage it.")

113. See *id.* at 452.

114. *Id.*

minimize any harm to those interests.”¹¹⁵ Among the interests protected by public trust, the Court lists anthropocentric values such as navigation, commerce, fishing, and recreation.¹¹⁶ The understanding, then, is that the public trust doctrine may be used as a mechanism to deal with environmental challenges and their impact on property rights. However, interference with private property rights on the grounds of this doctrine will only be done to the extent that the environmental challenges reveal harm to social and human interests.¹¹⁷

Another mechanism through which the courts tried to balance environmental challenges and private property rights was through takings laws. Generally, takings laws allow the state to take private property to fulfill a public need in exchange for compensation.¹¹⁸ In many cases where environmental challenges required interference with private property, however, there was no need to take the private property physically but only to impose certain limitations on the uses of the property or what could be built on it. For example, in *Lucas v. South Carolina Coast Council*, the state enacted a law that barred Lucas from erecting permanent habitable structures on his land, aiming to protect against erosion and destruction of barrier islands.¹¹⁹ Although the state did not *physically* take Lucas’s property, the question before the Supreme Court was whether, in a situation where the state deprives private property of all economically beneficial uses in the name of the common good, this should be considered a de facto taking, entitling the owner to compensation.¹²⁰ The Supreme Court answered this question in the affirmative.¹²¹ It stated that under these circumstances, the governmental action must be seen as a taking, under the Fifth Amendment to the Constitution, so that the owner would be entitled to compensation.¹²² Lucas was an extension of regulatory takings doctrine, introduced in *Pennsylvania*

115. Nat’l Audubon Soc’y v. Superior Ct., 658 P.2d 709, 712 (Cal. 1983).

116. *Id.* (“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.”).

117. See Ryan et al., *supra* note 16, at 2547 (“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.”).

118. U.S. CONST. amend. V (“[N]or shall private property be taken for public use, without just compensation.”).

119. *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1007 (1992).

120. *Id.* at 1019.

121. *Id.*

122. *Id.* at 1015 (“The second situation in which we have found categorical treatment appropriate is where regulation denies all economically beneficial or productive use of land.”).

Coal Co. v. Mahon. According to this doctrine, regulation that “goes too far” in violating private property rights may be considered a taking under the Fifth Amendment to the Constitution.¹²³ However, it is essential to note that the doctrine of regulatory takings, similar to its public trust counterpart, was also interpreted in anthropocentric terms. Even takings that were approved to respond to environmental challenges were explained and justified in human terms of aggregate welfare, utilitarianism, and efficiency.¹²⁴

Courts, therefore, chose to justify takings with human values to avoid dealing with the environmental values that actually motivated the taking. Because of this avoidance, environmental regulatory takings issues served as a setting for a balance between human values: the freedom of the owners and their commitment to the community. This anthropocentric balance for environmental challenges became part of property rights analysis.¹²⁵ Property law, which according to pluralistic conceptions, consists of a variety of human values, allowed the courts to legitimize a certain impairment of the owners’ liberties as long as they were able to describe the expected environmental damage in human terms, such as efficiency and aggregate welfare.

123. Pa. *Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

124. See *Lucas*, 505 U.S. at 1024 n.11. While the Court raises the hypothetical possibility that regulation will impose restrictions for “ecological” reasons, it states that

[i]n the present case, in fact, some of the “[South Carolina] legislature’s ‘findings’ to which the South Carolina Supreme Court purported to defer in characterizing the purpose of the Act as “harm-preventing,” seem to us phrased in “benefit-conferring” language instead. For example, they describe the importance of a construction ban in enhancing “South Carolina’s annual tourism industry revenue,” in “provid[ing] habitat for numerous species of plants and animals, several of which are threatened or endangered,” and in “provid[ing] a natural healthy environment for the citizens of South Carolina to spend leisure time which serves their physical and mental well-being[.]” It would be pointless to make the outcome of this case hang upon this terminology, since the same interests could readily be described in “harm-preventing” fashion.

Id. (quoting *Lucas v. S.C. Coastal Council*, 404 S.E.2d 895, 897 (S.C. 1992)).

125. The best illustration of anthropocentric usage comes from the definition of the state police power. Courts have often defined police power by reference to the acknowledged legitimate ends of the power, such as promoting the polity’s health, safety, and morals. See Pa. *Coal Co. v. Mahon*, 260 U.S. 393 (1922); *Nollan v. California Coastal Comm’n*, 483 U.S. 825 (1987); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003 (1992). The judicial determination that the state did not use its policing power, among other things, because the governmental action went “too far” and therefore took the owner’s property in a regulatory manner does not challenge the protected human interests but rather their degree of harm. All interests considered—health, safety, morality, or general welfare—are thoroughly human.

B. Ecocentrism and Private Property

Another approach to dealing with environmental challenges that require interference with private property is based on an entirely different ethical and normative infrastructure. This approach is based on ecocentrism, which expresses nature-centered, as opposed to human-centered anthropocentric values.¹²⁶ The ecocentric approach assigns intrinsic value to all forms of life and nature and does not assign a unique role or value specifically to humans.¹²⁷ In fact, according to ecocentric views, human beings and human values are only one part of the complex set of values and objects that should find expression in proper decision-making processes.¹²⁸ Therefore, adopting an ecocentric approach attaches a different meaning to dealing with environmental challenges than that used in an anthropocentric approach. While anthropocentric approaches weigh environmental considerations according to their impact on human and social interests, ecocentric

126. See ALDO LEOPOLD, A SAND COUNTY ALMANAC: AND SKETCHES HERE AND THERE 202–26 (1949). Leopold was one of the first writers to introduce an ecocentric view into American discourse. See *id.* In his book A SAND COUNTY ALMANAC, published in 1949, Leopold calls for applying a different ethical concept than the existing anthropocentric one regarding the relationship between man, land, and the animal world. See *id.* at 203. The starting point for an ecocentric ethical concept is that, while society maintains an ethical concept about the relationship between individuals, “[t]here is as yet no ethical dealing with man’s relation to land and to the animals and plants which grow upon it.” *Id.* The relationship between man and the land, Leopold claims, is managed in anthropocentric terms only while still being “strictly economic, entailing privileges but not obligations.” *Id.* Leopold’s conclusion is that “[t]he ‘key-log’ which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and aesthetically right, as well as what is economically expedient. 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.” *Id.* at 224–25.

127. See *id.* at 204.

128. PATRICK CURRY, ECOLOGICAL ETHICS: AN INTRODUCTION 44–45 (2006) (“But there is no reason why compassion for human beings and compassion for non-human animals and nature should have to be mutually exclusive. Logically speaking, if humans are a part of nature, then they share, at least in part and/or potentially, in nature’s intrinsic value. And in practice, the two kinds of compassion are likely to *reinforce* each other Ecocentrism does not necessarily exclude humanity, and there are powerful reasons—strategic as well as ethical—why it should not.”); Gray et al., *supra* note 18, at 130 (“Ecocentrism sees the ecosphere—comprising all Earth’s ecosystems, atmosphere, water and land—as the matrix which birthed all life and as life’s sole source of sustenance. It is a worldview that recognizes intrinsic value in ecosystems and the biological and physical elements that they comprise, as well as in the ecological processes that spatially and temporally connect them. So when human wants clash with the health of the Earth as a whole or any of its ecosystems, the former should, practically and ethically speaking, give way to the latter: human needs, like the needs of other species, are secondary to those of the Earth as the sum of its ecosystems.”).

approaches weigh environmental considerations according to environmental interests.¹²⁹ According to ecocentric views, environmental challenges must be resolved because of the possibility that the universe and its multiple ecosystems may be affected, and not because of the fear that humans will be harmed.¹³⁰ This distinction carries with it practical implications for the procedures, considerations, and consequences of environmental decision-making. For example, while anthropocentric views will provide ultimate weight to human values, ecocentric views will weigh these values alongside other considerations related to different ecosystems.¹³¹ In addition, ecocentric approaches may demand action even when that action conflicts with human interests.

These differences highlight the contrast between how ecocentric and anthropocentric approaches view interference with private property rights in the name of the environment. According to an anthropocentric view, property balances different human and social values, such as efficiency, labor, personality, and community.¹³² Since these values constitute the sum of the values that courts and other decision-makers must consider when deciding the legitimacy of interference with private property, the decision comes from within; that is, it is made within the limits of the right to private property.¹³³ Like anthropocentric views, an ecocentric view also believes that the right to property balances a set of human and social values.¹³⁴ Here, however, the course of these two views diverge.

129. Katie McShane, *Ecocentrism*, in *CRITICAL ENVIRONMENTAL POLITICS* 83, 83 (Carl Death ed., Routledge 2013) (“Ecocentrism is the view that the interests of ecosystems (or other ecological wholes) are of direct moral importance.”); J. Baird Callicott, *Non-Anthropocentric Value Theory and Environmental Ethics*, 21 *AM. PHIL. Q.* 299, 299–300 (1984).

130. See McShane, *supra* note 129, at 85 (“Ecocentrists thus claim that we ought to broaden our sense of morality to value not merely the good of human beings, but the good of ecological community as a whole.”).

131. See *id.*

132. See Dagan, *supra* note 94, at 1412; Alexander, *supra* note 12, at 748; see also SINGER, *supra* note 94, at 31.

133. Dagan, *supra* note 94, at 1412 (“[P]roperty is an umbrella for a set of institutions, serving a pluralistic set of liberal values: autonomy, utility, labor, personhood, community, and distributive justice.”); see SINGER, *supra* note 94, at 31 (“[P]roperty rights are related to a variety of values, such as autonomy, distributive fairness, economic efficiency, promotion of the general welfare, and social justice.”); see also *State v. Shack*, 277 A.2d 369, 372 (N.J. 1971) (“Property rights serve human values. They are recognized to that end, and are limited by it.”).

134. LEOPOLD, *supra* note 126, at 202–03. (“The first ethics dealt with the relation between individuals; the Mosaic Decalogue is an example. Later accretions dealt with the relation between the individual and society. The Golden Rule tries to integrate the individual to society; democracy to integrate social organization to the individual. There is as yet no ethic dealing with man’s relation to land and to the animals and plants which grow upon it. Land, like Odysseus’ slave-

While, for those who hold an anthropocentric point of view, the decision regarding the possibility of interfering with private property should be made in an intra-property balance between social and human values, those who hold an ecocentric point of view believe that this decision is only the beginning of the decision-making process. According to an ecocentric point of view, decision-making regarding environmental challenges demands more than clarifying the balance between social and human values.¹³⁵ Therefore, proper decision-making should also consider additional values, such as the consequences of these challenges on various ecological and biological systems.¹³⁶ In this sense, an ecocentric view does not see private property as an arena for dealing with environmental challenges but as one of many variables that decision-makers must consider. Dealing with environmental challenges, according to ecocentrists, should not ignore private property but must balance it with ecocentric and biocentric values.

To allow this human versus non-human value balance, ecocentrists offer two mechanisms for dealing with environmental challenges that require interference with private property rights. According to some scholars, the proper way to deal with environmental challenges that affect private property is to prioritize these challenges and the regulations designed to deal with them over private property rights.¹³⁷ Those who hold this view do not necessarily perceive the right to property as the sole and despotic dominion of the owners.¹³⁸ They may hold a pluralistic view of the right to private property and recognize the owners' obligations towards the community and society.¹³⁹

girls, is still property. The land-relation is still strictly economic, entailing privileges but not obligations.”).

135. Helen Kopnina et al., *Uniting Ecocentric and Animal Ethics: Combining Non-Anthropocentric Approaches in Conservation and the Care of Domestic Animals*, 26 ETHICS POL'Y & ENV'T 1, 15 (2022) (“[E]cocentrism (which is of course opposed to anthropocentrism) does not make sense if it is divorced from an underlying valorization of living beings in their own right. This does not imply that a principle of the sanctity of individual life needs to be upheld by ecocentrists. But it does mean that the intrinsic value of every living thing *always needs to be taken into account* in ecocentric decision-making.”).

136. *See id.*

137. Byrne, *supra* note 19, at 243; *see* Hunter, *supra* note 19, at 312–13.

138. Hunter, *supra* note 19, at 313 (“[U]se restrictions intended to preserve the ecological integrity of sensitive lands are different from other use restrictions. In regard to the former, society's decisions are compelled by a recognition of the external ecological effects private land-use decisions can have; in the latter, they are driven by majoritarian value judgments.”).

139. Byrne, *supra* note 19, at 244 (“Property law embraces society's allocation of benefits among its members and the boundaries between private and public control of things A green property law must thoroughly subject individual rights in natural resources to the community's need for biological and spiritual vitality”).

However, prioritizing environmental considerations over the right to private property stems from perceiving these challenges as a necessary external imperative based on inevitable and irreconcilable scientific knowledge.¹⁴⁰ David B. Hunter proposes such a concept in an article that argues for the adoption of an ecological perspective on property.¹⁴¹ Hunter contends that courts should treat environmental science differently from other economic or social considerations.¹⁴² This determination has several practical implications for the courts' attitude towards restrictions on private property for environmental reasons. For example, according to Hunter, use restrictions intended to preserve the ecological integrity of sensitive lands should be considered different from other use restrictions because the former results from an external scientific imperative, while the latter are majoritarian value judgments.¹⁴³ Another implication arising from this concept is that it is necessary to distinguish between different types of lands and their different ecological contributions. The courts should treat wildlife habitat areas, steep slopes, wetlands, and prime agricultural lands differently than land with no significant environmental sensitivity.¹⁴⁴

At the core of this concept is the distinction between the scientific basis of environmental threats and the social judgment underlying property rights.¹⁴⁵ In other words, this concept sees the relationship between property law and the environment, with its various threats and challenges, as a relationship between two factors that do not overlap normatively or value-wise. While property law and the extent of protection it provides to the property owners

140. Hunter, *supra* note 19, at 314–15 (“[T]he environment imposes constraints on our freedom; these constraints are not the product of value choices but of the scientific imperative of the environment’s limitations.”).

141. *See id.* at 311.

142. *Id.* at 312 (“[T]his article argues that the courts must refer to the environmental sciences in defining private property rights in land. Different types of land vary fundamentally in their ecological attributes and should be treated as fundamentally different by the courts.”).

143. *See id.* (“Recognizing these factors would lead the courts to reject a solely economics-based approach to land-use, to address the public interest in preserving the ecological role of land and, in some cases, to deny owners of particularly sensitive land the right to destroy its ecological integrity.”).

144. *Id.* at 313 (“The second insight offered by the ecological perspective of this article is that use restrictions intended to preserve the ecological integrity of sensitive lands are different from other use restrictions.”).

145. *Id.* (“[U]se restrictions intended to preserve the ecological integrity of sensitive lands are different from other use restrictions. In regard to the former, society’s decisions are compelled by a recognition of the external ecological effects private land-use decisions can have; in the latter, they are driven by majoritarian value judgments. This insight differentiates ecologically necessary exercises of the police power and refers the inquiry to the environmental sciences.”).

are based on a normative balance between different social values (such as autonomy, community, work, personhood, and aggregated welfare), the threats to the environment are scientifically based—and therefore cannot be compromised.

This scientific approach is based on two assumptions: First, property laws are based on anthropocentric values only and do not assign intrinsic value to all forms of life and nature.¹⁴⁶ This implies that environmental challenges' ecological and biological implications cannot be examined in balance with other property values. Therefore, the balance is external to the property discourse. Second, the scientific approach assumes that environmental science is supported by sound empirical evidence.¹⁴⁷ This assumption, as evidenced by environmental scientists and the regulatory bodies entrusted with environmental regulation at the international and national levels, is inconclusive.¹⁴⁸ In fact, in many cases, the rate and magnitude of a specific environmental threat and the probability of its realization are uncertain or cannot be accurately estimated.¹⁴⁹ Similarly, uncertainty also characterizes techniques and instruments used to accommodate environmental threats.¹⁵⁰ Finally, environmental research is also influenced by non-objective values—e.g., what is safe enough, how many species should be present, or how much open space is required—which call into question its empirical and scientific character.¹⁵¹ The prevailing uncertainty in environmental science, therefore,

146. See Alexander, *supra* note 12, at 749; see also SINGER, *supra* note 94, at 37 (focusing on the importance of human values and social context in resolving property disputes).

147. See Hunter, *supra* note 19, at 316 (“[E]cologists view the environmental sciences as providing us with certain laws of nature. These laws, just like our own laws, restrict our freedom of conduct and choice. Unlike our laws, the laws of nature cannot be changed by legislative fiat; they are imposed on us by the natural world. An understanding of the laws of nature must therefore inform all of our social institutions.”).

148. Shai Stern, *From “Sit and Wait” to “Proactive Regulation”: A Model for Environmental Regulation of Private Property*, 53 ENV'T L. 33, 53 (2023) (“The evidence regarding environmental risks is constantly accumulating. For some risks, both the expectation of damage and the feasibility of their realization are scientifically confirmed. Other risks are considered ‘emerging risks,’ meaning either the expectation of damage or likelihood of realization—or both—are unknown or cannot currently be identified.”); see also Cass R. Sunstein, *Irreversibility*, 9 L. PROBABILITY & RISK 227, 228 (2010) (pointing out that the United Nations has acknowledged a lack of scientific certainty, specifically regarding climate change).

149. Stern, *supra* note 148, at 53.

150. *Id.* at 54.

151. See, e.g., James H. Brown & Dov F. Sax, *An Essay on Some Topics Concerning Invasive Species*, 29 AUSTRAL ECOLOGY 530, 530–31 (2004) (arguing that the research regarding the invasion of species is influenced by not necessarily objective perceptions regarding invaders and that researchers should avoid incorporating non-objective values as much as possible); see also Brendon M.H. Larson, *An Alien Approach to Invasive Species: Objectivity and Society in Invasion*

challenges the assumption that environmental considerations should prevail over human and social values. At the same time, this uncertainty does not rule out giving expression to environmental values because waiting for certainty may lead to the realization of environmental threats without prior preparation.¹⁵²

Another expression of an ecocentric view and how its adoption affects the perception of private property and its role in environmental policy is the progressive development of the rights to nature.¹⁵³ Despite the alleged innovation in assigning a right to nature in the liberal rights discourse, granting an independent status to nature and animals has been customary among indigenous societies for hundreds of years.¹⁵⁴ In this way, among those societies, nature and its resources were not only sites of exploitation by humans but were recognized collectively as an independent entity entitled to preservation and respect.¹⁵⁵ The transition from the recognition of nature and

Biology, 9 BIOLOGICAL INVASIONS 947, 949–51 (2007) (discussing objectivity and non-objective in environmental science).

152. The understanding that waiting for regulatory action to deal with environmental threats until receiving certain scientific confirmation of their strength and scope is not desirable finds expression in various environmental conventions. See U.N. Framework Convention on Climate Change art. 3, ¶ 3, May 9, 1992, 1771 U.N.T.S. 107 (“The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects . . . [L]ack of full scientific certainty should not be used as a reason for postponing such measures.”); U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1992) (“In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities . . . [L]ack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”).

153. Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 456 (1972) (“I am quite seriously proposing that we give legal rights to forests, oceans, rivers and other so-called ‘natural objects’ in the environment—indeed, to the natural environment as a whole.”).

154. Ryan et al., *supra* note 16, at 2502 (“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.”); Lidia Cano Pecharroman, *Rights of Nature: Rivers that Can Stand in Court*, 7 RES. (NEW WATER REGIMES SPECIAL ISSUE) 23, 28 (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 [humans’] harmonious relation with nature has been always the desirable outcome.”).

155. See Catherine J. Iorns Magallanes, *Nature as an Ancestor: Two Examples of Legal Personality for Nature in New Zealand* 17 (Vict. Univ. of Wellington, Legal Rsch. Paper No. 54/2020, Aug. 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3532319 [<https://perma.cc/E26R-YF8L>].

its resources as independent entities to those that have legal personality stems, at its core, from the establishment of the liberal discourse of rights in the Western world, which grants legal standing only to those who have rights.¹⁵⁶ The rights of nature, therefore, is a Western legal expression of the understanding that nature and its resources are not just objects for exploitation by humans but have independent legal standing.¹⁵⁷

Recognizing the rights of nature may have several meanings for the tension between property and the environment. David R. Boyd claims that “[r]ecognizing that nature itself has rights goes even further, undermining the idea of property, and bringing into question the wholesale and accelerating appropriation of the planet.”¹⁵⁸ According to this concept, recognizing the legal status of nature and its rights undermines the Western thought that nature is only a collection of things intended for human use.¹⁵⁹ Granting a legal right to nature might undermine the continued existence of private property as a legal institution since it is, at its core, an arrangement for human exploitation of natural resources.¹⁶⁰

However, alongside this concept, there are also “softer” ecocentric theories regarding the rights of nature. These approaches seek to provide nature and its resources a voice within the liberal discourse of rights on the one hand but refrain from calling for the abolition of property as a legal institution on the other hand. For example, Christopher D. Stone, in his article *Should Trees Have Standing?*, does not call for the abolition of the institution of property due to recognizing the legal status of natural resources and animals, but on the contrary, for its expansion.¹⁶¹ According to Stone, granting legal rights to nature is intended to provide nature and its resources a voice through three criteria: granting the right to legal standing, weighing their unique damages in the outcome, and, just as importantly, making them

156. See Stone, *supra* note 153, at 458 (describing the effect of granting legal rights).

157. *Id.* at 464–67.

158. DAVID R. BOYD, *THE RIGHTS OF NATURE: A LEGAL REVOLUTION THAT COULD SAVE THE WORLD* 220 (2017).

159. *Id.* at 57 (“The law, which in recent centuries has treated non-human animals as property intended for human use and exploitation, is beginning to catch up with the science. An assessment of the laws governing the treatment of animals and their rights leads to an encouraging conclusion—more and more people, and more and more countries, are recognizing that animals deserve significantly stronger rights than they have been granted in the past.”); Stone, *supra* note 153, at 463 (“[Natural] objects have traditionally been regarded by the common law, and even by all but the most recent legislation, as objects for man to conquer and master and use—in such a way as the law once looked upon ‘man’s’ relationships to African Negroes.”).

160. BOYD, *supra* note 158, at 220.

161. Stone, *supra* note 153, at 456.

the beneficiaries of awards.¹⁶² Stone's view, therefore, seeks to widen the scope of private property as a legal institution so that its characteristics will also apply to natural resources as potential beneficiaries.¹⁶³ Stone's understanding is that when we establish a property right, we establish a monetary value.¹⁶⁴ In the same way, if natural rights are essential, and Stone believes that we should "give legal rights to forests, oceans, rivers and other so-called 'natural objects' in the environment,"¹⁶⁵ then we must produce a monetary value for them so that damages caused to these resources will be considered, and awards, insofar as they are issued, will be awarded to natural resources as beneficiaries.

From a practical point of view, the rights of nature concept is gaining momentum as a mechanism to protect natural resources and animals.¹⁶⁶ In some cases, the rights of nature are explicitly and broadly recognized.¹⁶⁷ In contrast, in other cases, it is more limited and intended to protect a particular species or natural resource.¹⁶⁸ The legal standing granted within the framework of the rights of nature also takes on different forms. In some cases, anyone can represent nature in legal proceedings, while in other cases, only

162. *Id.* at 464–81.

163. *Id.* at 482.

164. *Id.* at 476 (describing how literary works retain their value through copyright law, under which someone who violates the copyright owes damages to the copyright holder).

165. *Id.* at 456.

166. Ryan et al., *supra* note 16, at 2522 ("Since the 2000s, . . . 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.").

167. An example of a broad recognition in rights of nature is title II, chapter 7 of the Ecuadorian Constitution, which is dedicated to Rights of nature. The constitution states:

Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes.

All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.

The State shall give incentives to natural persons and legal entities and to communities to protect nature and to promote respect for all the elements comprising an ecosystem.

CONSTITUTION OF THE REPUBLIC OF ECUADOR Oct. 20, 2008, tit. II, ch. 7, art. 71.

168. Ryan et al., *supra* note 16, at 2507–09.

certain parties can do so.¹⁶⁹ Recognizing the rights of nature has become a legal means of balancing the rights and interests of humans (including private property owners) and of nature. However, the assertion of the rights of nature and its resources is external to the right to property (or to human rights in general). Similar to the anthropocentric views of property presented in Section III.A *supra*, the right to private property does not include reference to environmental challenges that do not carry with them a violation of human interests and rights. This concept assumes, similar to the anthropocentric concepts of property, that property is not an arena for dealing with environmental challenges. As I argue below, this assumption harms the ability to establishing a proper and effective environmental policy.

IV. FROM VILLAIN TO HERO: PRIVATE PROPERTY AS AN ARENA FOR BALANCING ANTHROPOCENTRIC AND ECOCENTRIC VALUES

While anthropocentric and ecocentric approaches provide different ethical and practical understandings of the tension between human and non-human values, they nevertheless agree that balancing these conflicting values cannot and should not be done within the right to private property. However, these two approaches fail to provide a comprehensive and practical framework for establishing a normatively desired, practically effective, environmental policy. In a nutshell, the argument is that the starting point of both approaches—the anthropocentric and the ecocentric—makes a wrong assumption regarding the legal institution of property, its underlying values, and how they should be balanced. This wrong assumption leads each approach to avoid establishing a proper balance between human values and ecological and biological values. It also makes it difficult for legislative decision-makers and the courts to deal properly and effectively with pressing environmental challenges.

Both anthropocentric and ecocentric approaches share the understanding that property rights are an arena where human and ecological values collide.¹⁷⁰ Given this shared understanding, each approach offers a different

169. Compare CONSTITUTION OF THE REPUBLIC OF ECUADOR Oct. 20, 2008, tit. II, ch. 7, art. 71(b) (“All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.”), with ORANGE COUNTY, FLA., CODE OF ORDINANCES part I, art. VII, § 704.1 (2020) (granting standing to all Orange County authorities and citizens to bring an enforcement action on behalf of the local waters).

170. For a discussion of the anthropocentric approach, see Ryan et al., *supra* note 16, at 2547 (“Even the environmentally protective California public trust doctrine, made internationally

way to deal with environmental challenges. The anthropocentric approach suggests that environmental challenges must be addressed only if they can be converted into human values.¹⁷¹ In contrast, the ecocentric approach seeks to challenge private property through external mechanisms, prioritizing environmental challenges over human values.¹⁷² Although some believe that these two approaches provide adequate protection against environmental challenges,¹⁷³ several failures arise from the fundamental premise underlying both approaches, according to which property is limited to human values only.

First, it is worth examining why both approaches assume that private property is limited only to human values. Does something in the conceptual development of private property require us to recognize that this legal system is based only on anthropocentric values? The answer to this question should be negative. A view that sees the right to property as a social construct is not conceptually committed to excluding non-human values from the basis of the right to private property. From a conceptual point of view, and as much as we accept the argument that the property right is a receptacle for the values that society wishes to balance, there is no need to focus only on human values. If society is responsible for shaping the right to property (as well as other rights), it can establish it on the values it believes are essential. Assuming the owners' right to do with their property as they wish should be balanced against other values vital to society, and as long as society regards the preservation of environmental resources as essential in and of itself, there is no justification for ignoring these ecological values when defining the contours of private property.

Assuming there is no normative justification for excluding non-human values from the set of values underlying private property, it is appropriate to examine why these values were excluded. The question is sharpened because, historically and theoretically, environmental values served as a central pillar

famous by its role in a 1983 decision protecting the Mono Lake ecosystem against water withdrawals to Los Angeles, privileges human values.”). For an example from the ecocentric approach, see Stone, *supra* note 153, at 489 (“Because the health and well-being of mankind depend upon the health of the environment, these goals will often be so mutually supportive that one can avoid deciding whether our rationale is to advance ‘us’ or a new ‘us’ that includes the environment.”).

171. See *supra* Section III.A.

172. See *supra* Section III.B.

173. Ryan et al., *supra* note 16, at 2574 (“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?”).

in defining private property. The backdrop of Hardin's theory of depletion of open-access natural resources is a tragedy of nature. This theory has animated modern understandings of environmental risks, strategies for environmental protection, and research.¹⁷⁴ The preservation of the environment was also expressed in Locke's labor theory when the limits of private property were recognized insofar as they did not harm the environment and its resources.¹⁷⁵ Against this background, the transformation of environmental values into human values, such as labor and efficiency, needs clarification. Why did Hardin and Locke avoid leaving the preservation of natural resources as an independent value and instead convert it into human values?

Ryan et al. claim that the transformation from ecological values to human ones stems from the Western legal tradition, which has permanently attached importance to human values only.¹⁷⁶ While comparing the Western legal tradition to that of Indigenous cultures, Ryan et al. argue that the Western legal tradition saw nature as subordinated to humans.¹⁷⁷ In contrast, Indigenous cultures saw nature and humans as inextricably knit together.¹⁷⁸ In this sense, the reason for excluding environmental values from the value base of private property is not ideological or conceptual. It stems from a built-in bias in Western legal thought in general, and American in particular, according to which nature and its resources are subordinated to humans and intended to increase their welfare.

Another explanation for transforming the discourse about property and the environment into one that prioritizes human values over environmental values lies in the expansion of neoliberal economic thinking, mainly in England and the United States.¹⁷⁹ Although there are many meanings and interpretations of the term neoliberal,¹⁸⁰ they all have in common the reliance

174. See, e.g., Jonathan M. Karpoff, *The Tragedy of "The Tragedy of the Commons": Hardin Versus the Property Rights Theorists*, 65 J.L. & ECON. 565, 565 (2022) ("[Hardin's tragedy of the commons] forms the basis of many scientists' understanding of the commons problem and has had a profound impact on governmental policies affecting natural resource management, environmental harms, and climate change.").

175. LOCKE, *supra* note 7, at xxiii.

176. Ryan et al., *supra* note 16, at 2541 ("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.").

177. *Id.*

178. *Id.* at 2502.

179. DAVID HARVEY, A BRIEF HISTORY OF NEOLIBERALISM 1–3 (2007).

180. James McCarthy & Scott Prudham, *Neoliberal Nature and the Nature of Neoliberalism*, 35 GEOFORUM 275, 276 (2004) ("Despite the familiarity of the term, defining neoliberalism is no straightforward task, in part because the term 'neoliberalism' stands for a complex assemblage of

on the free market and the willingness to expand competitive markets to all areas of life, including the economy, politics, and society.¹⁸¹ Establishing the neoliberal principle in the American economy also affected the ultimate status of human values over non-human interests and values.¹⁸² The use of markets is intended to expand freedom and open the gates to a broader range of participants. However, when markets become the sole focal point for deciding between rights and values, only those participating in the market can express their values. Those who do not participate—i.e., those who are not human—do not receive a voice within the framework of the market pricing procedures. In this way, a lack of purchasing power on behalf of non-human entities translates directly into a lack of political and legal power in when it comes to rights discourse.

Whether due to legal tradition or political ideology, there is no normative justification to exclude environmental values from the values underlying private property. Therefore, as property is a social construct, the values underlying property rights may include non-human or social values. Internalizing environmental values into private property means that these values will be considered in the balance conducted when defining the contours of private property. Thus, when environmental challenges require interference with owners' liberty to do as they wish with their property, these values should weigh against the owners' property rights.¹⁸³ If society considers environmental preservation to be an important value, it should redefine private property to reflect that importance.¹⁸⁴

ideological commitments, discursive representations, and institutional practices, all propagated by highly specific class alliances and organized at multiple geographical scales. In fact, the notion of a consistent set of defining material practices and outcomes that comprise neoliberalism is problematic.”).

181. See David Singh Grewal & Jedediah Purdy, *Introduction: Law and Neoliberalism*, 77 *LAW & CONTEMP. PROBS.* 1, 3 (2014) (“Neoliberal claims advance the market side of this contest in capitalist democracies between capitalist imperatives and democratic demands. . . . Neoliberalism, like classical liberalism before it, is also associated with a kind of ideological expansionism, in which market-modeled concepts of efficiency and autonomy shape policy, doctrine, and other discourses of legitimacy outside of traditionally ‘economic’ areas.”).

182. Peter Burdon & Samuel Alexander, *Earth Jurisprudence: Anthropocentrism and Neoliberal Rationality*, in *THE ROUTLEDGE HANDBOOK OF INTERNATIONAL LAW AND ANTHROPOCENTRISM* 215, 225 (Vincent Chapaux et al. eds., 2023) (“[A]nthropocentrism is an implicit assumption and starting position that neoliberal rationality takes for granted. Under neoliberalism, normative claims about the supremacy of human beings are not challenged.”).

183. See *supra* Section III.A.

184. Hanoch Dagan, *Takings and Distributive Justice*, 85 *VA. L. REV.* 741, 774 (1999) (“Inasmuch as we believe that structuring our geographic localities into such local communities

Furthermore, it is essential to clarify that recognizing the value of environmental preservation as internal to private property does not require converting these values into human values and interests. The understanding that legal institutions, including property, are defined according to values society considers important is not unique to the environment. The rights to nature movement also assumes that society is sovereign and thus has the authority to grant a place at the legal table to values it perceives as significant.¹⁸⁵ In this sense, it is impossible to point out a conceptual difference between including non-human values within the boundaries of private property and providing legal meaning to these values outside the boundaries of private property. In the latter, as in the former, society declares that these non-human values should be considered against human values and interests. However, although conceptually there is no difference between whether these non-human values be considered from within private property or whether they will be granted independent legal status, from a normative point of view and a practical one, this distinction has meaning.

Addressing environmental values within private property provides owners and governments with the complete picture of the values society considers significant. When the law recognizes the obligations of property owners towards their neighbors, it clarifies that society provides meaning to the values of community and cooperation.¹⁸⁶ When inventors or developers are provided with property rights such as patents or copyrights, society expresses its commitment to the values of efficiency and labor.¹⁸⁷ Property law has become an arena where society discusses, debates, and decides between different values. In this sense, private property, like most legal institutions, cannot ignore or exclude values society perceives as valuable. Excluding those values from the value inquiry that defines the contours of private property harms property owners, society, and the environment because it provides a distorted picture of the limits of private property, its role as a legal institution, and the importance of environmental values. Excluding environmental values from the value debate that defines the limits of private

fulfills an important human need and facilitates the pursuit of worthy civic virtues, we need to incorporate this vision into our legal rules . . .”).

185. See Ryan et al., *supra* note 16, at 2561–63.

186. See Dagan, *supra* note 184, at 772–74.

187. See Ofer Tur-Sinai, *Beyond Incentives: Expanding the Theoretical Framework for Patent Law Analysis*, 45 AKRON L. REV. 243, 246, 280–81 (2012) (discussing the labor and utilitarian justifications for patent law); Lawrence C. Becker, *Deserving To Own Intellectual Property*, 68 CHI.-KENT L. REV. 609, 609–11 (1993) (discussing the differences between the labor justification and the utilitarian justification for intellectual property).

property harms property owners, as it allows them to develop illegitimate expectations regarding the scope of their property rights. Since the expectations of property owners form a central pillar in the scope of the protection granted to property owners from government interference,¹⁸⁸ the distortion of expectations through the exclusion of environmental values when defining the limits of private property leaves property owners uncertain regarding the scope of their rights.

Excluding environmental values from the value debate that defines the contours of private property also harms private property as a legal institution, as doing so prevents the institution from holding a comprehensive value inquiry to define its limits. A value inquiry that considers only human values, and ignores critical values such as protecting the environment, is a flawed value inquiry. Excluding environmental values and reducing the value inquiry in the legal institution of private property to only human values prevents this institution from fulfilling its role correctly. This exclusion imposes a normative limitation on the institution of private property, harming its ability to fulfill its role as a legal institution.

Finally, excluding environmental values from the value inquiry conducted within private property harms the environment since it contributes to the normative prioritization of human values over non-human ones. Due to the prevailing understanding that legal institutions in general, and private property in particular, reflect society's values,¹⁸⁹ excluding non-human values sends a normative message that society perceives them as inferior to human values. In a reality where the legal tradition and economic policies promote anthropocentrism, excluding non-human values from private property interests preserves their status as second-class values.

Another problematic normative message that the externalization of environmental values from the value inquiry conducted on private property conveys is that individuals do not bear responsibility for the environment, which rests entirely on the shoulders of the government. To the extent that environmental values in their non-human sense do not find expression within private property and are not considered relevant to justify its limitation, they become someone else's problem.

188. See, e.g., *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) ("The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, relevant considerations."); cf. Richard A. Epstein, *Lucas v. South Carolina Coastal Council: A Tangled Web of Expectations*, 45 *STAN. L. REV.* 1369, 1370–71 (1993) (criticizing the courts' reliance on expectations as a key measure for estimating legitimate interference with private property).

189. See *supra* Section III.A.

However, considering non-human environmental values within the legal institution of private property is not only normatively desired but also practically effective. Currently, the reference to environmental values that require interference with private property rights is done in one of two ways. One action path suggests converting environmental values into human values (such as efficiency or community) and balancing these converted values within the set of human values recognized today as underlying private property.¹⁹⁰ The second path cuts off the affinity between the environment and private property.¹⁹¹ It suggests that private property (consisting of human values only) should be contrasted with external environmental values.¹⁹²

Both paths of action provide only a partial response to environmental threats. According to the first path, environmental threats will be addressed only to the extent that they have the potential to harm or threaten human values. Environmental threats that cannot be converted into human values will not allow interference with private property, even if the damage caused by their realization to ecosystems or various biological systems will be enormous. Implementing the second path of action, which balances property with external environmental interests and rights, is also expected to encounter quite a few difficulties arising from the current gap between the status of private property and ecocentric rights in the American legal system. Thus, while property rights are recognized as constitutional, ecocentric rights only take their first steps up the legislative ladder. As Ryan et al. demonstrate, although there is global progress in recognizing the rights of nature—rights that can justify interference with private property—policymakers and litigants are only making baby steps in the American justice system toward achieving such recognition.¹⁹³

Waiting for the consolidation and legal recognition of ecocentric rights to justify interference with constitutional rights may make it difficult to deal with environmental challenges in the short- and medium-terms and may damage our natural resources irreversibly.¹⁹⁴ As David Hunter argued back in 1988, the urgency in accommodating environmental threats does not allow us to “wait for social value changes to be reflected more boldly in the political process.”¹⁹⁵ The environmental price tag society will pay for this expected long wait for the completion of the legal anchoring of rights to nature may be

190. *See id.*

191. *See supra* Section III.B.

192. *See id.*

193. Ryan et al., *supra* note 16, at 2522.

194. *See id.* at 2505–43.

195. Hunter, *supra* note 19, at 316.

exceptionally high.¹⁹⁶ The price may be particularly high as there is an available legal institution where environmental values may be considered to enable accommodating environmental challenges properly and efficiently. From a legal and conceptual point of view, private property is ripe to balance values with different ethical origins. Insisting on excluding environmental values from the value inquiry in private property harms the ability to effectively deal with environmental challenges.

V. FROM THEORY TO PRACTICE

American law has struggled with the tension between environmental challenges and private property for decades.¹⁹⁷ Private property is portrayed as a barrier to an effective environmental policy mainly because dealing with environmental challenges involves interference with private property.¹⁹⁸ At the same time, this vision of private property does not correctly reflect the characteristics of this legal institution and its theoretical roots. The understanding that private property may serve as an arena for balancing human, social, and environmental values provides a more appropriate normative expression of the property right and makes it a means to better and more effectively deal with pressing environmental challenges. Incorporating environmental values into private property has several practical implications, all of which contribute to effectively and adequately accommodating pressing environmental threats.

A. *Rethinking Environmental Takings*

The first practical implication of incorporating environmental values into private property stems from the effects of including such values on owners' expectations regarding their property. Currently, discourse about the meaning of interference with private property fails to consider environmental values, despite a need to accommodate environmental challenges. This means there is no coherent outline for decision-makers, courts, and property owners to deal with these issues. Thus, the question of which interferences with private property should entitle the owner to compensation remains puzzling in a way that makes it difficult for decision-makers to make informed decisions regarding environmental regulation and for courts to gauge the scope of the

196. *See id.* at 316–17.

197. *See Stern, supra* note 148, at 35.

198. *See id.* at 36.

intervention in private property correctly.¹⁹⁹ Consider, for example, the tension between the definition of a regulation that interferes with private property as part of the state police power and one seen as a taking.²⁰⁰ The distinction between a regulatory taking and a proper exercise of state police power turns on whether a property owner is entitled to compensation for damage to their property right.²⁰¹ Courts have failed to provide what Justice Brennan defined in *Penn Central Transportation Co. v. New York City* as a “‘set formula’ for determining when ‘justice and fairness’ require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons.”²⁰²

Instead, the *Penn Central* Court determined that this decision would consist of ad hoc, factual inquiries, balancing several criteria.²⁰³ The most significant criterion that the courts must examine in order to decide on the owners’ entitlement to compensation for the interference with private property is the “economic impact of the regulation” on the property owners, with an emphasis on “the extent to which the regulation has interfered with distinct investment-backed expectations.”²⁰⁴ Basing the decision regarding the scope of private property on the owners’ expectations illustrates the practical significance of incorporating environmental values to clarify the values in private property. To the extent that these values are excluded from the internal property values inquiry, the expectations of property owners regarding interference with their property should not include reference to these values. Any intervention in private property dealing with environmental challenges should be considered a property right violation.

To the extent that environmental, human, and social values are included in the property values inquiry, the expectations of property owners regarding their obligations and property rights will be shaped by regulations designed to accommodate environmental challenges. One way to view the distinction between a situation where environmental values are internalized into private property and one where they are excluded from it is in the distinction between the state police power and takings.²⁰⁵ Thus, to the extent that environmental values are internalized into private property, an environmental regulation that

199. See, e.g., *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104 (1978).

200. See Stern, *supra* note 148, at 44–47.

201. *Id.*

202. *Penn Cent.*, 438 U.S. at 124.

203. *Id.*

204. See *id.*

205. See Stern, *supra* note 148, at 44–46.

interferes with private property will not necessarily be perceived as violating private property rights because the internal property balance takes into account environmental values and defines the scope of the right in such a way as to allow intervention for these reasons. In this sense, not every environmental regulation that interferes with private property will justify providing compensation to property owners since there is no justification for compensation in the absence of a right. When will property owners be entitled to compensation due to environmental regulation? Only when the regulation violates the internal property balance, or in the words of Judge Holmes in *Pennsylvania Coal Co. v. Mahon*, when the regulation “goes too far.”²⁰⁶

On the other hand, to the extent that environmental values are excluded from private property, any environmental regulation that demands interference with private property should, at least conceptually, be perceived as infringing on the owner’s property rights. If environmental values are not part of the considerations that property owners should consider, then these values should not influence their expectations regarding their property. In such a case, the default should be to compensate the owners for interfering with private property unless the environmental values can be converted into human values. To the extent that the environmental values in whose name the regulation is applied cannot be assigned to human values, interference with private property should be considered a taking, and the owner should be compensated.

The internalization of environmental values into private property, in a way that incorporates these values in owners’ expectations, enables a distinctive legal treatment of different types of land and different environmental threats. This differentiated treatment follows because property owners should consider environmental values integral to their property rights. If environmental values are internalized in private property, then when owners buy environmentally sensitive land, such as wetlands, their property right is defined, from the onset, in a different way than if they purchase land that is not environmentally sensitive. If environmental values are internalized into private property, the nature of the land has meaning in defining the expectations of the property owners. On the other hand, as long as these values are not internalized into private property, owners should not include environmental considerations in their expectations. These things are also valid concerning the magnitude of the expected damage and the urgency to deal with the environmental threat. As environmental values are internalized into private property, these data should find expression in the scope of the

206. *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

right and in the legitimate expectations of the property owners. To the extent that these values are external to the right to property, interference with private property for environmental reasons, insofar as it cannot be converted into human values, should be perceived as a taking, entitling the owner to compensation.

B. Public Trust, Private Responsibility

A second effect of internalizing environmental values into property concerns the property doctrine of public trust and its current role as an instrument to ward off environmental threats.²⁰⁷ The doctrine of public trust constitutes one of the significant legal instruments for dealing with environmental challenges that affect natural resources and property rights.²⁰⁸ The understanding underlying the public trust doctrine is that the title to certain lands remains in the hands of the State, in trust for the people.²⁰⁹ Allowing the land to be controlled by the State does not mean denying the State's ability to grant rights to individuals or the State's inability to change the distribution of the land according to circumstances.²¹⁰ But at the same time, the historical concept of the public trust doctrine is that there are interests that are so fundamentally important to every citizen that maintaining free availability is essential to a thriving society.²¹¹ In his famous article, Joseph Sax claims that the public trust doctrine establishes public rights to specific resources.²¹² Indeed, how the doctrine of public trust is applied

207. *See supra* Section III.A.

208. *See id.*

209. *See* Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 458 (1892).

210. Sax, *supra* note 107, at 482 ("To accept such claims of property rights would be to prohibit the government from ever accommodating new public needs by reallocating resources. Certainly any such notion strikes at the very essence of governmental power, and acceptance of such a theory by a court would be as unwise as it is unlikely. . . . However strongly one might feel about the present imbalance in resource allocation, it hardly seems sensible to ask for a freezing of any future specific configuration of policy judgments, for that result would seriously hamper the government's attempts to cope with the problems caused by changes in the needs and desires of the citizenry.").

211. *Martin v. Waddell's Lessee*, 41 U.S. 367, 420 (1842) ("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 a common right. It would be a grievance which never could be long borne by a free people."); *see also* Sax, *supra* note 107, at 484 ("The approach with the greatest historical support holds that certain interests are so intrinsically important to every citizen that their free availability tends to mark the society as one of citizens rather than of serfs.").

212. *See* Sax, *supra* note 107, at 478-79, 484.

reveals that the public trust doctrine creates a set of public rights concerning specific natural resources, especially waterways.²¹³

In the absence of other significant measures, the public trust doctrine gradually gained momentum as a prominent instrument for dealing with environmental challenges.²¹⁴ For example, public trust principles have been adopted in various state statutes and ratified in state constitutions.²¹⁵ Different states adopted public trust doctrines to “protect different resources, although the common core of all of them remains navigable waterways.”²¹⁶ However, the public trust doctrine suffers from two main failures in trying to become an efficient and effective mechanism for dealing with environmental challenges. First, it is applied—whether in legislation or case law—mainly to water resources and while protecting navigable waters.²¹⁷ Second, like most property doctrines, it focuses only on anthropocentric values and does not consider non-human values.²¹⁸ In this sense, not much has changed since the Supreme Court ruled in *Illinois Central Railroad Co. v. Illinois* that

the 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 them, and have liberty of fishing therein freed from the obstruction or interference of private parties.”²¹⁹

This means that, although it guarantees that specific resources such as navigable water will be freely available for all citizens, this doctrine provides limited protection to environmental resources. The limitations of the public trust doctrine make it a relatively weak instrument for dealing with environmental challenges.

213. *Id.* at 478–82.

214. See Ryan et al., *supra* note 16, at 2461.

215. *Id.* at 2463–67.

216. *Id.* at 2467.

217. Ryan, *supra* note 111, at 137 (“The public trust doctrine, the protagonist of much modern environmental advocacy in the United States, creates a set of public rights and responsibilities with regard to certain natural resource commons, obligating the state to manage them in trust for the public. It is thought to be among the oldest doctrines of the common law, with roots extending as far back as ancient Rome and early Britain, where it primarily protected public values of navigation, fisheries, and commerce associated with waterways.”).

218. Ryan et al., *supra* note 16, at 2541 (“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.”).

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

However, its environmental effects exceed its limited ability to deal with pressing environmental threats properly. Using the public trust doctrine as the primary instrument to address environmental challenges can be counterproductive because it sends the message that responsibility for environment protection rests on the shoulders of the government, rather than the shoulders of citizens. To be clear, the government should be responsible for dealing with environmental challenges, particularly when the government is responsible for allocating resources. At the same time, limiting environmental protection to a governmental obligation hinders society's ability to address environmental threats and improperly reflects the scale of social values.

The proposal set forth in this Article promotes the ability to deal with environmental challenges that require intervention in private property on two levels. First, internalizing non-human environmental values into property broadens the public trust doctrine to account for more than just anthropocentric values. Second, this reorientation restores the burden balance between the government and owners to accommodate environmental challenges adequately and effectively. Internalizing non-human environmental values into property delineates the proper limits of environmental responsibility while burdening private property owners. The internalization of environmental values into property sharpens the commitment of property owners to the environment. It may prevent inappropriate use from an environmental point of view, as well as facilitate—practically and economically—the application of regulation aimed at accommodating environmental challenges.²²⁰ Since non-human environmental values are internalized into private property, property owners may bear the weight of the responsibility towards the environment, just as they, as property owners, currently bear the weight of the responsibility towards the community or the aggregated welfare.²²¹ The internalization of non-human environmental values into property, therefore, strengthens the doctrine of public trust while providing additional tools to handle

220. See Hanoch Dagan, *The Social Responsibility of Ownership*, 92 CORNELL L. REV. 1255, 1260 (2007) (“Not only does the social responsibility of ownership comply with the most compelling justifications of private property[;] it also corresponds to, and is indeed required by, the most attractive conceptions of membership and citizenship.”).

221. See Dagan, *supra* note 184, at 767 (“By rejecting strict short-term accounting, long-term reciprocity refuses to reduce citizenship and membership to monetizable exchanges, and seeks to preserve and inculcate people's sense of responsibility toward their fellow community members.”).

environmental threats by redrawing the limits of environmental responsibility.

C. Nature Gets a Seat at the Table

Another implication of internalizing environmental values into private property concerns the technical and procedural difficulties posed by current environmental mechanisms with respect to the environment's right to legal standing. One of the failures in the current legal state of affairs is that the environment has no effective proxy to advocate for its interests when decisions balancing values are made.²²² Thus, according to the doctrine of public trust, the legal standing of the environment has thus far depended on the government's willingness to prioritize environmental goals and has encompassed, from the beginning, only those interests that could be converted into human interests. Non-human environmental values are not represented when the public trust doctrine is used.²²³ For example, in *Illinois Central*, as much as the Illinois legislature did not see fit to intervene and cancel the title granted to the Illinois Central Railroad Company in the section of the submerged lakebed of Lake Michigan, it is likely that no other party could intervene and protect the environmental values that were damaged as a result of the development carried out by the company on the land.²²⁴ This insight also applies to Michigan Governor Whitmer's latest decision to revoke and terminate the 1953 easement for the dual pipelines through the Straits of Mackinac.²²⁵ Governor Whitmer's decision to apply the public trust doctrine and terminate the easement granted to Enbridge protected environmental interests.²²⁶ However, it does not reflect a legal right of standing for the environment but one contingent on the government's willingness to extend protection to the environment.

On the other hand, to use the rights of nature mechanism, those who wish to give the environment a voice in the decision-making procedures had to incorporate the right of environmental representatives, who will serve as a proxy for the environmental interests, in the legislation.²²⁷ For example, in the case of Orange County, Florida, the residents were required to vote to

222. See Ryan et al., *supra* note 16, at 2503–05.

223. *Id.* at 2541.

224. See *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 460 (1892).

225. See Press Release, State of Mich. Off. of the Governor, *supra* note 63.

226. See *id.*

227. See, e.g., ORANGE COUNTY, FLA., CODE OF ORDINANCES pt. I, art. VII, § 704.1 (2023).

amend their county's charter to grant rights to the Econlockhatchee and Wekiva Rivers.²²⁸ The amendment, also known as the Wekiva River and Econlockhatchee River Bill of Rights ("WEBOR"), states that the district, municipalities in the district, agencies in the district, and every citizen in the district "shall have standing to bring an action in their own name or in the name of the Waters to enforce the provisions of this Section of the Charter."²²⁹ This means that giving a voice to the environment in decision-making procedures depends on legislative recognition of a right of standing. Legislation of this kind will likely encounter political and social obstacles and, in any case, requires time that is running out in pressing environmental challenges.

Internalizing non-human environmental values into private property overcomes the obstacles posed by the rights of nature and the public trust doctrine to better incorporate the environment's voice into value decision-making. Environmental interests such as maintaining the cleanliness of rivers, wetlands, and other natural resources become an obligation built into the property rights of the relevant owners.

This understanding that an owner's right to property does not include the ability to pollute or damage natural resources implies the ability to enforce various restrictions on use of property, including restrictions on development and construction. The moratoria imposed by the Regional Planning Agency in *Tahoe-Sierra* illustrates how internalizing environmental values in private property may provide a suitable and effective substitute for granting standing to third parties to represent environmental interests.²³⁰ In *Tahoe-Sierra*, the Regional Planning Agency imposed moratoria on development in the Lake Tahoe Basin while formulating a comprehensive land-use plan for the area.²³¹ Putting aside the legal debate on whether the moratoria amounted to a taking, the assessment performed by the decision-makers in *Tahoe-Sierra* was, in practice, a balance between environmental values and human values.²³² This balance called for halting and rethinking development in the Lake Tahoe Basin in light of severe environmental consequences to the lake.²³³

228 Nicole Pallotta, *Legal Rights Recognized for Rivers in Florida and Quebec*, ANIMAL L. DEF. FUND (Mar. 29, 2021), <https://aldf.org/article/legal-rights-recognized-for-rivers-in-florida-and-quebec/> [https://perma.cc/C4WJ-VAVT].

229. *Id.*; ORANGE COUNTY, FLA., CODE OF ORDINANCES pt. I, art. VII, § 704.1 (2023).

230. *See Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 306–13 (2002); *see also supra* notes 39–43 and accompanying text.

231. *Id.* at 306.

232. *Id.* at 306–11.

233. *See id.* at 310–11.

Given that the balance between environmental, social, and human values defines the scope of the owners' property rights, the act of balancing ensures that property owners do not hold the right to unrestricted development and construction. Considering environmental values as an integral part of defining the contours of private property suggests that owners cannot use their property in a manner that harms the natural resources, not because someone has made an external claim against their abusive use, but because such a use is not included in their property rights at all.

The significance of this decision for the environment—and, in this specific case, for Lake Tahoe—is dramatic. Nature does not have to wait until an outside representative arrives to appeal to the courts on its behalf. The decision-makers and the courts can and should determine that property owners in the Lake Tahoe Basin cannot pollute—because polluting development, use, and construction are not included in their property rights. Therefore, internalizing environmental values into private property is expressively sound and practically useful. These practical implications are significant, especially when environmental threats are pressing, and the mechanisms that are supposed to provide environmental protection cannot provide proper and adequate protection.

VI. CONCLUSION

The pressing environmental challenges facing our world require decisive and comprehensive action from courts and other decision-makers. Although the law provides various instruments and mechanisms to deal with environmental challenges, it does not provide normatively appropriate and practical adequate infrastructure to deal with this. The public trust doctrine and the rights of nature movement provide only a partial answer, which has difficulty keeping up with the pace at which threats develop and environmental damages take shape. These legal mechanisms leave private property as a barrier to addressing environmental challenges, thereby delaying implementation of comprehensive environmental policies.

This Article suggests viewing private property as an arena where society can balance anthropocentric and ecocentric values as intrinsic to the right to property. Thus, private property should be viewed as a legal institution through which society can balance and prioritize its many competing values. Furthermore, this approach provides the decision-makers and the courts with an available and effective legal mechanism for conducting this value balance without any need to fashion new rights from scratch. These characteristics of private property as a legal institution have significance when society is required to face pressing challenges. By turning private property into a

receptacle for all values perceived as necessary in society—including non-human values—private property can at last transform from a villain into a hero.