NYU JOURNAL OF LAW & LIBERTY

BACK TO THE FUTURE OF CONSERVATION:

CHANGING PERCEPTIONS OF PROPERTY RIGHTS & ENVIRONMENTAL PROTECTION

Jonathan H. Adler*

Introduction....988
I. Property Rights versus Environmental Protection....990
II. Environmental Protection versus Property Rights....992
A. The "Quiet Revolution" in Land-Use Control....993
B. The Growth of Federal Regulation....994
C. The "Takings Issue"....997
III. Unintended Consequences....1001
A. Landowner Backlash....1001
B. Perverse Incentives....1006
IV. Reconciling Property and Regulation....1009
V. Property-based Conservation....1013
A. Private Land Conservation....1014
B. Water Rights....1015
C. Grazing Rights....1017
D. Fishing Rights....1018
Conclusion....1019

* Visiting Associate Professor, George Mason University School of Law and Visiting Senior Scholar, Mercatus Center; Associate Professor of Law and Associate Director, Center for Business Law & Regulation, Case Western Reserve University School of Law. The author would like to thank J. Bishop Grewell, Andrew P. Morriss, and Christina Rorick for useful comments and critiques on earlier drafts of this paper, as well as Benjamin Cramer, Katherine Gibbons, and Nathaniel Stewart for valuable research assistance. Any mistakes or omissions are solely those of the author.

Introduction

Private property has been a core American value since the nation's inception. Property rights hold a central place in our constitutional design and provide the foundation for America's market economy. Influenced by the writing of John Locke,[1] who argued that the purpose of the state was to provide for the protection of life, liberty and property,[2] the nation's founders enshrined the protection of property rights in the Constitution.[3] The nation's founders saw property ownership as a guarantor of individual liberty and believed protection of property was among the central aims of government. James Madison, for one, argued that the very purpose of government was to protect private property and to "secure[] to every man, whatever is his *own*."[4]

Admiration of private property has not been universal, however. Critics have challenged the definition, distribution, and use of private property. Some environmental scholars and policymakers have been particularly critical of classical liberal conceptions of private property on both theoretical and practical grounds, suggesting that traditional notions of property rights are incompatible with the demands of environmental protection. Perceiving an environmental crisis borne from Lockean conceptions of property and capitalism, many environmental thinkers came to view the legal protection of private property as an obstacle to environmental sustainability. As a result, the development of command-and-control regulation in the 1960s and 1970s was influenced by the ecological critique of private property. Markets were efficient, but they encouraged the commodification of na-

---

[1] *See, e.g.*, PAULINE MAIER, AMERICAN SCRIPTURE 87 (1997) ("By the late eighteenth century, 'Lockean' ideas of government and revolution were accepted everywhere in America; they seemed, in fact, a statement of principles built into English constitutional tradition."); *see also* DENNIS J. COYLE, PROPERTY RIGHTS AND THE CONSTITUTION (1993); JAMES W. ELY JR., THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS (1992); FORREST MCDONALD, NOVUS ORDO SECLORUM: THE INTELLECTUAL ORIGINS OF THE CONSTITUTION (1985); LOUIS HARTZ, THE LIBERAL TRADITION IN AMERICA (1955).

[2] JOHN LOCKE, TWO TREATISES OF GOVERNMENT AND A LETTER CONCERNING TOLERATION 154-55 (Ian Shapiro ed., Yale Univ. Press 2003) (1690) (arguing that men enter the social contract to ensure "the mutual preservation of their lives, liberties, and estates, which I call by the general name property").

[3] The Bill of Rights and Reconstruction Amendments explicitly enshrined the protection of property in the Constitution. As amended, the Constitution bars government deprivation of "life, liberty, or *property*" without "due process of law" in the Fifth and Fourteenth Amendments. The Fifth Amendment further protected private property from being "taken for public use without just compensation." U.S. CONST. amend. V, XIV. Although "property" is not mentioned in the Constitution itself, other than in its amendments, Alexander Hamilton observed at the outset of *The Federalist Papers* that adoption of the Constitution would provide "additional security . . . to liberty, and to property." THE FEDERALIST No. 1, at 90 (Alexander Hamilton) (Isaac Kramnick ed., 1987). It is also significant that the original state constitutions contained explicit protections for property rights as well. *See, e.g.*, Steven J. Eagle, *The Birth of the Property Rights Movement*, POL'Y ANALYSIS (Cato Inst., Washington, D.C.), June 26, 2001, at 7.

[4] James Madison, *Property*, *in* 6 THE WRITINGS OF JAMES MADISON 102 (Galliard Hunt ed., 1906) (1792).

ture. Absent effective control of "externalities," property rights could lead to ruin, and externalities were everywhere.[5]

In recent years, however, the perception of private property's role in environmental conservation has begun to change. Disregard for the rights and interests of property owners has spurred a backlash of opposition to environmental regulation. No less significant, the incentives created by land-use restrictions have often worked against the goals of environmental conservation, prompting some environmental analysts to observe that working with landowners may, in some circumstances, be more effective than controlling them through regulation. More broadly, there is an increased recognition that property rights can be as important for environmental protection as they are for individual liberty and economic prosperity.[6] While the transformation is not complete, a reconciliation between property rights and environmental protection seems to be in the making.

This essay traces the evolving perception of private property in modern environmental policy. Part I documents how modern environmental thought has challenged the traditional notions of property, focusing on the ecological critiques that were particularly influential during the emergence of the modern environmental movement in the 1960s and 1970s. Part II explains how these critiques were translated into policy, contributing to a "quiet revolution in land use policy"[7] and the emergence of federal controls on various aspects of land use, as well as the concern that constitutional protections for private property, such as the Fifth Amendment's Takings Clause, could inhibit environmental regulation of land use.

The proliferation of environmental regulation controlling private land use was not without its consequences. Part III summarizes these consequences. On the one hand, extensive land-use regulations triggered opposition from landowners and resource-dependent communities, leading to the emergence of the "wise use" and property rights movements. On the other hand, some environmental regulations, such as the Endangered Species Act's controls on private land use, discouraged environmental conservation. Part IV describes how some environmental activists came to recognize that punitive environmental regulations could be counterproductive for environmental goals, and that if compliance were less onerous for private landowners, it would be easier to advance some environmental goals, such as the conservation of endangered species' habitats.

---

[5] *Cf.* RONALD H. COASE, THE FIRM, THE MARKET, AND THE LAW 26 (1988) (observing that "the mere existence of 'externalities' does not, of itself, provide any reason for governmental intervention," since such externalities are "ubiquitous").

[6] For general evidence of the resurgent appreciation of property rights as an institution, *see* HERNANDO DE SOTO, THE MYSTERY OF CAPITAL: WHY CAPITALISM TRIUMPHS IN THE WEST AND FAILS EVERYWHERE ELSE (2000); RICHARD PIPES, PROPERTY AND FREEDOM (1999); TOM BETHELL, THE NOBLEST TRIUMPH: PROPERTY AND PROSPERITY THROUGH THE AGES (1998); *see also* PROPERTY RIGHTS: COOPERATION, CONFLICT, AND LAW (Terry L. Anderson & Fred S. McChesney eds., 2003) (surveying the law and economics of property rights).

[7] *See* FRED BOSSELMAN & DAVID CALLIES, THE QUIET REVOLUTION IN LAND USE CONTROL (1971).

Greater recognition of the role of private landowners in conservation is but one part of the renewed appreciation for private property in environmental policy. Part V summarizes how environmental analysts are starting to encourage the use of property institutions themselves to advance environmental values. From land and water conservation to fisheries regulation, property rights increasingly sit alongside traditional command-and-control regulation in the environmental policymaker's toolbox. The essay closes with some thoughts on how this new appreciation of private property may continue to transform environmental policy in the future, while harkening back to the property-based conservation strategies initially embraced by the early American conservation movement.

I. Property Rights versus Environmental Protection

The modern environmental movement was born in the late 1960s, a time when many American institutions were viewed with suspicion.[8] "You simply can't live an ecologically sound life in America," Earth Day organizer Denis Hayes explained, so it was necessary to "challeng[e] the ethics" of American society.[9] The ecological wisdom of the time held that saving the earth required new limitations on the rights of private ownership, particularly land ownership. The Blackstonian conception of ownership as complete dominion had to yield to ecological considerations[10] and broader notions of the social good.[11] Indeed, some argued that classical liberalism itself, not just Lockean notions of property, was problematic for environmental protection, and that mainstream discussions of environmental policy had understated the tension between liberal values and environmental protection.[12] "If, in the view of liberalism, the chief end of civil society is the preservation and protection of property rights, environmental regulation challenges the ideological basis of political order."[13] The "ecological crisis" required the reconsideration of basic liberal ideals, including basic notions of private property and progress.[14]

---

[8] The modern environmental movement should be distinguished from the "conservation movement" that began decades earlier. As environmental historian Roderick Nash observed, in the late 1960s and early 1970s "[t]he term conservation lost favor to environmentalism" as the priorities and ideology of environmental concerns changed. RODERICK NASH, AMERICAN ENVIRONMENTALISM: READINGS IN CONSERVATION HISTORY 187 (3rd Ed. 1990). *See also* JONATHAN H. ADLER, ENVIRONMENTALISM AT THE CROSSROADS: GREEN ACTIVISM IN AMERICA 21-24 (1995) (noting conflict between old-line conservationists and emerging environmental movement); PHILIP SHABECOFF, A FIERCE GREEN FIRE: THE AMERICAN ENVIRONMENTAL MOVEMENT 111-29 (1993) (same).

[9] MARC MOWERY & TIM REDMOND, NOT IN OUR BACKYARD: THE PEOPLE AND EVENTS THAT SHAPED AMERICA'S MODERN ENVIRONMENTAL MOVEMENT 42 (1993) (quoting Denis Hayes).

[10] *See* Eric T. Freyfogle, *Ownership and Ecology*, 43 CASE W. RES. L. REV. 1269, 1292 (1993).

[11] *See, e.g.*, BERNARD SCHWARTZ, A COMMENTARY ON THE CONSTITUTION OF THE UNITED STATES, PART 2: THE RIGHTS OF PROPERTY v (1965) ("[W]e are ceasing to think of property purely in terms of private right and more and more thinking of it in terms of social function, and hence increasingly subject to social control.").

[12] Matthew A. Cahn, *Liberalism and Environmental Quality, in* THINKING ABOUT THE ENVIRONMENT: READINGS ON POLITICS, PROPERTY, AND THE PHYSICAL WORLD 120, 120-21 (Matthew Alan Cahn & Rory O'Brien eds., 1996).

[13] *Id.* at 126.

[14] Ritchie P. Lowry, *Toward a Radical View of the Ecological Crisis*, 1 ENVTL. AFF. 350, 356-57 (1971).

Pioneers in environmental thinking, such as Barry Commoner[15] and E.F. Schumacher,[16] rejected capitalism, and private property in particular. For ecological survival, Commoner counseled that private property rights would have to be subsumed for the public good. "If we are to survive, ecological considerations must guide economic and political ones."[17] Others warned that traditional notions of property threatened to "destroy" the environment.[18] Environmental law pioneer Joseph Sax, for instance, argued that the conflict between traditional notions of property and environmental protection suggested "the need for a reconsideration of the notion of property rights."[19]

The new ecological worldview called for more than piecemeal change. Commoner's insight that "everything is connected to everything else"[20] was simply "the most profound challenge ever presented to established notions of property."[21] Private ownership requires the division, segmentation, and commodification of the earth without regard for ecological boundaries. Yet "[d]efining property as something that is privately held immediately impacts the environment."[22] The "interconnectedness between seemingly unrelated pieces of property" meant that traditional notions of property and ownership must yield to ecological considerations.[23] However much such boundaries facilitate human exchange and the resolution of disputes, they are decidedly unnatural: "The boundaries that we draw, between farm A and ranch B, carry no meaning in nature's terms. No coyote or egret reads our deeds; no percolating groundwater stops to ask permission to enter."[24] As Sax observed, "modern ecological theory has eroded the notion of a bounded domain, often almost to the vanishing point."[25]

From this standpoint, *any* use of private land is a potential source of externalities worthy of regulation. Leaving land in a "natural" state becomes a default proposition.[26] Whereas Americans once shared the belief that "the private owner-

---

[15] BARRY COMMONER, THE CLOSING CIRCLE: NATURE, MAN AND TECHNOLOGY 291 (1972).

[16] *See generally* E.F. SCHUMACHER, SMALL IS BEAUTIFUL (1973).

[17] COMMONER, *supra* note 15, at 292.

[18] Lowry, *supra* note 14, at 355–56.

[19] Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149, 150 (1971) [hereinafter Sax, *Takings*].

[20] COMMONER, *supra* note 15, at 291.

[21] Joseph L. Sax, *The Constitutional Dimensions of Property: A Debate*, 26 LOY. L.A. L. REV. 23, 32 (1992) [hereinafter Sax, *Constitutional Dimensions*].

[22] Rory O'Brien, *Law Property, and the Environment, in* THINKING ABOUT THE ENVIRONMENT: READINGS ON POLITICS, PROPERTY, AND THE PHYSICAL WORLD 57, 57 (Matthew Alan Cahn & Rory O'Brien eds., 1996).

[23] Sax, *Takings*, *supra* note 19, at 150; *see also* Freyfogle, *supra* note 10, at 1269 ("A land parcel is a precisely bounded portion of the Earth's surface, a tiny piece of an entirety that is, in nature's terms, interconnected and indivisible.").

[24] Freyfogle, *supra* note 10, at 1279.

[25] Sax, *Constitutional Dimensions*, *supra* note 21, at 33. Sax added that "it is not simply that we know more than we once did. We also have different priorities," including environmental protection. *Id.* at 34. In other words, changed values are part of the reason for the redefinition of property rights.

[26] Eventually some prominent environmental scholars would suggest barring the development of all previously undeveloped land. *See, e.g.*, Paul R. Ehrlich & Edward O. Wilson, *Biodiversity Studies: Science and Policy*, SCIENCE, Aug. 16, 1991, at 761 (A "first step" toward protection of biodiversity "would be to

ship system [would] allocate and reallocate the property resource to socially desirable uses," visible failures to put land to "correct" uses suggested otherwise.[27] The traditional view that each landowner was entitled to use her land as she saw fit, so long as her endeavors did not intrude upon her neighbors' quiet enjoyment of their property, was displaced. Development itself became suspect, and landowners were expected to leave their land in a natural state to provide public benefits in the form of habitat, viewsheds, open space, and other amenities. The owner of undeveloped land would now be required "to continue bestowing amenity value upon his neighbors even though they have no similar obligation."[28] "Planning" would displace "property" as the engine of progress.[29] Such were the demands of the new environmental ethic.

II. Environmental Protection versus Property Rights

The ecological critique quickly began to influence environmental policy and encouraged the adoption of land-use regulations at the federal, state, and local levels. Political leaders warned of a "national land use crisis" and counseled that "land must be considered as more than a commodity to be bought, sold and consumed; rather it should be viewed as a finite resource to be husbanded."[30] As the ideas of environmental thinkers permeated the development of environmental policy, regulatory controls on private land use proliferated at the federal, state and local levels. Russell Train, Chairman of the President's Council on Environmental Quality, explained the new policy agenda:

> Once, perhaps, it was enough to leave a property owner in virtually full dominion over his land. But that is no longer the case, and more and more people are recognizing that it is essential to extend the public authority over private land if we are to provide some order and preserve some beauty in the very complex urban society of the late twentieth century.[31]

The result was a "revolution" in land-use policy to address environmental concerns.[32]

---

cease 'developing' any more relatively undisturbed land.").

[27] Joseph L. Sax, *Some Thoughts on the Decline of Private Property*, 58 WASH. L. REV. 481, 484 (1983) [hereinafter Sax, *Thoughts*].

[28] *Id.* at 483.

[29] *Id.* at 495-96.

[30] ENVIRONMENTAL POLICY DIV., 93D CONG., NATIONAL LAND USE POLICY LEGISLATION: AN ANALYSIS OF LEGISLATIVE PROPOSALS AND STATE LAWS 653 (Comm. Print 1973) [hereinafter NATIONAL LAND USE POLICY].

[31] COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY 1973, at 126 (1973) [hereinafter ENVIRONMENTAL QUALITY].

[32] *See* BOSSELMAN & CALLIES, *supra* note 7; ENVIRONMENTAL QUALITY, *supra* note 31, at 121 ("This country is in the midst of a revolution in the way we regulate the use of our land."). This "revolution" in thinking about private land-use should be distinguished from the earlier push within the conservation movement for greater federal ownership and scientific management of lands for both economic and environmental purposes. *See generally* ROBERT H. NELSON, PUBLIC LANDS, PRIVATE RIGHTS 39-146 (1995).

A. The "Quiet Revolution" in Land-Use Control

As the environmental movement evolved from a localized conservation movement to a national political force in the late 1960s and 1970s, there was a push for a new generation of environmental regulation at all levels of government. While conservation leaders had long supported government land acquisition and careful resource management on the federal estate, modern environmentalism called for greater regulatory control of private land. In 1971, the newly formed President's Council on Environmental Quality (CEQ) declared that the nation was "in the midst of a revolution in the way we regulate the use of our land"—the so-called "quiet revolution in land-use control."[33] The presidentially appointed Task Force on Land Use and Urban Growth noted a "new mood" in the nation that "recognizes for the first time that decisions regarding the use of land will have a major impact on society." This recognition led to a "wave of state land use regulation."[34] Traditional notions of property rights, economic laissez-faire, and local control were discredited. According to the Task Force, "[t]he land market as it operates today is the principal obstacle to effective protection of private open space."[35] Whereas land-use control had traditionally been viewed as an "urban problem" best handled by local zoning, policymakers now perceived the need for broader property restrictions.[36] Local zoning was "inadequate to combat a host of problems of statewide significance," and environmental problems in particular.[37] The Task Force concluded that in order to "protect critical environmental and cultural areas, tough restrictions will have to be placed on the use of privately owned land."[38]

The policy changes began at the state level, where governments began adopting a variety of "revolutionary" new regulatory programs to control land-use in a more comprehensive fashion.[39] Hawaii was the first to act, in 1961, enacting a land-use law that authorized creation of a state Land Use Commission with broad regulatory authority. Other states quickly followed suit.[40] These regulatory programs were designed, in part, to address "our increasingly limited supply of land"[41] and make up for local zoning's failure to produce comprehensive land-use planning.[42] Each embodied "a regional land resource orientation" that sought to control land use for the broader wellbeing of the region as a whole. Taken together,

---

[33] BOSSELMAN & CALLIES, *supra* note 7, at 1.
[34] THE USE OF LAND: A CITIZEN'S POLICY GUIDE TO URBAN GROWTH 147–48 (William K. Reilly, ed. 1973). *See also* ENVIRONMENTAL QUALITY, *supra* note 31, at 220.
[35] THE USE OF LAND, *supra* note 34, at 21.
[36] BOSSELMAN & CALLIES, *supra* note 7, at 2.
[37] *Id.* at 3.
[38] THE USE OF LAND, *supra* note 34, at 23.
[39] Charles S. Unfug & Lewis Schwartz, *Development Pains: From the Mountains to the Plains*, ENV'T, Jan.–Feb. 1977, at 29 (noting several states had taken "the revolutionary step of passing state-level land-use programs in the early 1970s").
[40] NATIONAL LAND USE POLICY, *supra* note 30, at 117.
[41] BOSSELMAN & CALLIES, *supra* note 7, at 1.
[42] *Id.* at 3.

they represented a rejection of "19th century" conceptions of land as a commodity in favor of seeing land as a "resource."[43]

State land-use controls took a variety of forms. Vermont, for example, adopted a new "Environmental Control" law to "provide a uniform, comprehensive approach" to land-use planning.[44] Massachusetts adopted a wetland protection law in 1963,[45] the first such program in the nation,[46] and New York created the Adirondack Park Agency to combat the "'threat of unregulated development' on private land within the Park."[47] Wisconsin created a shoreland protection program,[48] and the San Francisco Bay Commission was formed to regulate land-use in the area.[49] Regional authorities, such as the Tahoe Regional Planning Compact, were also created with Congressional approval to address interstate land-use concerns.[50] Although differing in their particulars, these statutes "shared a common emphasis."[51] As CEQ observed in a 1973 report, each "viewed the use of land as a resource decision that must be analyzed from a state or regional perspective not merely with an eye to its effect on the immediate neighbors."[52]

These changes in land-use policy at the state and local level were deemed the "quiet revolution in land use control," as they seemed to presage a genuine change in the view of private property at the grass-roots level.[53] These regulatory programs, based upon "new perceptions of society's well-being," reflected a changed conception, if not actual redefinition, of the institution of private property.[54]

B. The Growth of Federal Regulation

Just as federal environmental regulation followed on the heels of earlier state efforts,[55] the proliferation of state and local land-use controls rapidly led to the consideration of national land-use planning legislation. In 1972, President Nixon

---

[43] *Id.* at 314–15.
[44] *Id.* at 55.
[45] *Id.* at 207.
[46] *See* Alexandra D. Dawson, *Massachusetts' Experience in Regulating Wetlands, in* ASS'N OF STATE WETLAND MGRS., WETLAND PROTECTION: STRENGTHENING THE ROLE OF THE STATES 255 (1985). For more discussion of early state wetland protection efforts, see Jonathan H. Adler, *Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetland Regulation*, 29 ENVTL. L. 1, 47–49 (1999).
[47] BOSSELMAN & CALLIES, *supra* note 7, at 296.
[48] *Id.* at 235.
[49] *Id.* at 108.
[50] *See* NATIONAL LAND USE POLICY, *supra* note 30, at 117; Tahoe Regional Planning Compact, Pub. L. No. 91-148 (1969).
[51] FRANK BOSSELMAN ET AL., THE TAKING ISSUE: A STUDY OF CONSTITUTIONAL LIMITS OF GOVERNMENTAL AUTHORITY TO REGULATE THE USE OF PRIVATELY-OWNED LAND WITHOUT PAYING COMPENSATION TO THE OWNERS 213 (1973).
[52] *Id.*
[53] BOSSELMAN & CALLIES, *supra* note 7, at 108.
[54] ENVIRONMENTAL QUALITY, *supra* note 31, at 125–26.
[55] *See* Jonathan H. Adler, *The Fable of Federal Environmental Regulation*, 55 CASE W. RES. L. REV. 93 (2004).

called for the federal government to "reinforce" the "encouraging trend" of greater state and local land-use controls.[56] Specifically, Nixon cited an emerging view of "our land as a limited and irreplaceable resource" as grounds for creating "the administrative and regulatory mechanisms necessary to assure wise land use and to stop haphazard, wasteful, or environmentally damaging development."[57] Nixon's CEQ Chairman, Russell Train, concurred. It was "a matter of urgency that we develop more effective nationwide land-use policies and regulations. Land use is the single most important element affecting the quality of our environment which remains substantially unaddressed as a matter of national policy."[58]

Members of Congress became "convinced that the United States need[ed] a broad-based policy of land use management" at the federal level.[59] Such legislation was "one of the most urgent environmental issues in the 93rd Congress,"[60] in which over 60 bills promoting federal land-use control were introduced.[61] One legislative proposal declared that it was a "federal responsibility" to "undertake the development and implementation of a national land use policy which shall incorporate environmental, esthetic, economic, social, and other appropriate factors."[62] Failure to adopt such measures could lead to nothing less than a "*national* land use crisis."[63] Train observed favorably that such legislation was "a very revolutionary proposal to bring about a basic shift in political power as it deals with land use in the United States."[64] Furthermore, Train argued, federal incentives for greater state land-use planning were insufficient. Federal legislation needs "sanctions—tough sanctions—or it will never work," he warned,[65] a view also endorsed by President Nixon.[66]

Congress was never able to enact a federal land-use planning statute, but it did enact extensive federal environmental regulation with tremendous implications for private land use.[67] By the end of the 1970s over a dozen major environmental laws had been enacted, including the Clean Air Act,[68] Endangered Species Act,[69]

---

[56] NATIONAL LAND USE POLICY, *supra* note 30, at 5.
[57] *Id.*
[58] *Id.* at 644. *See also* Martin R. Healy, *National Land Use Proposal: Land Use Legislation of Landmark Environmental Significance*, 3 ENVTL. AFF. 355, 355 (1974) ("Land use is the single most important element affecting the quality of the environment which remains substantially unaddressed as a matter of national policy.").
[59] NATIONAL LAND USE POLICY, *supra* note 30, at 9.
[60] *Id.* at 20.
[61] *Id.* at 39.
[62] *Id.* at 497–98.
[63] *Id.* at 640.
[64] *Id.* at 81.
[65] Quoted in Healy, *supra* note 58, at 376–77.
[66] *See* ENVIRONMENTAL QUALITY, *supra* note 31, at 214.
[67] *See* Robert H Nelson, *Federal Zoning: The New Era in Environmental Policy*, *in* LAND RIGHTS: THE 1990S PROPERTY RIGHTS REBELLION 295, 296 (Bruce Yandle ed. 1995) ("Over the space of three years in the early 1970s . . . the key elements of a statutory foundation for federal land-use regulation were put in place.").
[68] 42 U.S.C. §§ 7401–7671q (2000). It is worth noting that the first federal clean air legislation was enacted in 1955 (Pub. L. No. 88-206) and amended in 1963, 1965, 1966, and 1967. With a few exceptions, such as the creation of federal emission standards for new automobiles mandated in 1967, the pre-1970 statutes were largely non-regulatory in nature. Although the 1970 Act was itself, technically, a series of amend-

Water Pollution Control Act (commonly known as the "Clean Water Act"),[70] Coastal Zone Management Act,[71] Federal Land Policy and Management Act,[72] National Forest Management Act,[73] and Resource Conservation and Recovery Act,[74] among others.[75] Taken together, these statutes had profound implications for land-use decisions throughout the nation.[76]

National land-use legislation had been rejected, but much the same thing was enacted in piecemeal fashion throughout the decade. Nearly all of the major environmental laws had implications for the use of private land. The Endangered Species Act (ESA) prohibited the modification of endangered species' habitat on private land where such habitat modification could "harm" listed species.[77] In effect, the ESA granted endangered species a lien or easement that trumps the conflicting rights of the land's title-holder.[78] As a result, the ESA barred landowners from building homes, planting crops, or making other land-use modifications that could alter species' habitat.[79] The Clean Water Act (CWA) prohibition on the "discharge of any pollutant" into the navigable waters of the United States without a permit has been interpreted to require federal permits for the development and filling of wetlands.[80] While the ESA and CWA had the greatest impact on private land use, other environmental statutes restricted private land-use decisions as well. The Resource Conservation and Recovery Act regulated land-based waste disposal.[81] Even the Clean Air Act, not normally considered a piece of land-use legislation, authorized land-use and transportation controls to meet air quality stan-

---

ments to the prior statutes, it is commonly referred to as *the* Clean Air Act, as it provides the foundation for the contemporary regulatory structure.

[69] 16 U.S.C. §§ 1531–1544 (2000).

[70] 33 U.S.C. §§ 1251–1387 (2000). The Clean Water Act is formally known as the Federal Water Pollution Control Act.

[71] 16 U.S.C. §§ 1451–1465 (2000).

[72] 43 U.S.C. §§ 1701–1785 (2000).

[73] 16 U.S.C. §§ 1600–1614 (2000).

[74] 42 U.S.C. §§ 6901–6992k (2000).

[75] Other environmental statutes enacted during this period include the National Environmental Policy Act, 42 U.S.C. §§ 4321–4347 (2000), the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136–136y (2000), the Safe Drinking Water Act, 42 U.S.C. §§ 300f–300j-26 (2000), and the Toxic Substances Control Act 15 U.S.C. §§ 2601–2692 (2000).

[76] FRED BOSSELMAN, ET AL., FEDERAL LAND USE REGULATION 1 (1977); *see also* Nelson, *Federal Zoning*, *supra* note 67; Nancie G. Marzulla, *The Property Rights Movement: How It Began and Where It Is Headed*, *in* LAND RIGHTS, *supra* note 67, at 1.

[77] 16 U.S.C. § 1538 (2000) (prohibiting the "tak[ing]" of an endangered species). *See also* Babbitt v. Sweet Home Chapter of Cmtys. for a Great Oregon, 515 U.S. 687 (1995) (upholding definition of "take" to include "significant habitat modification or degradation" that "actually kills or injures wildlife").

[78] *See* Brian Mannix, *The Origin of Endangered Species and the Descent of Man (with apologies to Mr. Darwin)*, AM. ENTER. Nov. 1992, at 58; *see also* Andrew P. Morriss & Richard L. Stroup, *Quartering Species: The 'Living Constitution,' the Third Amendment, and the Endangered Species Act*, 30 ENVTL. L. 769 (2000).

[79] *See generally* Albert Gidari, *The Endangered Species Act: Impact of Section 9 on Private Landowners*, 24 ENVTL. L. 419 (1994); *see also* Ike C. Sugg, *Caught in the Act: Evaluating the Endangered Species Act, Its Effects on Man and Prospects for Reform*, 24 CUMB. L. REV. 1 (1993); Robert J. Smith, *The Endangered Species Act: Saving Species or Stopping Growth?* REG., Winter 1992, at 83.

[80] *See* 33 C.F.R. § 328.3 (interpreting 33 U.S.C. §1311(a)).

[81] 42 U.S.C. § 6924.

dards.[82] Even if not completely recognized at the time, the impact of these new environmental laws was quite far reaching.[83]

C. The "Takings Issue"

As the new environmental policy agenda progressed, environmental leaders feared that legal protection of private property from government expropriation and regulation could limit the effectiveness of new environmental measures. Beginning in the 1970s, government officials and environmental leaders expressed concern that courts might enforce constitutional limitations on land-use controls.[84] "Almost every state and local government that is trying to implement an environmentally-oriented land regulatory system finds itself plagued with constitutional doubts," observed one report.[85] Specifically, they feared that insofar as new regulations limited the rights of ownership, they could run afoul of the Fifth Amendment's admonition that "private property [shall not] be taken for public use without just compensation."[86]

The President's Council on Environmental Quality published a series of reports examining the potential impact of the "taking issue" on environmental policy. CEQ officials were concerned that the constitutional protection of property rights could be the "weak link" in efforts to protect environmental quality through land-use control.[87] They observed that "attempts to solve environmental problems through land-use regulation are threatened by the fear that they will be challenged in court as an unconstitutional taking of property without compensation."[88] Confirming this fear, the Supreme Judicial Court of Maine found that application of the Maine Wetland Act to private land constituted an uncompensated "taking" in violation of the Maine constitution.[89]

---

[82] *See* Charles B. Ferguson, Jr., Comment, *Hamlets: Expanding the Fair Share Doctrine Under Strict Home Rule Constitutions*, 49 EMORY L.J. 255, 265 n.68 (2000) ("The Clean Air Act at its inception contained provisions aimed at land use control; however, it was amended in 1977 due to concerns over infringing on the traditional land use control authority of local government." (citing 5 FRANK P. GRAD, TREATISE ON ENVIRONMENTAL LAW § 10.02, at 10–43 (1999))). *See also* Arnold W. Reitze, Jr., *Transportation-Related Pollution and the Clean Air Act's Conformity Requirements*, 13 NAT. RESOURCES & ENV'T 406, 406 (1998).

[83] Nelson, *Federal Zoning*, *supra* note 67, at 297 ("The full land-use consequences of the environmental legislation of the early 1970s, as subsequently amended, are only now coming to be more widely recognized.").

[84] *See, e.g.*, BOSSELMAN ET AL., *supra* note 51, at 29; BOSSELMAN & CALLIES, *supra* note 7, at 323-25.

[85] BOSSELMAN & CALLIES, *supra* note 7, at 323.

[86] U.S. CONST. amend. V.

[87] BOSSELMAN ET AL., *supra* note 51, at iv.

[88] *Id.*

[89] State v. Johnson, 265 A.2d 711 (Me. 1970); *See also* Joseph W. Gannon, Jr. *Constitutional Implications of Wetlands Legislation*, 1 ENVTL. AFF. 654 (1971) (discussing and critiquing the Johnson decision). Gannon concludes that such cases "[r]equire the courts to be attentive to new scientific information and to shifting societal values." *Id.* at 665.

Finding ways around potential takings concerns became a major environmental priority.[90] Analysts for CEQ questioned whether "in an increasingly crowded and polluted environment can we afford to continue circulation of the myth that tells us that the takings clause protects this right of unrestricted use regardless of its impact on society?"[91] CEQ's answer: "Obviously not."[92] At the same time, environmentalists did not believe that environmental protection could proceed if new land-use controls were deemed unconstitutional takings of private property for which compensation had to be paid. Thus CEQ sought to identify potential strategies to address the takings issue, particularly in court. If it were possible to "destroy the 'myth' of the taking clause," CEQ observed, environmental regulation would face fewer legal obstacles.[93] Left unchecked, this "myth" would inhibit regulatory measures needed to address the threat posed by unregulated land use.[94]

These concerns were valid. The Fifth Amendment was originally enacted to prevent the government from expropriating private property for some "public" use without compensating the landowner for his loss.[95] If the government needed a piece of coastal land to build a lighthouse or expand a naval base, private land could be taken through the power of eminent domain, but the government would have to pay the fair value for the land taken. Government could effectively force a sale of property, but it could not take property outright without compensating the owner.

In the 1922 case of *Pennsylvania Coal Co. v. Mahon*, the Supreme Court held for the first time that regulation, if it goes "too far," could effectuate a taking of private property.[96] The Pennsylvania Coal Company owned land in fee simple near Scranton, Pennsylvania. In 1887, the company transferred ownership of the surface to Mrs. Mahon, while explicitly retaining the subsurface right to the coal beneath the land. Over thirty years later, Pennsylvania enacted a law limiting the mining of coal under private land owned by someone else. When Pennsylvania Coal sought to begin mining, Mrs. Mahon sued, prompting Pennsylvania Coal to challenge the constitutionality of the state law.[97]

---

[90] BOSSELMAN, ET AL., *supra* note 51, at v ("[I]f the challenge posed by the taking issue can be overcome we believe it will make a very significant impact on environmental quality.").
[91] *Id.* at 2.
[92] *Id.* The report continued, "yet we must not let concern for the environment blind us to the fact that regulations have real economic impact on real people, and we must search for solutions that will take their interests into account." *Id.*
[93] *Id.* at 236.
[94] *Id.* at 324.
[95] *See* Armstrong v. United States, 34 U.S. 40, 49 (1960) (noting that the Takings Clause "was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole").
[96] 260 U.S. 393, 413, 415 (1922) ("When it reaches a certain magnitude, in most if not in all cases there must be an exercise of eminent domain and compensation to sustain the act."); *See also,* ELY, *supra* note 1.
[97] *Mahon,* 260 U.S. at 412.

Writing for the Court, Justice Oliver Wendell Holmes explained that "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."[98] "Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law," Holmes acknowledged. Yet, for government regulation "to make it commercially impracticable to mine certain coal has very nearly the same effect for constitutional purposes as appropriating or destroying it."[99] Government's police power could not be used to take with regulation that which government would have to pay for through eminent domain: "A strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change."[100]

The Supreme Court did not find many cases of regulatory takings in the following decades.[101] Nonetheless, the *Mahon* decision stood as a warning that if environmental regulation went "too far" compensation to landowners would be required. As a general rule, regulation to prevent a "nuisance" would not require compensation, but naked restrictions on land use would. The former is not a taking because no landowner has the right to use his land so as to harm another.[102] The latter is a taking because the landowner is deprived of a right that inheres in ownership of the land. For many environmentalists, this test was too restrictive.[103] Greater leeway for environmental regulations, and land-use controls in particular, was required. As the 1973 Task Force on Land Use and Urban Growth chaired by Laurence Rockefeller concluded, the doctrine of regulatory takings would have to be limited for environmental reasons:

> Many [judicial] precedents are anachronistic now that land is coming to be regarded as a basic natural resource to be protected and conserved . . . . It is time that the U.S. Supreme Court re-examine its precedents that seem to require a balancing of public benefit against land value loss in every case and declare that, when the protection of natural, cultural or aesthetic resources or the assurance of orderly development are involved, a mere loss

[98] *Id.* at 415.
[99] *Id.* at 413, 414–15.
[100] *Id.* at 416.
[101] *See, e.g.*, Maurice J. Holland, *Ill-Assorted Musings About Regulatory Takings and Constitutional Law*, 77 OR. L. REV. 949, 955 (1998) ("Thus, only four years after *Mahon*, the Court in *Village of Euclid v. Ambler Realty Co.* rebuffed a challenge to zoning regulations, holding them to be rationally related to a legitimate public purpose as measured by the test of substantive due process without even mentioning either *Mahon* or the Takings Clause." (internal citation omitted)); BOSSELMAN, ET AL., *supra* note 51, at 321.
[102] *See* Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1029 (1992) (noting private land uses can be restricted by "the State's law of private nuisance, or by the State under its complementary power to abate nuisances" consistent with the Fifth Amendment).
[103] *See, e.g.*, Sax, *Takings*, *supra* note 19.

> in land value is no justification for invalidating the regulation of land use.[104]

The environmental critique of takings doctrine seemed to take hold in the 1970s as concerns that environmental degradation was stretching nature's recuperative powers to the breaking point began to pervade the intellectual and legal culture. In a landmark case, *Just v. Marinette County*, the Wisconsin Supreme Court embraced the view that land rights could be limited to those uses "consistent with the nature of the land."[105] The court held that "[a]n owner of land has no absolute and unlimited right to change the essential natural character of his land so as to use it for a purpose for which it was unsuited in its natural state and which injures the rights of others."[106]

For the next fifteen years, courts gave state and federal regulators broad discretion to regulate private property without judicial interference. The Supreme Court soon followed suit in *Penn Central Transportation Co. v. City of New York*,[107] a case Joseph Sax would later identify as a hallmark of "a major transformation in which property rights are being fundamentally redefined to the disadvantage of property owners."[108] In *Penn Central*, a divided Supreme Court found that historic preservation rules limiting a landowner's ability to develop his land was not a regulatory taking for which compensation was due under the Fifth Amendment.[109] Penn Central owned the historic train terminal in midtown Manhattan, and sought to build an office building above it. The proposal met all the applicable building and zoning requirements. Nonetheless, the New York City Landmarks Preservation Commission rejected the plan as an "aesthetic joke" that would ruin the terminal's historic façade.[110] Penn Central indisputably lost substantial development rights due to the Commission's action, but the Court, adopting an "ad-hoc balancing test" found no compensable taking had occurred. Although understated in the opinion, *Penn Central* affected a dramatic result: A property owner "was denied the opportunity to pursue an established business expectation,"[111] not because that opportunity threatened the rights or property of another, but because the public—or at least its regulatory representative—sought to "adjust[] the benefits and burdens of economic life to promote the common good."[112] While subsequent Supreme Court de-

---

[104] THE USE OF LAND, *supra* note 34, at 24–25. The Task Force was created by the Citizen's Advisory Committee on Environmental Quality, "a body established by presidential executive order in May 1969." *Id.* at 1.

[105] 201 N.W.2d 761, 768 (Wis. 1972).

[106] *Id.* Courts in other states adopted similar reasoning. *See* James M. McElfish, Jr., *Property Rights, Property Roots: Rediscovering the Basis for Legal Protection of the Environment*, 24 ENVTL. L. REP. 10231, 10244 (1994) (citing cases in New Hampshire and New Jersey).

[107] 438 U.S. 104 (1978).

[108] Sax, *Thoughts*, *supra* note 27, at 481.

[109] *Penn Central*, 438 U.S. at 138.

[110] *Id.* at 117–18.

[111] Sax, *Thoughts*, *supra* note 27, at 482.

[112] *Penn Central*, 438 U.S. at 124.

cisions, most notably *Nollan v. California Coastal Council*,[113] *Lucas v. South Carolina Coastal Council*,[114] and *Dolan v. Tigard*,[115] may have limited *Penn Central*'s reach, under current precedent the constitutional protection of private property is not a substantial obstacle to environmental regulation of private land use.[116]

III. Unintended Consequences

The explosion of federal regulation propelled by the ecological paradigm also sowed the seeds for an eventual backlash, both intellectually and politically. The extensive growth of environmental regulation produced significant environmental gains, but it also had unintended consequences. While environmental protection was a politically popular goal, there was growing discontent with the costs and apparent unreasonableness of some environmental regulations. Land-use controls in particular aroused popular concern, as landowners bristled at regulatory limitations on the use of their private property. This discontent was further fueled by the view that some environmental regulations were not producing results sufficient to justify their costs.[117] Despite the tremendous environmental gains in the second half of the twentieth century,[118] environmentalists themselves began to recognize that some environmental controls on land use were creating perverse incentives and undermining environmental goals.

A. Landowner Backlash

The proliferation of rules governing property use provoked a powerful reaction among landowners who resented being told how they could make use of their property. Property owners across the country formed small grassroots organizations to protect private property rights from government encroachment.[119] Much as local environmental groups often formed to address local environmental concerns, property rights groups formed in response to local regulatory concerns. The Maryland-based Fairness to Landowners Committee formed in 1990 in response to

---

[113] 483 U.S. 825 (1987).

[114] 505 U.S. 1003 (1992).

[115] 512 U.S. 374 (1994).

[116] *See* Eagle, *supra* note 3, at 16 (noting that "the *Penn Central* ad hoc balancing test has been synonymous with rubber-stamp deferential review that hardly ever finds government to have overstepped its authority").

[117] This general perspective was captured in the titles of best-selling environmental books in the 1990s. *See, e.g.*, PHILLIP HOWARD, THE DEATH OF COMMON SENSE (1994); DIXY LEE RAY, ENVIRONMENTAL OVERKILL (1993).

[118] *See generally* STEVEN F. HAYWARD, INDEX OF LEADING ENVIRONMENTAL INDICATORS 2005 (2005).

[119] *See generally* JAMES V. DELONG, PROPERTY MATTERS: HOW PROPERTY RIGHTS ARE UNDER ASSAULT AND WHY YOU SHOULD CARE (1997); A WOLF IN THE GARDEN: THE LAND RIGHTS MOVEMENT AND THE NEW ENVIRONMENTAL DEBATE (Philip D. Brick & R. McGreggor Cawley eds., 1996); LAND RIGHTS, *supra* note 67; WILLIAM PERRY PENDLEY, IT TAKES A HERO: THE GRASSROOTS BATTLE AGAINST ENVIRONMENTAL OPPRESSION (1994); Jonathan H. Adler, *Takings Clause – The Property Rights Revolt*, NAT'L REV., Dec. 19, 1994, at 32. For less sympathetic views of the property rights movement see LET THE PEOPLE JUDGE: WISE USE AND THE PRIVATE PROPERTY RIGHTS MOVEMENT (John D. Echeverria & Raymond Booth Eby eds., 1995); DAVID HELVARG, THE WAR AGAINST THE GREENS : THE "WISE-USE" MOVEMENT, THE NEW RIGHT AND ANTI-ENVIRONMENTAL VIOLENCE (1994).

federal wetland regulations on the eastern shore,[120] while the New Hampshire Landowners Alliance organized in 1991 to prevent the federal government from designating the Pemigewasset a "wild and scenic" river.[121] The Davis Mountains Heritage Association was formed in 1989 to oppose the creation of a national park in West Texas,[122] while the Adirondack Solidarity Alliance formed to oppose government land purchases and regulatory controls in New York's Adirondack Park.[123] At the same time, conservative and libertarian public interest legal groups, including the Pacific Legal Foundation and Mountain States Legal Foundation, sought to overturn government regulations of private property in court.[124]

While there was no single catalyst for the birth of the property rights movement, and some landowner hostility to environmental regulation dated to the 1960s, the revival of environmental regulation under the first Bush Administration stoked the fires of the property rights rebellion to a greater intensity.[125] Whereas the Reagan administration was largely sympathetic to the plight of small landowners burdened by government regulation, and adopted an executive order to protect property rights from "regulatory takings,"[126] its successor sought to be "kindler and gentler" in its approach.[127] George H. W. Bush campaigned to be the "environmental president."[128] Once in office, he appointed a prominent environmentalist, William K. Reilly, to head the Environmental Protection Agency[129] and signed the most extensive and expensive federal environmental statute of all time into law.[130]

---

[120] Kathleen F. Brickey, *Wetlands Reform and the Criminal Enforcement Record: A Cautionary Tale*, 76 WASH. U. L.Q. 71, 84 n.17 (1998) ("The Fairness to Landowners Committee was an 11,000 member grass roots organization formed for the purpose of bringing rationality into wetlands regulation."); Margaret Ann Reigle, Letter, *Records Refute Charges in Article on Wetlands*, BALT. SUN, Jan. 8, 1994 (noting members joined due to "19-month period when the Corps [of Engineers] refused to issue a single permit for residential use of any property on the entire Eastern Shore"); PENDLEY, *supra* note 119, at 85–90.

[121] PENDLEY, *supra* note 119, at 181–84.

[122] *Id.* at 165–70.

[123] Property Rights Foundation of America, Inc., *Adirondack Solidarity Alliance*, http://prfamerica.org/Stats-AdirondackSolidarity.html (last visited Nov. 21, 2005) ("The Adirondack Solidarity Alliance was formed in 1990 to consolidate the efforts of various groups fighting against further Adirondack land-use controls, land acquisition and taxpayer problems at the time the Twenty-First Century Commission report was released.").

[124] *See generally*, Ronald A. Zumbrun, *Life, Liberty and Property Rights*, *in* BRINGING JUSTICE TO THE PEOPLE: THE STORY OF THE FREEDOM-BASED PUBLIC INTEREST LAW MOVEMENT 41 (Lee Edwards ed., 2004).

[125] *See* Nancie G. Marzulla, *The Property Rights Movement: How It Began and Where It Is Headed*, *in* LAND RIGHTS, *supra* note 67, at 3–7.

[126] Exec. Order No. 12,630, 53 Fed. Reg. 8,859 (Mar. 15, 1988).

[127] *See* Jack Nelson, *Bush Promises New Policies to Build on Reagan's Record: Establishes His Political Independence*, L.A. TIMES, Aug. 19, 1988, at 1 (quoting George H.W. Bush saying "I want a kindler, gentler nation.").

[128] *See* Maura Dolan, *Bush Rated as Uneven in Handling of Environment; But Called an Improvement Over Reagan*, L.A. TIMES, Aug. 6, 1989, at 1 ("President Bush, who pledged during his campaign to be an 'environmental President,' has set a new, more aggressive agenda on pollution problems during his first six months in office but largely has failed to change the pro-development course steered by President Reagan on public lands.").

[129] Of note, William K. Reilly had been the editor for the report of the Task Force on Land Use and Urban Growth. *See* THE USE OF LAND, *supra* note 34.

[130] United States Environmental Protection Agency, *The Benefits and Costs of the Clean Air Act 1990 to 2010* (1999), *at* http://www.epa.gov/oar/sect812 (estimating annual costs of $19 billion before the subse-

Compared to its immediate predecessor, the Bush Administration was quite sympathetic to increases in federal regulation of private land.

Federal wetland regulations, and the changing definition of what would constitute a regulated "wetland" under federal law, probably spurred more discontent than any other single program.[131] The 1989 revisions to the federal wetland delineation manual were probably the proverbial straw that broke the camel's back.[132] By redefining what constituted a wetland, the U.S. Army Corps of Engineers and Environmental Protection Agency nearly doubled the amount of land regulated under the Clean Water Act.[133] In one stroke of a bureaucratic pen, the Bush Administration extended federal regulatory jurisdiction over some 75 million acres of private land.[134] In Maryland's Dorchester County, for example, the amount of land classified as wetlands for regulatory purposes exploded from 275,000 acres to over 1 million acres.[135]

The new wetland definition was particularly controversial because it seemed so irrational to many landowners. Section 404 of the Clean Water Act prohibits the unauthorized filling of "navigable waters."[136] This is the statutory basis for federal regulation of wetland development. Yet much of the land covered by the new definition was wet only seasonally, if at all.[137] Individuals who had purchased land to build a home or finance retirement suddenly found their ability to use their land subject to government approval.[138] The Bush Administration enforced the new definition quite rigidly, even seeking criminal penalties in a handful of cases

---

quent tightening of the National Ambient Air Quality Standards for ozone and particulate matter) (last visited Nov. 21, 2005); *see also* Jonathan Rauch, *The Regulatory President*, 23 NAT'L J. 2902 (1991) (documenting growth in regulatory activity under President Bush).

131 The "basic definition of wetlands used by the government changed at least six times" between 1986 and 1994. DELONG, *supra* note 119, at 134.

132 *See* Richard Miniter, *Muddy Waters: The Quagmire of Wetlands Regulation*, POL'Y REV., Spring 1991, at 70; Marzulla, *supra* note 76, at 17; Warren Brookes, *The Strange Case of the Glancing Geese*, FORBES, Sept. 2, 1991, at 104 (reporting that the 1989 *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* "extended the reach of the 1972 Clean Water Act," prompting "angry protest from traditional Republican constituencies, farmers, businesses, real estate developers, landowners, and local governments.").

133 Marzulla, *supra* note 76, at 17.

134 *Id.*

135 Brookes, *supra* note 132, at 104 ("Previously some 275,000 acres of privately owned land had been classified as a wetland. With the 1989 manual, the figure topped 1 million acres.").

136 33 U.S.C. § 1311(a) (2000).

137 As one court observed, "a landowner who places clean fill dirt on a plot of subdivided dry land may be imprisoned for the statutory felony offense of 'discharging pollutants into the navigable water of the United States.'" United States v. Mills, 817 F. Supp. 1546, 1548 (N.D. Fla. 1993).

138 *See* Brookes, *supra* note 132, at 109.

> The town supervisor of Wheatfield, in Niagara County, N.Y., told [Rep. John] LaFalce that if the Corps issued permits based on the 1989 manual, "areas like Niagara County will be deprived of approximately 65% of the remaining developmental property"... In Hampton, Va., meanwhile, Thomas Nelson Community College had made a routine request for a Corps check of a proposed 40-acre site for its new sports complex. The result was a finding of "hydric soils" and "wetlands" at the college. Similar findings could, in a cascade or regulatory mayhem, threaten the 38-acre Nelson Farms subdivision, the 800-home, 133-acre Michael's Woods subdivision, the 300-acre Hampton Roads Center office park, and a 600-home Hampton Woods subdivision.

against landowners who violated federal wetland rules.[139] In one particularly infamous case, William Ellen, an environmental engineer, was sent to prison for filling wetlands without a federal permit when the Army Corps of Engineers changed the definition of wetlands after he had begun construction and received the then-necessary permits.[140]

The Endangered Species Act also sparked landowner unrest. Section 9 of the ESA prohibited the "tak[ing]" of endangered species, including significant modification of listed species' habitat. The presence of a listed species could freeze the use of private land, barring everything from timber cutting and ditch digging to plowing a field or building a home.[141] On the Olympic Peninsula, the Fish & Wildlife Service sought to enjoin a private timber company from harvesting timber on private land, lest it disturb a pair of northern spotted owls nesting in a national forest almost two miles away.[142] In Riverside County, Calif., the ESA prevented private landowners from discing to clear firebreaks on their own land because the brush was habitat for the endangered Stephens' kangaroo rat.[143] The subsequent fires burned human and kangaroo rat habitat alike. As with Section 404, the potential reach of the ESA "caught landowners off guard" and prompted a heated response.[144]

While often portrayed as an industry-funded effort to cripple environmental protections,[145] the so-called "backlash" was a genuine grassroots movement focused on the vindication of the constitutional principle that private property should not be taken for public use without just compensation.[146] As Ann Corcoran,

---

[139] The criminal, as opposed to civil, prosecution of those who filled wetlands without federal permits was the exception. *See* Kathleen F. Brickey, *Wetlands Reform and the Criminal Enforcement Record: A Cautionary Tale*, 76 WASH. U. L.Q. 71 (1998).

[140] DELONG, *supra* note 119, at 16–17. The investor, Paul Tudor Jones, pleaded guilty to a misdemeanor, paid $1 million in civil penalties, and paid an additional $1 million into a federal restitution fund. *See* Dianne Dumanoski, *Maryland Wetlands Convict: Victim or Villain?* BOST. GLOBE, Dec. 7, 1992, at 6.

[141] *See generally*, Gidari, *supra* note 79.

[142] *Id.* at 436.

[143] *See* Ike C. Sugg, *Losing Houses, Saving Rats*, WALL ST. J., Nov. 10, 1993, at A20. *See also* Ike C. Sugg, Letter, *Environmental Overprotection*, WASH. POST, Aug. 9, 1994, at A18; DELONG, *supra* note 119, at 13–14; David W. Myers, *Ire After the Fire: Victims Say Endangered Rat Got More Protection than Their Homes*, L.A. TIMES, Nov. 16, 1993, at 1. While there is dispute whether discing firebreaks would have adequately protected homes in Riverside County from the fire threat, it is undisputed that landowners were threatened with prosecution under the ESA were they to use the traditional method of discing to clear fire breaks on their own land. For a comprehensive discussion of the fires that includes copies of letters from the Fish & Wildlife Service threatening landowners with prosecution should they clear firebreaks, see Ike C. Sugg, *Rats, Lies, and the GAO* (August 1994), *available at* http://www.cei.org/pdf/4361.pdf. The FWS even threatened to prosecute local fire officials should they recommend discing to clear firebreaks. *Id.* at Appendix III. *Cf.* U.S. GENERAL ACCOUNTING OFFICE, ENDANGERED SPECIES ACT: IMPACT OF SPECIES PROTECTION EFFORTS ON THE 1993 CALIFORNIA FIRES, GAO/RCED-94-224 (1994).

[144] Barton H. Thompson Jr., *Protecting Biodiversity through Policy Diversity*, 38 IDAHO L. REV. 355, 363 (2001) ("[M]ost of the major land regulations in the federal government's biodiversity arsenal caught landowners off guard.").

[145] *See, e.g.*, HELVARG, *supra* note 119.

[146] Indeed, in some cases industry used federal land use regulations to its economic advantage. Weyerhauser, for example, employed wildlife biologists to look for spotted owl habitat on federal land. The

a former lobbyist for the National Audubon Society turned property rights activist observed, "[t]he private-property-rights movement consists of ordinary people—farmers, families, retirees—who think that they can take care of their land as well as or better than the government can, and who are not about to let the public authorities confiscate their property."[147]

A concerned environmental movement reached the same conclusion. Debra Callahan, then-director of the W. Alton Jones Foundation's Environmental Grass Roots Program, reported the results of the foundation's study of its new opposition to the 1992 conference of the Environmental Grantmakers Association on property rights and wise use groups: "We have come to the conclusion that this is pretty much generally a grass roots movement."[148] Callahan further noted that many environmentalists, including herself, liked to think of the groups as "command and control, top heavy, corporate-funded front groups," and as a mainly "western phenomenon." Yet, "it's not true."[149] Indeed, there is growing recognition among environmentalists that federal regulation of private land "is unpopular and has fueled a property rights backlash against the ecological management of natural resources."[150]

In the early 1990s, the property rights movement was able to flex political muscle. In the 103rd Congress, the last under Democratic control, the leadership of the House of Representatives and representatives of environmentalist organizations agreed to pull the pending reauthorizations of several environmental statutes from consideration out of fear that an "unholy trinity" of regulatory reforms, including mandatory compensation for environmental land-use restrictions, would pass on the floor.[151] Property rights legislation was considered independently and passed

---

resulting restrictions on logging on such lands drove timber prices "through the roof." The *Wall Street Journal* reported that "owl-driven profits enabled the company to earn $86.6 million in the first quarter, up 81% from a year earlier." Bill Richards, *Owls, of All Things, Help Weyerhauser Cash in on Timber*, WALL ST. J., June 24, 1999, at A1.

[147] Ann Corcoran, *This Land is Our Land*, POL'Y REV., Winter 1993, at 72.

[148] Quotes taken from a session entitled "The Wise Use Movement—Threats and Opportunities." Tapes of the conference were obtained by the *Land Rights Letter*, a publication that covers property-related issues. Excerpts were published as supplements to several recent issues. Environmental Grantmakers Association quotes are taken from Erich Veyhl, *Special Supplement: Preservationists Acknowledge Growing Grass Roots Opposition, Plan Strategy*, LAND RIGHTS LETTER (Jan.-Feb. 1993) *available at* http://moosecove.com/propertyrights/EGA/EGA-main.shtml (last visited Nov. 19, 2005).

[149] *Id.*

[150] Robert B. Keiter, *Ecosystems and the Law: Toward an Integrated Approach*, 8 ECOLOGICAL APPLICATIONS 332, 337 (1998); Michael J. Bean, *The Endangered Species Act and Private Land: Four Lessons Learned From the Past Quarter Century*, 28 ENVTL. L. REP. 10701, 10702 (1998) [hereinafter Bean, *Four Lessons*] ("conflicts—or perceived conflicts—between species conservation and the interests of private landowners are increasingly common and have provided much of the fodder for a recent backlash among many private landowners against not just the ESA, but environmental regulations and programs generally.").

[151] *See Bliley Reveals to Industry Group Draft of Environmental Legislative Strategy*, BNA NAT'L ENV. DAILY, Mar. 17, 1994. *See also Administration Plans Narrow Agenda for Environmental Bills*, BNA NAT'L ENV. DAILY, Oct. 24, 1994 (noting "unholy trinity" issues blocked environmental legislation). Property rights concerns also blocked legislative authorization for the proposed National Biological Survey in 1993. DELONG, *supra* note 119, at 104.

the House in the 104th and 105th Congress, but was eventually filibustered in the Senate.[152] Such legislation fared much better at the state level. By 2001, 23 states had enacted statutes providing additional protection for property rights.[153]

B. Perverse Incentives

Political opposition and grassroots discontent were not the only consequences of extensive environmental land-use regulation. Over time, it also became clear that at least some environmental measures were not producing environmental gains sufficient to justify the burdens they placed upon landowners. Particularly in the case of the Endangered Species Act, conservationists began to observe that the regulations squeezing landowners were creating substantial economic incentives *against* the conservation of endangered species.[154] If costly environmental regulation was the consequence of owning land that served as habitat for endangered species or performed another vital ecological function, landowners were less likely to maintain their lands in such condition, and they were even less likely to make environmental improvements. In economic terms, such stewardship actions would entail costs to the landowner with no reasonable expectation of future benefits. Sam Hamilton, former Fish and Wildlife Service administrator for the state of Texas, explained this more fully: "The incentives are wrong here. If I have a rare metal on my property, its value goes up. But if a rare bird occupies the land, its value disappears."[155] In other words, by ignoring the economic incentives created by restricting private property rights, regulations designed to help endangered species were causing environmental harm. Insofar as private landowners were threatened with the potential loss of the productive use of their land without compensation by environmental statutes, they would have an incentive not to provide whatever environmental amenity it was the federal government sought to protect.

Economists were the first to suggest that land-use regulation could have unintended consequences,[156] and their theoretical predictions were quickly confirmed on the ground.[157] For example, Ben Cone was the owner of over 7,000 acres of timberland in North Carolina.[158] For years Cone sought to attract wildlife to his land. Through selective logging, long rotation cycles, and understory management, Cone created a habitat for many species, including wild turkey, quail, black bear, and deer. Cone's good land stewardship also provided habitat for the endangered red-cockaded wood-

---

[152] Eagle, *supra* note 3, at 30–32 (summarizing proposed federal legislation and outcomes).
[153] *Id.* at 26; *see also* Hertha L. Lund, *The Property Rights Movement and State Legislation, in* LAND RIGHTS, *supra* note 67, at 199, 199–231.
[154] Robert J. Smith, *The Endangered Species Act: Saving Species or Stopping Growth?*, REG. Winter 1992, at 83; *see also* Morriss & Stroup, *supra* note 78, at 790–94; Barton H. Thompson, Jr., *The Endangered Species Act: A Case Study in Takings & Incentives*, 49 STAN. L. REV. 305, 345 (1997).
[155] Betsy Carpenter, *The Best-Laid Plans*, U.S. NEWS & WORLD REP., October 4, 1993, at 89.
[156] *See, e.g.*, Smith, *supra* note 154; Richard L. Stroup, *The Endangered Species Act: A Perverse Way to Protect Biodiversity*, PERC VIEWPOINTS, No. 11, April 1992.
[157] Sugg, *supra* note 79, at 43–47.
[158] This account is based on Lee Ann Welch, *Property Rights Conflicts Under the Endangered Species Act: Protection of the Red-Cockaded Woodpecker, in* LAND RIGHTS, *supra* note 67, at 151, 173–85.

pecker. In response, the federal government placed over 1,000 acres of his land off limits to logging. The value of his land plummeted by over 95 percent—or some $2 million. This taught Cone a lesson: He should no longer manage his land in a way that attracted red-cockaded woodpeckers if he wanted to be able to use it.[159] Rather than allow trees to mature for at least 75 to 80 years before cutting them, as Cone used to, he began cutting them earlier, as red-cockaded woodpeckers prefer older stands. He also began to clear other parts of his property to ensure more woodpeckers would not arrive.[160]

Ben Cone was not the only landowner to respond in this manner to the incentives created by environmental land-use restrictions. In California's Central Valley, farmers plowed fallow fields to destroy potential habitat and prevent the growth of vegetation that could attract endangered species.[161] In the Pacific northwest, land-use restrictions imposed to protect the northern spotted owl scared private landowners enough that they "accelerated harvest rotations in an effort to avoid the regrowth of habitat that is usable by owls," according to the Fish & Wildlife Service.[162] In Texas Hill Country, landowners razed hundreds of acres of juniper tree stands to prevent their occupation by the golden-cheeked warbler after it was listed as an endangered species.[163] Bob Stallman of the Texas Farm Bureau testified in 1995 that so long as the existing regulatory strictures remained in place, his members "are not going to want to work actively and openly to promote and to propagate a species as long as there is that threat of future government intervention and regulation of the use of that land."[164] Operation Stronghold founder Dayton Hyde attested from personal experience that, even for those who wished to engage in habitat conservation on their own land, "[i]t's just plain easier and a lot safer to sterilize the land."[165] Even endangered plants were victim to such "scorched earth" policies, though they were not subject to the same level of regulatory protection. When the Fish & Wildlife Service proposed listing the San Diego Mesa Mint as endangered, land containing the plant was bulldozed before the listing could take effect.[166]

---

[159] As Cone commented at the time, "I cannot afford to let those woodpeckers take over the rest of the property. I'm going to start massive clearcutting." Ike C. Sugg, *Ecosystem Babbitt-Babble*, WALL ST. J., Apr. 2, 1993, at A10.

[160] The publicity surrounding the Cone case eventually resulted in the Fish & Wildlife Service granting Cone an incidental taking permit allowing him to take *all* of the woodpeckers on his property. *See* 61 Fed. Reg. 36,390 (July 10, 1996); 62 Fed. Reg. 54,122 (Oct. 17, 1997); *see also* Marianne Lavelle, *Feds Settle to Save Act and Species but Critics Say Deals May Hurt Not Help Endangered*, NAT'L L.J., Dec. 16, 1996, at A1.

[161] Jennifer Warren, *Revised Species Protection Law Eases Farmers' Anxiety*, L.A. TIMES, Oct. 11, 1997, at A1.

[162] 60 Fed. Reg. 9507-8 (February 17, 1995). *See also* Bean, *Four Lessons*, *supra* note 150, at 10706 n.45.

[163] *See* David Wright, *Death to Tweety*, NEW REPUBLIC, July 6, 1992, at 9, 9–10; DELONG, *supra* note 119, at 103.

[164] *Hearing Before the Task Force on Endangered Species and Task Force on Wetlands of the Resources Committee*, 104th Cong. H651-6.5 (1995) (testimony of Bob Stallman, President, Texas Farm Bureau).

[165] TERRY L. ANDERSON & DONALD R. LEAL, FREE MARKET ENVIRONMENTALISM 72 (2nd ed. 2001).

[166] Charles C. Mann & Mark Plummer, *Is the Endangered Species Act in Danger?*, 267 SCI. 1256, 1258 (1995). *See also* CHARLES C. MANN & MARK PLUMMER, NOAH'S CHOICE: THE FUTURE OF ENDANGERED SPECIES 187 (1995). While endangered plants are not subject to the same level of regulatory protection as endangered animals, the presence of an endangered plant can prevent the issuance of a federally required permit.

Evidence of the ESA's perverse incentives is no longer confined to such anecdotal accounts.[167] Recent empirical research confirms that federal land-use controls discourage conservation on private land. Professors Lueck and Michael report that forest owners respond to the likelihood of ESA regulation by harvesting timber and reducing the age at which timber is harvested.[168] Such preemptive habitat destruction could well "cause a long-run reduction in the habitat and population" of endangered species.[169] In some instances, it is likely that the economic incentives created by the Act result in the *net loss* of species habitat. That is, in some cases the ESA may be responsible for more habitat loss than habitat protection.[170] A study in *Conservation Biology* further reports that just as many landowners responded to the listing of Preble's Meadow jumping mouse by destroying potential habitat as undertook new conservation efforts.[171] It also found a majority of landowners would not allow biologists on their land to assess mouse populations out of fear that land-use restrictions would follow the discovery of a mouse there.[172]

Insofar as ESA regulation discourages private land conservation it undermines species conservation efforts. The majority of endangered and threatened species depend on private land for some portion of their habitat,[173] so by discouraging private land conservation the ESA could well have a devastating impact on species conservation efforts. Indeed, these "perverse incentives" may help explain the poor environmental performance of the ESA. Enacted in 1973 to save species from the brink of extinction, the ESA has hardly been a success. In over thirty years, fewer than forty of over 1,000 species have been delisted as endangered or threatened.[174] Few of

---

[167] *Cf.* Jeffrey J. Rachlinski, *Protecting Endangered Species without Regulating Private Landowners: The Case of Endangered Plants*, 8 CORNELL J.L. & PUB. POL'Y 1, 36 (1998) ("Other than anecdotes, however, there is no evidence to support the conclusion that these restrictions actually harm species.").

[168] Dean Lueck & Jeffrey Michael, *Preemptive Habitat Destruction under the Endangered Species Act*, 46 J. L. & ECON 27 (2003).

[169] *Id.* at 30.

[170] Dr. Larry McKinney, Director of Resource Protection for the Texas Parks and Wildlife Department concluded: "While I have no hard evidence to prove it, I am convinced that more habitat for the black-capped vireo, and especially the golden-cheeked warbler, has been lost in those areas of Texas since the listing of these birds than would have been lost without the ESA at all." Larry McKinney, *Reauthorizing the Endangered Species Act – Incentives for Rural Landowners, in* BUILDING ECONOMIC INCENTIVES INTO THE ENDANGERED SPECIES ACT 71, 74 (1993).

[171] Amara Brook et al., *Landowners' Responses to an Endangered Species Act Listing and Implications for Encouraging Conservation*, 17 CONSERVATION BIOLOGY 1638 (2003). Those landowners who undertook conservation activities did so due to the species' listing, whereas those who took negative actions presumably did so due to the threat of regulation, and not because the species was endangered. Therefore, easing the regulatory burden on landowners would likely lessen the anti-environmental actions of some landowners without discouraging the pro-conservation efforts of others.

[172] *Id.*; *see also* Barton H. Thompson Jr., *Protecting Biodiversity through Policy Diversity*, 38 IDAHO L. REV. 355, 364 (2001) ("Property owners . . . have an incentive to conceal information about endangered species that might lead to tighter regulation and to preclude government scientists and officials from surveying their property.").

[173] U.S. GEN. ACCOUNTING OFFICE, ENDANGERED SPECIES ACT: INFORMATION ON SPECIES PROTECTION ON NONFEDERAL LANDS (1994).

[174] *See* U.S. FISH & WILDLIFE SERVICE, THREATENED AND ENDANGERED SPECIES SYSTEM, http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.EntryPage (last visited September 5, 2005).

these delisted species have legitimately "recovered"; instead, most of them either went extinct or never should have been listed as endangered in the first place.[175] While some species populations appear to have improved under the ESA, there is also widespread recognition that wildlife species continue to have the most trouble on private land, despite the ESA's "protections."

IV. Reconciling Property and Regulation

The unintended consequences of land-use control slowly prompted a re-evaluation of the role private ownership should play in environmental conservation, particularly in the context of the ESA. Over 75 percent of those species currently listed under the ESA rely upon private land for some or all of their habitat, according to the General Accounting Office.[176] Because of this, "[n]o strategy to preserve the nation's overall biodiversity can hope to succeed without the willing participation of private landowners," observes Conservation Fund president John Turner.[177] As ecologist David Wilcove observed, the "greatest challenge facing the Endangered Species Act" is how to make private landowners "become more willing participants in the national effort to save endangered species."[178] Without private cooperation, environmental conservation efforts will be futile.[179]

Environmentalist groups did not initially warm to the message that change was necessary. In 1992, environmentalist groups were still touting the ESA's "success," and claiming "it has [succeeded] without frequent conflict of a draconian nature."[180] In 1994, the Endangered Species Coalition, an umbrella organization representing environmental groups on ESA reform, was focused on strengthening the ESA by toughening enforcement, increasing penalties, and "closing the legal loopholes," all the while denying that the Act had any significant impact on private landowners.[181] The National Wildlife Federation maintained that the ESA "has

---

[175] *Id; see also* Robert E. Gordon, Jr., James K. Lacey & James R. Streeter, *Conservation Under the Endangered Species Act*, 23 ENV'T INT'L 359 (1997); Sugg, *supra* note 79, at 42–44. It is worth noting that many of the alleged "successes" of the ESA are nothing of the kind and involve species that were either never in danger of extinction or were helped by exogenous factors. *See id.* (discussing the examples of the Palau dove, Palau fantail flycatcher, Palau owl, Rydberg milk-vetch, and American alligator).

[176] U.S. GEN. ACCOUNTING OFFICE, *supra* note 173.

[177] John F. Turner & Jason C. Rylander, *The Private Lands Challenge: Integrating Biodiversity Conservation and Private Property, in* PRIVATE PROPERTY AND THE ENDANGERED SPECIES ACT: SAVING HABITATS, PROTECTING HOMES 92, 116 (Jason Shogren ed. 1998).

[178] David S. Wilcove, *The Promise and the Disappointment of the Endangered Species Act*, 6 N.Y.U. ENVTL L. J. 275, 278 (1998).

[179] Bean, *Four Lessons, supra* note 150, at 10701–02 ("[W]hat private landowners do on and with their land will likely have a major influence on the success or failure of the ESA.").

[180] Michael J. Bean, *Taking Stock: The Endangered Species Act in the Eye of a Growing Storm*, 13 PUB. LAND L. REV. 77, 86 (1992).

[181] The Endangered Species Coalition's 1994 "action agenda" is summarized in ADLER, *supra* note 8, at 18–19.

never prevented property owners from developing their land."[182] Yet within a few years, many environmentalists and conservation leaders had changed their tune.

The first sign of this transformation was the recognition within the environmental community that the punitive nature of environmental regulation can discourage conservation. For instance, in 1994 Interior Secretary Bruce Babbitt called for reforms in ESA enforcement:

> The government should administer the ESA in a way that is sensitive to private property, and demonstrate that the administration of the ESA has stopped short not only of a constitutional taking, but is actually sensible and does not inflict unnecessary inconvenience and hardships on citizens.[183]

As noted above, this "hardship" spurred opposition to environmental policies and discouraged the conservation of species habitat on private land.

Many landowners "have no incentive to do the things that would make their lands a better place for imperiled species," observed noted wildlife law expert Michael Bean.[184] Worse, under the ESA, some landowners have incentive "to consider managing their land so as to preclude such species from utilizing it."[185] The problem is not simply that some landowners have the incentive to engage in "scorched earth" practices to prevent their land from becoming inhabited by endangered species, as the ESA also fostered "a simple unwillingness to do the mundane management activities that could create or enhance habitat for rare species.... From the perspective of an imperiled species, the result is pretty much the same: less available habitat and lower quality of that which is available."[186]

These concerns formed the impetus for various reforms of the implementation and enforcement of the ESA. One reform finalized in 1999, known as the "safe harbor" policy, sought to reduce the economic incentives that discourage habitat enhancement and conservation on private land by ensuring that environmental good deeds are not punished with land-use controls.[187] Authorized under Section 10 of the ESA, safe harbor agreements provide landowners with greater incentives to aid species conservation on their land.[188] As explained by Michael Bean, who helped develop the policy, "Safe harbor agreements offer a means not only for the

---

[182] John Kostyack, Letter to the Editor, *If Ecosystem Is Harmed, We're All Endangered*, WALL ST. J. May 12, 1994, at A15.

[183] Bruce Babbitt, *The Endangered Species Act and "Takings": A Call for Innovation within the Terms of the Act*, 24 ENVTL L. 355, 361 (1994).

[184] Michael J. Bean, *Overcoming Unintended Consequences of Endangered Species Regulation*, 38 IDAHO L. REV. 409, 414 (2002) [hereinafter Bean, *Overcoming*].

[185] *Id.* at 415.

[186] *Id.*

[187] *See* Announcement of Final Safe Harbor Policy, 64 Fed. Reg. 32,717 (June 17, 1999).

[188] The legal basis for safe harbors is described in Bean, *Overcoming*, *supra* note 184, at 416–17. Bean notes that in some cases safe harbor agreements could also be justified under section 7. *Id.*

[government] to enlist private landowners in voluntary conservation efforts, but for private conservation organizations to do so as well."[189] Specifically, under the "safe harbor" policy, a landowner may enter into an agreement with the FWS to enhance habitat on his land over a given period of years. In return, the landowner can receive technical assistance. Importantly, at the end of the agreement the landowner has no obligation to maintain the enhanced habitat beyond the "baseline" set in the agreement. In effect, a safe harbor agreement enables a landowner and the FWS to pretend as if endangered species habitat created under the agreement is not there.

Another measure adopted to encourage voluntary conservation efforts by private landowners was the "no surprises" rule.[190] The intent of "no surprises" was to protect landowners from subsequent legal, policy, or environmental changes that could alter a landowner's conservation obligations. The aim was to give landowners greater certainty about the extent of their potential obligations under the ESA and remove the prospect of increased obligations at a later date. This policy was particularly controversial, and opposed by some environmental groups despite its potential to encourage private conservation efforts.[191] Environmental conditions change; land unnecessary for a species' survival one year may be extremely vital a few years later. On this basis some environmental groups fear that "no surprises" could undermine species conservation efforts, prompting some groups to challenge "no surprises" in court.[192]

The safe harbor policy, like compensation and economic incentive programs, helps species insofar as it safeguards the interests of property owners. By protecting private land from the threat of regulatory control, the safe harbor policy reduces the regulatory incentive against conservation. The development of this policy is evidence of a broader recognition that conservation is enhanced by protecting private property from federal regulation. Safe harbors are not sufficient on their own to ensure the success of species conservation efforts.[193] Instead they are but "one needed tool."[194] Yet combined with the "no surprises" policy and the more flexible and innovative use of "habitat conservation plans," safe harbors are part of a broader effort to eliminate the "perverse incentives" that exist under statutes like the ESA.[195]

In addition to programs that make land-use regulations more "landowner friendly," some conservationists have called for the addition of economic incentives

---

[189] *Id.* at 418.

[190] *See* Habitat Conservation Plan Assurances ("No Surprises Rule") 63 Fed. Reg. 8,859 (Feb. 23, 1998).

[191] *See generally*, Eric Fisher, *Habitat Conservation Planning under the Endangered Species Act: No Surprises & the Quest for Certainty*, 67 U. COLO. L. REV. 371 (1996).

[192] *See* Spirit of the Sage Council v. Norton, 411 F.3d 225 (D.C. Cir. 2005).

[193] Bean, *Overcoming*, *supra* note 184, at 419.

[194] *Id.*

[195] *See generally* J.B. Ruhl, *While the Cat's Asleep: The Making of the "New" ESA*, 12 NAT. RESOURCES & ENV'T 187 (1998) (summarizing the various reforms); Karin Sheldon, *Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act*, 6 N.Y.U. ENVTL. L.J. 279, 313-37 (1998) (same).

to existing regulatory schemes.[196] In a sense, they have called for "carrots" to accompany the "sticks" of environmental enforcement because regulatory controls and punitive sanctions were insufficient to meet environmental goals.[197] As discussed above, the stick of regulatory sanctions could punish outright violations of the law, but did nothing to encourage positive efforts on behalf of species. At its worst, the regulatory mindset discourages voluntary efforts to restore and enhance habitat on private land. As noted biologist E.O. Wilson explained, private landowners are "deathly afraid of . . . losing their personal property rights" due to environmental regulation. "So the secret—and it's not a secret—lies in providing incentives for people whose property contains endangered species."[198]

In the mid-1990s, Texas became the first state to offer economic incentives to private landowners for species conservation efforts on private lands.[199] National environmental leaders also began to support the authorization of increased economic incentives under the federal ESA. According to Bean, the ESA would be more effective with "new authority that creates positive incentives for landowners to conserve endangered species."[200] Recognizing the success of the Wetlands Reserve Program, Partners for Wildlife, and other voluntary conservation programs funded by the federal government, environmentalists sought to expand and replicate these efforts to give landowners an added incentive to preserve and protect their land.[201] The North American Waterfowl Management Plan, for example, has conserved or restored an estimated three million acres of waterfowl habitat at a cost of approximately $230 per acre.[202] Partners for Wildlife has likewise funded the restoration of over 300,000 acres of wetland habitat and 350 miles of riparian habitat at a cost as low as $100 or less per acre.[203] Compared to existing regulatory programs, these approaches seem quite cost-effective,[204] and far less controversial.

Some environmentalist groups got into the act directly as well. Defenders of Wildlife began providing compensation to landowners harmed by the reintroduction of wolves.[205] Specifically, Defenders established a fund to compensate

---

[196] *See* Richard Stone, *Incentives Offer Hope for Habitat*, 269 SCI. 1212 (1995). Groups supporting the use of "positive reinforcement" to encourage habitat conservation include the National Wildlife Federation, National Audubon Society, and Environmental Defense Fund. *See* Jeffrey A. Lockgood, *The Intent and Implementation of the Endangered Species Act: A Matter of Scale*, *in* PRIVATE PROPERTY AND THE ENDANGERED SPECIES ACT 70, 83 (Jason F. Shogren ed., 1998); *see also* Thomas Eisner, et al., *Building a Scientifically Sound Policy for Protecting Endangered Species*, 269 SCI. 1231, 1232 (1995) (calling for "supplementing the law's regulatory requirements with economic incentives").

[197] *See* Stone, *supra* note 196, at 1213 ("the ESA has been 'all stick and no carrot,' says [Michael] Bean").

[198] Quoted in Bill McKibben, *More Than a Naturalist*, AUDUBON, Jan.–Feb., 1996, at 94–95.

[199] Bean, *Four Lessons*, *supra* note 150, at 10701–02 ("Two years ago, the Texas Parks and Wildlife Department began an experimental, first-in-the-nation program to give financial incentives to private landowners who agreed to carry out endangered species conservation activities on their land.").

[200] *Id.* at 10702.

[201] *See generally* Turner & Rylander, *supra* note 177, at 116–31; Adler, *Wetlands*, *supra* note 46, at 54–62.

[202] Turner & Rylander, *supra* note 177, at 124.

[203] *Id.* at 126.

[204] *See* Adler, *Wetlands*, *supra* note 46, at 57.

[205] Dwight H. Merriam, *Reengineering Regulation to Avoid Takings*, 33 URB. LAW. 1, 42 (2001).

ranchers who lost livestock to reintroduced wolves.[206] This approach is not widespread or comprehensive, but it suggests a change in the perception of private property interests. By compensating landowners, albeit with private funds, Defenders is safeguarding the property interests that ranchers have in their livestock, thereby reducing the burden of environmental protection and reducing the opposition to wolf reintroduction efforts from those who would otherwise bear the costs. Other organizations, such as Ducks Unlimited and the Wildlife Habitat Council, have similar efforts to work collaboratively with landowners to encourage conservation on private lands.[207]

V. Property-based Conservation

Regulatory reforms and compensation proposals can enhance environmental protection insofar as they mitigate the anti-environmental impacts of government regulation. The idea that private property rights can support environmental protection, rather than undermine it, is also fueling efforts to enhance conservation efforts through the *creation* of property rights in environmental resources.[208] There is an "increasing recognition of the need for non-regulatory approaches to private land conservation," including greater reliance on landowners themselves.[209] As noted in a recent literature survey, "private conservation themes have begun to appear in land use textbooks."[210] There is also a greater recognition of the need to extend those legal institutions that allow for private conservation into the developing world where governments are even less likely to be effective environmental stewards than their counterparts in the developed world.[211] While few mainstream environmentalists are prepared to argue that property rights should completely supplant regulatory approaches to environmental conservation, prop-

---

[206] *See* Todd G. Olson, *Biodiversity and Private Property: Conflict or Opportunity?*, *in* BIODIVERSITY AND THE LAW 67, 71 (William J. Snape III ed. 1996).

[207] Turner & Rylander, *supra* note 177, at 119; *see also* Adler, *Wetlands*, *supra* note 46, at 59–62.

[208] *See, e.g.*, Carol Rose, *Property Rights and Responsibilities*, *in* THINKING ECOLOGICALLY: THE NEXT GENERATION OF ENVIRONMENTAL POLICY 49, 57 (Marian R. Chertow & Daniel C. Esty eds. 1997) ("[T]here are many exciting possibilities for using property concepts to further the protection of environmental resources.").

[209] Nancy A. McLaughlin, *The Role of Land Trusts in Biodiversity Conservation on Private Lands*, 38 IDAHO L. REV. 453, 459 (2002); *see also* Federico Cheever, *Property Rights and the Maintenance of Wildlife Habitat: The Case for Conservation Land Transactions*, 38 IDAHO L. REV. 431, 431 (2002) (arguing that "some of the inherent qualities of the legal institutions we call property make that type of institution more suitable for the maintenance of wildlife habitat than the legal institutions we call regulation"); James L. Huffman, *Marketing Biodiversity*, 38 IDAHO L. REV. 421, 421 (2002) ("Only recently have some mainstream environmental groups embraced the idea that property rights and private markets can promote environmental protection."); Leigh Raymond & Sally K. Fairfax, *The "Shift to Privatization" in Land Conservation: A Cautionary Essay*, 42 NAT. RESOURCES J. 599, 600 (2002) ("[P]roperty rights are being created to address new environmental challenges, like air and water pollution, that previously have been regulated in a less market-based, more command-and-control manner."). Raymond and Fairfax also argue, however, that this is not a "clear shift toward private alternatives" as much as it is evidence of "a growing complexity of policy arrangements" and increased diversity in conservation tools on private lands. *Id.* at 599.

[210] Andrew P. Morriss, *Private Conservation Literature: A Survey*, 44 NAT. RESOURCES J. 621, 623 (2004).

[211] *See, e.g.*, ENVTL. LAW INST., LEGAL TOOLS AND INCENTIVES FOR PRIVATE LANDS CONSERVATION IN LATIN AMERICA: BUILDING MODELS FOR SUCCESS 39 (2003).

erty-based conservation strategies are increasingly relied upon and advocated, as the following examples suggest.[212]

A. Land Conservation

Perhaps the most direct way to use property rights to protect environmental values is for conservationists to acquire ownership of ecologically important resources so as to ensure their conservation. Outright land purchase in fee simple is the most obvious, but not the only way to protect resources with private property. Conservation easements and other partial interests can be particularly cost-effective at conserving certain environmental values.[213] These strategies have been used by conservationists for decades. Since the creation of the first land trusts over 100 years ago,[214] land trusts have purchased land, easements, or other property interests to protect them from development or overuse.[215]

The growth in land trust activity over the past 50 years is particularly impressive.[216] In 1950 there were just over 50 land trusts in the United States. By 1990 there were 887, and the 2000 National Land Trust Census listed over 1,200 local and regional land trusts.[217] Altogether these land trusts conserve 3.8 million acres na-

---

[212] There are those, however, including this author, who have called for a more complete reliance upon property rights to protect environmental values, an approach known as "free market environmentalism." *See, e.g.*, TERRY L. ANDERSON & DONALD R. LEAL, FREE MARKET ENVIRONMENTALISM (Rev. ed. 2001); ECOLOGY, LIBERTY & PROPERTY: A FREE MARKET ENVIRONMENTAL READER (Jonathan H. Adler ed., 2000); Fred L. Smith, Jr., *Markets and the Environment: A Critical Reappraisal*, 13 CONTEMP. ECON. POL'Y 62 (1995); Fred L. Smith, Jr., *A Free-Market Environmental Program*, 11 CATO J. 457 (1992). For an overview of specific policy prescriptions based on free market environmentalism, *see* Jonathan H. Adler, *Free & Green: A New Approach to Environmental Protection*, 24 HARV. J.L. & PUB. POL'Y 653 (2001); BREAKING THE ENVIRONMENTAL POLICY GRIDLOCK (Terry L. Anderson ed. 1997).

[213] Dominic Parker, *Land Trusts and the Choice to Conserve Land with Full Ownership or Conservation Easements*, 44 NAT. RESOURCES J. 483, 516 (2004) (explaining that conservation easements "better facilitate gains from [landowner] specialization" because they can "conserve environmental amenities while continuing to allow landowners the right to produce non-conservation output" and that such arrangements can be "especially cost-effective"). For more on conservation easements as a conservation tool, see Peter M. Morrisette, *Conservation Easements and the Public Good: Preserving the Environment on Private Lands*, 41 NAT. RESOURCES J. 373 (2001); Gerald Korngold, *Privately Held Conservation Servitudes: A Policy Analysis in the Context of in Gross Real Covenants and Easements*, 63 TEX. L. REV. 433 (1984). Of course, conservation easements, like any policy tool, are not without their potential drawbacks. *See, e.g.*, Julia D. Mahoney, *The Illusion of Perpetuity and the Preservation of Privately Owned Lands*, 44 NAT. RESOURCES J. 573 (2004) (suggesting that perpetual land preservation could frustrate conservation in the future as environmental priorities change over time); Jamie Sayen, *Limitations of Conservation Easements*, WILD EARTH, Spring 1996, at 77 (suggesting that fee simple ownership provides greater protection for some resources than a conservation easement).

[214] Parker, *supra* note 213, at 486 (citing Gordon Abbot, Jr., *Historic Origins*, *in* PRIVATE OPTIONS: TOOLS AND CONCEPTS FOR LAND CONSERVATION 150, 150–52 (Barbara Rushmore et al. eds. 1982)).

[215] McLaughlin, *supra* note 209, at 453 ("Over the past two decades there has been an explosion in both the use of conservation easements as a private land conservation tool and the number of private nonprofit organizations, typically referred to as 'land trusts,' that acquire easements."). *See also* RICHARD BREWER, CONSERVANCY: THE LAND TRUST MOVEMENT IN AMERICA (2003).

[216] McLaughlin, *supra* note 209, at 453.

[217] Parker, *supra* note 213, at 487–89; Barton H. Thompson, Jr., *Conservation Options: Toward a Greater Private Role*, 21 VA. ENVTL. L.J. 245, 254 (2002) (citing Land Trust Alliance 1998 Conservation Directory listing over 1200 land trusts).

tionwide—an area larger than the state of Connecticut.[218] This is in addition to the approximately 1.75 million acres protected by national organizations such as The Nature Conservancy and Ducks Unlimited,[219] as well as by other privately owned, yet undeveloped land.[220] Whereas many presume that government agencies, such as the U.S. Forest Service, are primarily responsible for conservation, nearly 60 percent of America's forests are privately owned,[221] and much of this land is managed, at least in part, for conservation purposes.[222]

Much of this conservation activity is directed at preserving particular environmental amenities, including watersheds, species habitat and the like.[223] The Montana Land Reliance, for example, holds easements covering more than 300,000 acres of "ecologically important land."[224] This growth in land trust activity has been fueled by increased demand for environmental conservation and legal changes that facilitate and encourage the purchase of conservation easements.[225] Government efforts may foster greater private land conservation, but they also pose the risk of "crowding out" private efforts.[226] In any event, those engaged in land-use policy are now more sensitive to the need to facilitate, and not inhibit, private land conservation strategies.

B. Grazing Rights

Conservation easements enable private conservation organizations to protect ecological resources on private lands. In a similar vein, some conservation groups have sought to protect environmental values on government-owned lands through the purchase of grazing permits. The idea is that environmentalists concerned about overgrazing benefit from the ability to purchase grazing rights and

---

[218] Parker, *supra* note 213, at 487. This figure excludes lands transferred to government agencies or conserved by means other than ownership of the land in fee simple or a conservation easement. *Id.*

[219] *Id.* at 487 n.22. Some estimates place the total amount of land protected by private conservation organizations at over 15 million acres nationwide. *See* MARY GRAHAM, THE MORNING AFTER EARTH DAY: PRACTICAL ENVIRONMENTAL POLITICS 99 (1999) (citing estimates of 13 and 4.7 million acres conserved by national and local organizations respectively).

[220] *See, e.g.*, MIKE MCQUEEN & ED MCMAHON, LAND CONSERVATION FINANCING 103 (2003)("One of the most important categories of private land stewardship is those large blocks of roadless, natural land not currently in resource production. These are a de facto part of our nation's conservation lands, but they are not permanently protected."); McLaughlin, *supra* note 209, at 466 ("Although lacking the 'flash and glamour' associated with the protection of large parcels that have undeniable scenic or habitat value, the ordinary parcels protected by land trusts constitute a significant portion of the national landscape.").

[221] CONSTANCE BEST & LAURIE A. WAYBURN, AMERICA'S PRIVATE FORESTS: STATUS AND STEWARDSHIP 3 (2001).

[222] Substantial amounts of private timber land are managed for conservation purposes during long cutting rotations. *See, e.g.*, TERRY L. ANDERSON & DONALD R. LEAL, ENVIRO-CAPITALISTS: DOING GOOD WHILE DOING WELL 4–8 (1997) (describing efforts to improve wildlife habitat and recreation opportunities on lands owned by International Paper).

[223] Parker, *supra* note 213, at 488 (reporting that "over 40 percent of land trusts report protecting watersheds, farmlands, ranchlands, or endangered species habitat").

[224] Andrew P. Morriss & Roger E. Meiners, *The Destructive Role of Land Use Planning*, 14 TUL. ENVTL. L.J. 95, 125–26 (2000).

[225] Parker, *supra* note 213, at 489–96.

[226] *See* Thompson, *supra* note 217, at 258–61.

devote them to other uses, whether grazing by indigenous species, recreation, or letting the land rest.[227] In 1996, for example, Forest Guardians successfully bid on grazing permits on New Mexico state lands near the Rio Puerco River.[228] The Nature Conservancy has also purchased grazing rights on government-owned lands in conjunction with the purchase of ranches.[229]

Existing grazing regulations can make such transactions difficult. On Bureau of Land Management (BLM) lands, for instance, prospective purchasers of grazing permits must meet several conditions, including base property requirements, that make the purchase of grazing permits for ecological purposes difficult.[230] The Grand Canyon Trust recently sought to purchase and retire grazing permits covering nearly one million acres of federal land.[231] Their bid was unsuccessful, however, as the Bush Administration refused to authorize the sale, despite its potential environmental benefits.[232]

Despite current political obstacles, a number of prominent environmental activists support transforming the current permit-based system into a property-based system under which grazing rights could be bought and sold, and even retired, by conservation groups. Andrew Kerr of the Oregon Natural Resources Coalition, for example, believes that "a permittee should be able to sell the grazing privilege to anyone: another ranger or to an environmental group who could elect to retire the permit in favor of salmon and elk or plenty and poetry."[233] Kerr argues that turning grazing permits into a tradable commodity—a de facto property right—that environmentalists and recreationists could purchase would be "easier" and "more just" than seeking to force ranchers from the land.[234] Reducing grazing through regulatory strictures denies ranchers their livelihood, and reduces the value of the lands to which the permits are attached. Turning grazing permits into property, however, ensures that ranchers are compensated when they move off the

---

[227] This idea was first proposed by agricultural economist Delworth Gardner. *See* B. Delworth Gardner, *A Proposal to Reduce Misallocation of Livestock Grazing Permits*, 45 J. FARM ECON. 109 (1963); *see also* B. Delworth Gardner, *Transfer Restrictions and Misallocation in Grazing Public Range*, 445 J. FARM ECON. 52 (1962); Robert H. Nelson, *How to Reform Grazing Policy: Creating Forage Rights on Federal Rangelands*, 8 FORDHAM ENVTL. L.J. 645, 667 (1997) [hereinafter Nelson, *Grazing*].

[228] *See* Katie Fesus, *New Mexico Environmentalists Lease State Lands*, HIGH COUNTRY NEWS, Nov. 25, 1996, at 4.

[229] *See* Nelson, *Grazing*, *supra* note 227, at 657–58.

[230] *Id.* at 673–80 (summarizing permit holding requirements that make private purchase by conservation groups difficult).

[231] Brent Israelsen, *Grazing Permits to Retire*, SALT LAKE TRIB., Jan. 14, 2003, at B1.

[232] *Id.*; Nancy Perkins, *Ranchers Blast the BLM Over Allotment Purchase*, DESERT NEWS, Jan. 23, 2002, at B6; John D. Leshy, *Natural Resources Policy in the Bush (II) Administration: An Outsider's Somewhat Jaundiced Assessment*, 14 DUKE ENVTL. L. & POL'Y F. 347, 355–56 (2004).

[233] Nelson, *Grazing*, *supra* note 227, at 649 (quoting Andrew Kerr, *Removing Hoofed Locusts from the Public Trough*, WALLOWA COUNTY CHIEFTAIN, Aug. 15, 1996, *available at* http://www.andykerr.net/ChieftainCols/Col02.html). *See also* Andy Kerr's Permits for Cash Page *at* http://www.andykerr.net/Grazing/PFCAF-ERPLRW.html (last visited Nov. 21, 2005).

[234] Nelson, *Grazing*, *supra* note 227, at 649 (quoting Andrew Kerr, *Removing Hoofed Locusts from the Public Trough*, WILLOWA COUNTY CHIEFTAIN, Aug. 15, 1996, *available at* http://www.andykerr.net/ChieftainCols/Col02.html).

land. Other prominent environmental activists have endorsed similar approaches.[235]

C. Water Rights

There is similarly a growing recognition of the substantial environmental gains to be had from replacing the bureaucratic allocation of water with water markets.[236] Subsidized irrigation has wreaked havoc on western ecosystems. Requiring water users to pay market prices for water would encourage more efficient use and discourage wasteful diversions.[237] The creation of water markets, however requires well-defined property rights.[238] Conservationists are also discovering that negotiating firm deals to transfer water rights can offer more certain environmental benefits more rapidly than pursuing traditional regulatory and litigation strategies to mandate changes in water use.[239]

Western water law traditionally required landowners to make productive use of water rights to retain them.[240] A landowner who left her water in the stream for the benefit of fish or other species risked losing her water rights to those who used water for irrigation or drinking.[241] By limiting the marketability of water, the traditional legal regime diminished the incentives to increase water efficiency and obstructed conservation efforts.

In recent years, however, western water law has begun to change. Some states now recognize property interests in instream water flows.[242] Oregon, for example, allows individuals to purchase, lease, or donate water rights for instream flows.[243] This enables environmental groups, such as the Oregon Water Trust (OWT), "to use the marketplace to purchase existing water rights and convert them" for the benefit of fish.[244] Instead of lobbying for regulatory restrictions on water use by farmers and ranchers, OWT can now negotiate with farmers and

---

[235] *Id.* at 656 (citing support of Johanna Wald, Karl Hess, and David Foreman).

[236] ANDERSON & LEAL, *supra* note 222, at 105. ("[T]he last fifteen years have seen a growing shift away from costly command and control approaches to water allocation that have locked most of the West's water into agricultural uses.").

[237] *See* Terry L. Anderson and Peter J. Hill, *Taking the Plunge, in* WATER MARKETING—THE NEXT GENERATION i, xii–xiii (Terry L. Anderson & Peter J. Hill eds., 1997).

[238] James L. Huffman, *Institutional Constraints on Transboundary Water Marketing, in* WATER MARKETING—THE NEXT GENERATION 31, 32–33 (Terry L.Anderson & P.J.Hill eds. 1997).

[239] *See* ANDERSON & LEAL, *supra* note 222, at 94–95 (discussing the experience of Oregon Water Trust).

[240] Michael C. Blumm, *Unconventional Waters: The Quiet Revolution in Federal and Tribal Minimum Streamflows*, 19 ECOLOGY L.Q. 445, 446 n.1 (1992) ("Limiting water rights to those who could make productive use of the water—and only for as long as they did so (nonuse can lead to loss of the right through abandonment or forfeiture)—was designed to conserve scarce Western water for those who were making productive investments such as irrigation, mining, and stock watering.").

[241] *Id.* at 480; ANDERSON & LEAL, *supra* note 222, at 105.

[242] *See* TERRY L. ANDERSON & PAMELA SNYDER, WATER MARKETS: PRIMING THE INVISIBLE PUMP 111–32 (1997); *see also* Andrew P. Morriss, Bruce Yandle & Terry Anderson, *Principles for Water*, 15 TUL. ENVTL. L.J. 335 (2002).

[243] ANDERSON & SNYDER, *supra* note 242, at 120.

[244] *See id.*; J. BISHOP GREWELL & CLAY LANDRY, ECOLOGICAL AGRARIAN: AGRICULTURE'S FIRST EVOLUTION IN 10,000 YEARS 107–113 (2003) (discussing activities of Oregon Water Trust and Trout Unlimited).

ranchers to purchase water rights. If OWT can show a farmer how to irrigate his land more efficiently, OWT can show the farmer how to profit by selling the extra water. The recognition of property rights in water gives farmers a potentially marketable asset, and the efforts of organizations like OWT create a financial incentive to "use" water in ways that benefit species and local ecosystems.[245] The Oregon system is not a pure market in water, but it has facilitated market-based conservation strategies by moving toward greater recognition of property rights in water. Other states, such as Montana, have taken similar steps in this direction.[246]

D. Fishing Rights

The failure of traditional regulations, and the recent success of alternative management strategies, has generated interest in the potential use of property rights for marine conservation. Environmental Defense is one of many groups urging the expansion of property rights in marine resources to address overharvesting of fisheries.[247] In British Columbia, for example, the introduction of private fishing rights saved the halibut fishery from ruin.[248] This change not only led to sustainable catch levels but also increased the quality of the fish caught and the profitability of local fishing operations.[249] The creation of private property rights advanced conservation where regulation failed.

Iceland and New Zealand experienced similar success with the implementation of a property-regime known as individual transferable quotas, or "ITQs."[250] Under an ITQ system, the government sets the total allowable catch for a given season, and then allocates shares of the catch quota to individuals, boats, or firms as a form of transferable right. ITQ programs have been implemented in several countries with substantial success at increasing fishing efficiency, reducing overcapitalization, and lessening the ecological impact of fishing operations.[251] Of particular significance, ITQs have encouraged fishers to exercise greater steward-

---

[245] ANDERSON & LEAL, *supra* note 222, at 94–95.

[246] *Id.* at 105.

[247] *See* Brad Knickerbocker, *Natural Capitalism*, CHRISTIAN SCI. MONITOR, Jan. 4, 2001, at 11 (reporting that "Environmental Defense recently teamed up with the Political Economy Research Center to protect fisheries" by advocating for the greater use of ITQs); *On the Magnuson-Stevens Fishery Conservation and Management Act before the Senate Subcommittee on Oceans and Fisheries Committee on Commercer, Science and Transportation*, Dec. 14, 1999 (testimony of Peter M. Emerson), *available at* http://www.environmentaldefense.org/documents/497_Pete%20Emerson%20testimony.htm; Rodney M. Fujita, *Building Conservation into Individual Transferable Quota Programs* (March 1999), http://www.environmentaldefense.org/documents/534_Oceans_building%20conservation.html (noting that "Individual Transferable Quotas for fish catch privileges (ITQ) can enhance conservation and make fisheries more sustainable and profitable").

[248] *See* RÖGNVALDUR HANNESSON, THE PRIVATIZATION OF THE OCEANS 110–112 (2004).

[249] *See* R. Quentin Grafton, et al., *Private Property and Economic Efficiency: A Study of a Common-Pool Resource*, 43 J.L & ECON. 679 (2000).

[250] *See generally* HANNES H. GISSURARSON, OVERFISHING: THE ICELANDIC SOLUTION (2000). *See also*, MICHAEL DE ALESSI, FISHING FOR SOLUTIONS 41–43 (1998) [*hereinafter* DE ALESSI, FISHING].

[251] *See, e.g.*, Grafton, et al., *supra* note 249, at 679–713; Robert Repetto, *A Natural Experiment in Fisheries Management*, 25 MARINE POL'Y 251, 262–63 (2001). *See generally* GISSURARSON, *supra* note 250.

ship.[252] Under ITQ regimes, each fisher has "an interest in cooperating to build the stocks, because each will benefit from increased catches in the future."[253]

Some researchers encourage even broader development of property rights in coastal resources, such as private ownership of oyster beds. Empirical research finds privately managed oyster beds to be healthier and more productive than those under state protection.[254] Technological improvements, over time, will further facilitate the expansion of property rights in natural resources.[255] The benefits of private ownership of marine resources can also be seen in the explosion in aquaculture production, which more than tripled between 1985 and 1995.[256] Aquaculture now accounts for approximately one-quarter of global fish harvests, and one-third of fish harvested for human consumption.[257] Aquaculture operations are privately owned in their entirety, so producers have the incentive "to tinker, to experiment, and to innovate" to increase the productivity of their facilities.[258] As aquaculture expands, it reduces the pressure on wild fish stocks.[259]

Conclusion

The growing recognition that the protection of property rights is an essential component of environmental protection should not be a surprise. In many respects, it marks a return to this nation's original conservation tradition. The initial conservation groups, formed at the close of the 19th and dawn of the 20th centuries,

---

[252] *See* DE ALESSI, FISHING, *supra* note 250.

[253] Brian Lee Crowley, *Introduction*, *in* TAKING OWNERSHIP: PROPERTY RIGHTS AND FISHERY MANAGEMENT ON THE ATLANTIC COAST 1, 4 (Brian Crowley ed. 1996). This is not merely a theoretical observation. In New Zealand, for example, ITQs have given fishers an incentive to monitor fish catch and population levels, and to ensure that government set catch limits are sufficiently stringent. Michael DeAlessi, *Fishing for Solutions: The State of the World's Fisheries*, *in* EARTH REPORT 2000 at 86, 99 (Ronald Bailey ed., 2000) [hereinafter DeAlessi, *Fishing*].

[254] DeAlessi, *Fishing*, *supra* note 253, at 94–95. *See also*, Richard J. Agnello & Lawrence P. Donnelley, *Prices and Property Rights in the Fisheries*, 42 S. ECON. J. 253 (1979) (comparing Louisiana and Mississippi oyster fisheries); Richard J. Agnello & Lawrence P. Donnelley, *Property Rights and Efficiency in the Oyster Industry*, 18 J.L. & ECON. 521 (1975) (comparing the productivity of Maryland and Virginia oyster fisheries).

[255] *See* Bruce Yandle & Andrew P. Morriss, *The Technologies of Property Rights: Choice Among Alternative Solutions to Tragedies of the Commons*, 28 ECOLOGY L.Q. 123, 139–41 (2001). A good example of the role of technology in the evolution of property rights is how the development of barbed wire and branding facilitated the definition of property rights on the Western Range. *See* Terry L. Anderson & Peter J. Hill, *The Evolution of Property Rights: A Study of the American West*, 12 J.L. & ECON. 163 (1975). It is possible that a similar technological development is occurring in the context of marine resources. *See* Daniel Huppert & Gunnar Knapp, *Technology and Property Rights in Fisheries Management*, *in* THE TECHNOLOGY OF PROPERTY RIGHTS 79 (2001); DEALESSI, FISHING, *supra* note 250, at 48–53; Charles C. Mann, *The Bluewater Revolution*, WIRED MAG., May 2004 *available at* http://www.wired.com/wired/archive/12.05/fish.html (discussing the University of New Hampshire's "Open Ocean Aquaculture Project" described as "the first fish farm ever on the open ocean" that some believe will lead to fully automated, mobile "ocean ranches").

[256] De Alessi, *Fishing*, *supra* note 253, at 109.

[257] James L. Anderson, *Aquaculture and the Future*, 17 MARINE RES. ECON. 133, 134 (2002).

[258] DE ALESSI, FISHING, *supra* note 250, at 54.

[259] Aquaculture is not without its problems, however. Some forms of aquaculture, for example, are significant sources of water pollution. DE ALESSI, FISHING, *supra* note 250, at 54–57.

organized hunters, outdoorsmen, and others to protect private land for present and future generations.[260]

The National Committee of Audubon Societies—the forerunner to today's National Audubon Society—stressed education and private stewardship in its early efforts to protect game birds.[261] Where such efforts were not enough, Audubon began to purchase land itself to ensure that vital nesting and breeding grounds would be protected.[262] At one time, Audubon's sanctuary system covered thousands of acres. As John M. "Frosty" Anderson, former director of the system, recounted,

> For fifty years, before *any* federal, state, or private organization paid serious attention to endangered species, our wardens were providing effective protection to them. Beginning with our system of wardens and sanctuaries, supplemented later by research, the NAS was and *is* unique, because we did not rely *solely* on persuasion through education, nor did we *ever* believe that simply passing laws would help conserve wildlife. We got control of land by purchase, long-term lease, bequests, or in some cases merely by verbal agreement. We put a man on that land who stood between the endangered species and the market place. Had it not been for the Audubon system of sanctuaries and wardens, many endangered species would not have survived long enough to be classified as such.[263]

Indeed, the first game warden killed while protecting a wildlife preserve was not employed by the National Park Service or U.S. Forest Service. It was Guy Bradley, shot protecting an Audubon preserve in 1905.[264]

For early conservationists, private property was an essential means of protecting species and spaces then unappreciated by the rest of the country. Even Aldo Leopold, whose "land ethic" continues to inspire conservationists and ecologists to this day, suggested that property-based conservation strategies were more effective than regulation.[265] Where there was no political will to protect environmental re-

---

[260] *Over a Century of Conservation: An Audubon Timeline, at* http://www.audubon.org/nas/timeline.html (last visited Nov. 21, 2005); PHILIP SHABECOFF, A FIERCE GREEN FIRE: THE AMERICAN ENVIRONMENTAL MOVEMENT 85–86 (1993) ("In the first half of the [twentieth] century, hunting and fishing organizations were the most politically effective environmental activists.").

[261] *See* ADLER, *supra* note 8, at 2–3. *See also* FRANK GRAHAM JR., THE AUDUBON ARK 9–12 (1990). Initially, the Audubon Society, formed as "an Association for the protection of wild birds and their eggs," believed that "[t]he way to effect a change of heart . . . was through articulate persuasion, or, as he wrote, 'the education of our whole people to an understanding of the usefulness of the birds and the folly of permitting their wholesale destruction.'" *Id.* at 12.

[262] GRAHAM, *supra* note 261, at 44 (discussing efforts to purchase Pelican Island in 1898); *Over a Century of Conservation, supra* note 260.

[263] R.J. Smith, The Ark Founders, the Great Egret Flees 12–13 (1995) (emphasis in original) (unpublished manuscript, on file with the Political Economy Research Center).

[264] Cam Tredennick, *The National Wildlife System Improvement Act of 1997: Defining the National Wildlife Refuge System for the Twenty-First Century*, 12 FORDHAM ENVTL. L.J. 41, 42 n.3 (2000)

[265] Aldo Leopold, *Conservation Economics, in* THE RIVER OF THE MOTHER OF GOD AND OTHER ESSAYS 193, 193–94 (Susan L. Flader & J. Baird Callicott eds., 1991) ("We tried to get conservation by buying land, by subsidizing desirable changes in land use, and by passing restrictive laws. The last method largely failed; the other two have produced some small samples of success."). Leopold further suggested that

sources, individuals and associations could use private money and private land to preserve the nation's environmental heritage. At a time when governments encouraged the slaughter of raptors, one woman, Ms. Rosalie Edge, purchased Hawk Mountain to protect birds of prey from extirpation. While unpopular at the time, Ms. Edge's purchase enabled the creation of one of the most important raptor research sites in the world.[266] In a similar fashion, private individuals like William Hornaday, founder of the American Bison Association, saved the buffalo from extinction on the western plains at a time when the federal government was subsidizing its slaughter.[267] While buffalo populations were dwindling on public lands, they were prospering on private lands. Were it not for these efforts, it is unlikely that there would be any buffalo in Yellowstone National Park today. Indeed, we have reason to believe that *all* buffalo on federal lands today are descended from private stock.

In discussing the source of environmental problems, we often recall Garrett Hardin's seminal essay on the "tragedy of the commons."[268] As Hardin noted, where a resource is held in common—that is, where it is subject to open-access—there is no incentive for any user of that resource to conserve it, as the benefits of one's conservation are dispersed among all the users. Exploiting the resource as quickly as possible, on the other hand, allows a single user to capture the gains of his hard work, while dispersing the costs on the larger group. Thus, where there is open-access in the commons, the tragedy of overuse is the inevitable result. What is often overlooked is Hardin's prescription. Where possible, the creation of property rights in threatened resources encourages their protection and sustainable use. In Hardin's words, "[t]he tragedy of the commons as a food basket is averted by private property, or something formally like it."[269] Environmental problems, therefore, are often essentially "property rights problems" and are best redressed by the extension, definition, and defense of property rights in environmental resources.[270]

As a general rule, where resources are privately owned, either individually or collectively, there is less concern about their overuse. Property owners have both the ability to protect the owned resource and a substantial incentive to maintain its

---

private conservation was preferable to government acquisition of land for conservation purposes. *Id.* at 196 ("I do challenge the growing assumption that bigger buying [of public land] is a substitute for private conservation practice.").

[266] *See* Robert J. Smith, *Private Conservation Case Studies: Hawk Mountain Sanctuary Association* (Apr. 1, 1999), *at* http://www.cei.org/gencon/025,01598.cfm (last visited Nov. 21, 2005). *See also* Morriss & Meiners, *supra* note 224, at 128–29.

[267] *See* Ike C. Sugg, *Where the Buffalo Roam, and Why*, EXOTIC WILDLIFE, Jan.-Feb. 1999, at 14. ("Bison were initially saved by six individuals who either saw business opportunities in the existence of bison or simply wanted to save a vanishing species." (quoting Dr. Valerius Geist)).

[268] Garrett Hardin, *The Tragedy of the Commons*, 162 SCI. 1243 (1968).

[269] *Id.* at 1245. Hardin's reluctance to call for broader property rights in other environmental resources, such as air and water, stemmed from his belief that such resources "cannot be readily fenced," not out of any concern that the power of property rights to promote sound resource use was limited to farmlands and pastures.

[270] Peter J. Hill & Roger E. Meiners, *Property Rights and Externalities: Problems and Solutions*, *in* WHO OWNS THE ENVIRONMENT? i, xi (Peter J. Hill & Roger E. Meiners eds., 1998).

value—both to themselves and to others.[271] Those property owners that do the best job of estimating likely future income streams, including those that derive from careful environmental stewardship, are then rewarded in the marketplace with greater property values. "Well-maintained forests suitable for, say, recreation, wildlife and sustainable timber harvesting will be worth more than a nonsustainable timber harvest and the resulting clear-cut land where the sum of values from the former activities outweighs the sum of values from the latter."[272] At the same time, many landowners see their land as a "personal reflection on themselves" and take pride in managing their land in a sustainable fashion.[273] Land trusts and other conservation organizations are private owners that place substantial value on maximizing the conservation potential of their own land. Conversely, the lack of property rights provides substantial incentives against resource conservation.[274]

Private property is not the enemy of conservation; it is its foundation. Where property rights are defined and defended, careful stewardship is the norm. Where property rights are diminished or disregarded, negative environmental consequences often follow. Acceptance of the environmental benefits of property rights is far from universal.[275] Nonetheless, the growing recognition of property's ecological benefits may yet provide the basis for a new agenda for environmental conservation.

---

[271] Robert J. Smith, *Resolving the Tragedy of the Commons by Creating Private Property Rights in Wildlife*, 1 CATO J. 439, 456 (1981)("Wherever we have exclusive private ownership, whether it is organized around a profit-seeking or nonprofit undertaking, there are incentives for the private owners to preserve the resource."). *But see* Daniel H. Cole, *Clearing the Air: Four Propositions About Property Rights and Environmental Protection*, 10 DUKE ENVTL. L. & POL'Y F. 103, 117–25 (1999) (arguing there are many environmental problems for which property rights are not the "first-best" solution).

[272] Morriss, *Private Conservation Literature*, *supra* note 210, at 635. This is the environmental application of Harold Demsetz' claim that "If a single person owns land, he will attempt to maximize its present value by taking into account alternative future time streams of benefits and costs and selecting that one which he believes will maximize the present value of his privately-owned land rights." Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 355 (1967); *id.* at 356 ("The development of private rights permits the owner to economize on the use of those resources from which he has the right to exclude others."). Demsetz' claim is not that *every* private landowner will act in this fashion, just that the incentives of ownership are such that the typical landowner will act in this fashion. As is true in all contexts, the behavior of specific individuals will vary, with some taking greater or lesser actions to maximize the present value of the property in question.

[273] *See* GREWELL & LANDRY, *supra* note 244, at 157.

[274] As Anthony Scott observes, "No one will take the trouble to husband and maintain a resource unless he has a reasonable certainty of receiving some portion of the product of his management; that is, unless he has some property right in the yield." Anthony D. Scott, *The ITQ as a Property Right: Where It Came From, How It Works, and Where It Is Going*, *in* TAKING OWNERSHIP, *supra* note 253, at 31, 63. Again, while it may be an overstatement to claim that "no one" will act in such a manner, this is clearly a case in which the exception proves the rule.

[275] *See,* Olson, *supra* note 206, at 67 ("To hear some conservationists, one would gather that private property is the bane of their existence"); *see also* Cole, *supra* note 271; David Dreisen, *What's Property Got to Do with It?* 30 ECOLOGY L.Q. 1003 (2003).