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SIXTH ANNUAL LLOYD K. GARRISON LECTURE ON ENVIRONMENTAL LAW

The Future of Environmental "Rule of Law" Litigation

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I. Introduction: Environmental Law as Litigation

What is environmental law? There is no easy answer to this simple but complex question. The most common answer is that environmental law consists of the regulatory programs that have been enacted by Congress and the states since 1969 and the cases interpreting those statutes and regulations. A slightly more expansive answer includes post-New Deal administrative law of increased citizen access to the courts and heightened judicial scrutiny of resource allocation decisions, and common law tort remedies for pollution damage. Put differently, environmental law could be defined as the law found in the standard law school

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casebooks.[1] These are correct, but ultimately unsatisfactory, answers because the mass of statutes, administrative regulations, guidances and judicial decisions do not constitute a coherent and distinctive legal category and do not provide much insight into a more interesting and important question: what is the future of environmental law? Thirty years after "environmental protection" emerged as a priority public policy objective, the normative content of environmental law remains incoherent and contested.[2] In fact, in addition to incoherence, the most distinctive features of environmental law are irony and paradox. Thus, a more meaningful question to pose might be, what is the jurisprudential basis of environmental law, and can this basis sustain itself in the future?

Jurisprudentially, environmental law could be defined as the positive and common law that reflects environmentalism. Environmentalism is an unstable wedding of two policy objectives: (1) the protection of public health from the risks associated with involuntary exposures to pollutants and contaminants, and (2) the protection and preservation of natural areas. Not surprisingly, a more complete definition of environmentalism creates a more complex question with many different and contradictory answers.[3] Following Aldo Leopold,[4] I define environmentalism as an emerging philosophy or value system[5] which posits that we living humans should assume science-based ethical stewardship obliga-

1. *E.g.*, FREDERICK ANDERSON ET AL., ENVIRONMENTAL PROTECTION: LAW AND POLICY (3d ed. 1999); JOHN E. BONINE and THOMAS O. MCGARITY, THE LAW OF ENVIRONMENTAL PROTECTION (1992); ROGER FINDLEY and DANIEL FARBER, ENVIRONMENTAL LAW (4th ed. 1995); ROBERT PERCIVAL ET AL., ENVIRONMENTAL REGULATION (2d ed. 1996); ZYGMUNT J.B. PLATER et al., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY (1998).

2. *See, e.g.*, Zygmunt J.B. Plater, *Environmental Law and Three Economies: Navigating A Sprawling Field of Study, Practice, and Societal Governance Where Everything is Connected to Everything Else*, 23 HARV. ENVTL. L. REV. 359 (1999).

3. The best introduction to environmentalism remains T.O. RIORDAN, ENVIRONMENTALISM (2d ed. 1980).

4. The main principle of environmentalism is Aldo Leopold's famous dictum that "[a] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." ALDO LEOPOLD, A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE 224-225 (1949).

5. The case that a fundamental value or paradigm shift has occurred is set out in Gilbert F. White, *Reflections on Changing Perceptions of the Earth, 1994 Annual Review of Energy and the Environment* 19 (1994); and Lester Milbrath, *The World is Relearning Its Story about How the World Works*, in Environmental Politics in the International Arena 21 (Sheldon Kamieniecki ed. 1993). *See generally* I.G. Simmons, ENVIRONMENTAL HISTORY: A CONCISE INTRODUCTION (1993).

tions[6] to conserve natural systems for ourselves as well as for future generations.[7] Every word of this definition can be parsed and contested, but it is a sufficient working principle because it distinguishes environmentalism from the dominant western world view that the earth is ours to exploit and to enjoy without restraint.[8] Environmental law can therefore be explained as an effort to institutionalize stewardship obligations. For example, emerging international doctrines, such as the duty of environmental impact assessment[9] and the use of the precautionary principle to prevent environmental degradation before conclusive evidence of injury, exist.[10]

Defining environmental law as institutionalized stewardship has the virtue of moving beyond the extreme positive explanation, but the definition has two major drawbacks. First, although the definition can be found in statutes and an occasional case,[11] it is

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6. This proposition is derived from Edward Wilson's dictum that "[f]or what, in the final analysis, is morality but the command of conscience seasoned by a rational examination of the consequences." EDWARD O. WILSON, THE DIVERSITY OF LIFE 351 (1992).

7. This definition is formally neutral on the question of whether it is possible to create duties toward non-human communities and future generations. Professor Edith Brown Weiss is the leading exponent of the idea that each generation owes conservation duties to the generations to come. EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATION: INTERNATIONAL LAW, COMMON PATRIMONY, AND INTERGENERATIONAL EQUITY (1989). Jeffrey Gaba, *Environmental Ethics and Our Moral Relationship to Future Generations: Future Rights and Present Value*, 24 COLUM. J. ENVTL. L. 249 (1999), cogently criticizes the idea that our moral relationship to the future can be expressed in terms of duty or obligation and argues that we should instead focus on our obligations to ourselves through the lens of virtue ethics. The virtue of benevolence would lead us to make decisions based on the quality of life that "we wish to see lived in the future." *Id.* at 286. Neither theory of intergenerational equity, however, adequately addresses the issue, which is at the heart of more international environmental policy, whether a principle that requires any subordination of immediate development on the part of developing nations is fair and thus ethical.

8. The classic exploration of the western tradition from the ancient Hebrews through the Enlightenment is JOHN PASSMORE, MAN'S RESPONSIBILITY FOR NATURE: ECOLOGICAL PROBLEMS AND WESTERN TRADITIONS (1974).

9. The duty to prepare an EIS has been so widely adopted throughout the world, Directive on Environmental Assessment (87/337/EC) and Rio Declaration on Environment and Development, Principle 17, adopted by the United Nations Conference on Environment and Development, June 14, 1992, that it can now be said to be a customary procedural duty. Justice Weermantry posited such a duty in his separate opinion in *Case Concerning the Gabcikovo-Nagymaros Project* (Hungary/Slovakia) (visited Sept. 1997) <http://www.ijc.org>.

10. The precautionary principle is still a contested one. Compare PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 212-213 (1995), with PATRICIA W. BIRNIE AND ALAN E. BOYLE, INTERNATIONAL LAW AND THE ENVIRONMENT 98 (1992).

11. Application of Christensen, 417 N.W.2d 607 (Minn. 1988); Department of Community Affairs v. Moorman, 644 So.2d 930, 932 (Fla. 1995)("[t]he clear policy un-

not a good explanation of how the law surrounding environmental protection actually functions. From a legal perspective, environmental stewardship remains more a statement of aspiration rather than a positive description of law because, as a substantive matter, environmentalism is such a radical break with the western philosophical and legal tradition[12] that stewardship does not reflect our actual behavior. We may weep for burned rain forests in Brazil and enthusiastically support wolf-reintroduction in the northern Rockies, but we continue to drive too many vehicles too often and demand more elaborate packaging for our favorite products. Second, much of environmental law has evolved as judge-made law, and remains more procedural than substantive. Therefore, this article asks a different question from the over-arching question of "what is environmental law." Instead, the article asks what the jurisprudential theory of law is that underlies environmental litigation. This is a more fruitful line of inquiry because it

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derlying Florida's environmental regulation is that our society is to be the steward of the natural world, not its unreasoning overlord.").

12. One of the many problems with formulating a coherent theory of environmental "law" is that environmental regulation cuts against the grain of western civilization. Thus, environmental law is, to a greater extent than other areas of law, a product of external forces, difficult to integrate into our legal system, and limited to the extent that it seeks to impose rather than reflect fundamental societal values. The thrust of environmentalism is not the enhancement of human dignity but need for humankind to subordinate itself to two communities, neither of which have legal personality: future generations and ecosystems. See A. Dan Tarlock, *Environmental Law, But Not Environmental Protection in* NATURAL RESOURCES POLICY AND LAW: TRENDS AND DIRECTIONS 162-169 (Lawrence J. MacDonnell and Sarah F. Bates eds. 1993); and Joseph L. Sax, *The Search for Environmental Rights*, 1 J. LAND USE and ENVIRONMENTAL LAW 93 (1990). The problem of incorporating non-human values into the calculus of recognized legal interests is illustrated by the difficulty that courts have had with nuisance claims that are limited to ecosystem damage. At the start of the environmental movement, a Minnesota trial judge found that the discharge of taconite tailings into Lake Superior did not constitute a nuisance because they only increased the "green water phenomenon" and killed a small shellfish that supported smelt and trout. Reserve Mining v. Minnesota, 2 ERC 1135 (1971). The same result was reached in Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency, 34 F.Supp. 1126 (D. Nev. 1999). The Council was ordered to pay damages for a temporary taking for a moratorium which prohibited building on high hazard lands around Lake Tahoe. The regional planning agency argued that the moratorium was necessary to protect Lake Tahoe from gradual degradation from erosion and thus merely prevent plaintiffs from maintaining a nuisance. However, the court concluded that "[i]t is certainly true that Lake Tahoe is faced with serious harm, which ought to be prevented if at all possible, but it is not the type of harm contemplated by California nuisance law . . . The fact that the lake may turn green and opaque and be reduced to a pale copy of its current self, is abhorrent to think of - yet not, unfortunately a nuisance as defined by the pre-existing law of California." 34 F.Supp. at 1226. Susan Warren, *Recycler's Nightmare: Beer in Plastic*, WALL ST. J., Nov. 16, 1999, at B1.

both probes the immediate origins of the distinctive features of environmental law in the United States, such as litigation, and the factors that have influenced its development. It also raises important questions about the future role of environmental litigation in the continued evolution of effective environmental protection.

II. The Argument: The Rule of Law Litigation Strategy

In the 1960's, lawyers had to create the subject of environmental law from whole cloth and, as a result, lawyers followed the great common law tradition of marginal groups and pursued a "rule of law" litigation strategy. To discipline public agencies, through what we now call "public interest" litigation, they had to convince courts that environmental law in fact existed when it did not exist. Lawyers had to create the fiction that the recognition of new environmental protection duties merely required courts to perform their traditional and constitutionally legitimate function of enforcing, rather than creating, pre-existing rules. This strategy was adopted out of necessity in an *ad hoc* fashion because environmental values had almost no support in the common law, in constitutional law or in legislation. Access to the courts was limited because standing was thought to be confined to common law rights, statutory rights or the clear legislative creation of non-common law legal interests.

The statutory regimes, which promoted the degradation that non-governmental organizations (NGOs) and their lawyers were trying to reverse, were all enacted before environmental values were widely understood. These statutes conferred almost unlimited discretion upon administrative agencies to choose among a wide range of resource-use options from complete preservation to full development. Thus, NGO lawyers had to find indirect ways to convince judges to reach environmental results. This was done by strictly construing statutes to argue that the agency failed to follow the letter of the statute, or by reading statutes creatively to find duties in broad delegations of discretion. At times, a strict statutory reading was fiction to disguise the radical nature of the legal argument while in other cases, lawyers resorted to orginalist theories of statutory interpretation to find environmental protection duties. Occasionally, agency action was found to be *ultra vires* on the merits.[13] In short, all environmental litigation proceeded

13. *See infra* notes 78 to 81.

on the premise that judicial intervention was necessary to uphold the rule of law.[14]

Environmental law quickly gained a statutory status in the 1970s, but the "rule of law" strategy was carried over into National Environmental Policy Act of 1969 (NEPA)[15] litigation and the implementation of all the subsequently-enacted pollution control and biodiversity conservation statutes. This strategy served the environmental movement well. It transferred power from the mission agencies to the court,[16] and created powerful environmental NGOs which now have a seat at the political table. The many remands and invalidations secured through this strategy have created powerful incentives for agencies to comply with the likely environmental NGO construction of the law at all stages of regulatory activities. This development was a classic example of the ability of well-crafted litigation to stimulate social change and to redress deep power imbalances.

The question today is whether the "rule of law" strategy can sustain itself in the future. I argue that the sustainability of this strategy is open to question for two reasons. First, the strategy was always a fiction because courts were creating, not "finding," law, and all fictions break down over time as the need for them decreases and they become more transparent. Second, the future evolution of environmental law suggests that the rule of law litigation strategy will be less effective in the future because environmental protection is evolving as it enters its second generation.[17]

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14. The classic articulation of this argument is David Sive, *Some Thoughts of an Environmental Lawyer in the Wilderness of Administrative Law*, 70 COLUM. L. REV. 612 (1970). Professor Sive argued that courts must intensify judicial review of decisions that failed to give adequate consideration to environmental values in order to create "a body of doctrines that will enable its practioners to win cases, to neutralize the effluent of affluence, and to prevent the asphalt jungle from supplanting the still green part of our one earth." *Id.* at 614.

15. 42 U.S.C.A. §§ 4321 to 4370(d).

16. In his path-breaking book, DEFENDING THE ENVIRONMENT: A STRATEGY FOR CITIZEN ACTION, Professor Joseph Sax extolled the virtues of litigation as a chance for the ordinary citizen to challenge government action and suggested that environmental management requires "a repudiation of our traditional reliance on professional bureaucrats." The Garrison Lecture series honors one of the great practioners of the use of litigation to reflect new social values and to redress deep structural societal power imbalances and inequities, Lloyd K. Garrison. Professor David Sive taught this tradition by example to the first generation of environmental lawyers and ably defended it in the first Garrison Lecture. *The Litigation Process in the Development of Environmental Law*, 13 PACE ENVTL. L. REV. 1 (1995).

17. DANIEL C. ESTY AND MARIAN R. CHERTOW, THINKING ECOLOGICALLY: AN INTRODUCTION IN THINKING ECOLOGICALLY: THE NEXT GENERATION OF ENVIRONMENTAL POLICY 1 (1997).

Three primary non-legal changes may be converging which challenge the future of environmental law as "rule of law" litigation. First, changes in ecology have undermined the simple faith that preventing changes in natural systems is a sufficient protection strategy and, thus, the possibility for general, but hard, substantive environmental protection rules. Second, the search for non-litigation alternatives, especially stakeholder consensus processes to resolve environmental disputes, is accelerating. There is growing support for more democratic, decentralized ecosystem management regimes[18] to promote biodiversity conservation. Litigation may play an important but different role in this process. Ecosystem management is an experiment which may require very different legal approaches from the first generation of environmental problems.[19]

Third, if environmental protection is to succeed as a legitimate, permanent policy, it must evolve from a negative strategy of simply trying to stop an action that disturbs a mythical natural baseline to a pervasive, affirmative one which provides incentives for creative super-legal protection solutions that are sometimes "extra" legal.[20] In addition, these changes are occurring in a post-*Chevron*[21] world when the judiciary is returning to the private rights model of litigation and, thus, is increasingly indifferent or hostile to "rule of law" private attorney general actions.

As stated earlier, environmental law has two distinct but overlapping branches, public health protection and biodiversity conservation. Although my argument has more applicability for resource conservation and management, it can also apply to pollution enforcement litigation. This is especially true as there is a close link to biodiversity conservation and where over-enforcement of environmental goals may compromise other objectives,

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18. *See, e.g.*, TIMOTHY BEATLEY AND KRISTY MANNING, THE ECOLOGY OF PLACE: PLANNING FOR ENVIRONMENT, ECONOMY AND COMMUNITY (1997).

19. *See* Lee P. Breckenridge, *Nonprofit Environmental Organizations and the Restructuring of Institutions for Ecosystem Management*, 25 ECOLOGY L. Q. 692 (1999).

20. *See* WILLIAM HOLLAND DRURY, JR., CHANCE AND CHANGE: ECOLOGY FOR CONSERVATIONISTS 185 (1998), observes that "[o]bstructionism is an effective program if one is small, but unfortunately the environmental establishment has persisted in this strategy even as the movement has grown beyond its limited beginnings."

21. Chevron U.S.A., Inc. v. Natural Resources Defense Council,Inc., 487 U.S. 837 (1984), requires that courts defer to reasonable agency constructions of laws "[i]f Congress has explicitly left a gap for the agency to fill." At best, *Chevron* reflects the erroneous view that law and the administrative state are not compatible. Cass Sunstein, *Judicial Review of Administrative Action in a Conservative Era*, 39 ADMIN. L. REV. 353 (1987).

such as social justice, with no corresponding environmental protection gain. All of environmental management and law is adapting to the evolution of environmentalism.

My argument is both positive and normative, and my thesis is provocative but not absolute. Some of the reasons that I cite are the inevitable result of the evolution of environmental law and others posit that some of the direction represents a needed correction of our initial regulatory strategies to reflect our understanding of the complex nature of environmental systems and their management.[22] The thesis is not absolute because the need for NGO vigilance and litigation will always exist. Unlike some libertarian scholars and judges, I do not question the legitimacy of either the administrative state or the idea that principled judicial law creation by agencies and courts is consistent with the rule of law. Our opened-textured theory of separation of powers, which has kept courts open to new theories and suits to check the abuses of the executive and the legislature, needs to be preserved in the face of the Supreme Court's current assault on it. Confucianism teaches that one should dissolve rather than resolve disputes, but we western lawyers do not subscribe to this aspiration. "Rule of law" litigation will always remain an important feature of environmental law because it is a counter-pressure to the inevitable swings in legislative and executive enthusiasm for environmental protection. But environmentalists must recognize that all movements change over time and, if they are to have a lasting impact, the initial strategies must evolve as the movement evolves.

III. Environmental Law as Rule of Law Litigation

A. Environmental Law as the Product of A Legal Guerilla Warfare

Environmental law is an unplanned by-product of the unique politics of environmentalism in the late 1960s and early 1970s. Environmental law began as a legal guerilla movement led by *ad hoc* citizens groups which tapped a growing frustration with development and the idea that application of all technology was progress.[23] The objective was often to stop a local public works project

22. *See e.g.*, J.B. Ruhl, *Thinking of Environmental Law as a Complex Adaptive System: How To Clean Up the Environment by Making a Mess of Environmental Law*, 34 HOUS. L. REV. 933 (1997). *See e.g.*, American Trucking Associations, Inc. v. EPA, 175 F.3d 1027 (D.C. Cir. 1999) (cert. granted, ___ U.S. ___ (2000)).

23. Former Secretary of the Interior Stewart Udall describes Victor Yannacone, the first lawyer to try and stop the use of DDT, as follows: "Yannacone was a brilliant

or a federal or state licensed activity that allowed the development of scenic "natural" areas.[24] Environmental law was born out of the fight to stop a pump storage project at Storm King Mountain on the Hudson River in New York State. The successful lawsuit to remand a Federal Power Commission license became the paradigm environmental law suit.[25] First, an *ad hoc* citizen group gained unprecedented standing to represent non-economic, aesthetic interests. Second, the plaintiffs convinced the Court of Appeals to read a broad regulatory statute, which at best conferred discretion on the agency to consider aesthetic values (a then much contested idea), to impose mandatory duties on an agency to consider environmental values and to justify those decisions not to protect environmental values.[26] This is the core "rule of law" litigation strategy. Judge Hays' reading of the Federal Power Act of 1920,[27] which ironically signaled the demise of the progressive conservation movement[28] as an environmental statute suggested that a strict construction of statutes could be erected to allow judges to "discover" environmental mandates. Third, the major remedy was not a decision on the merits, but a remand. This cast environmental law as primarily procedural, and litigation as a tactic to stall an undesired project by political means rather than by a final adjudication of a legal issue on the merits. Lawyers sought to obtain, in Joseph Sax's words, either a legislative or administrative remand.[29] This strategy was adopted by the United

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tactician, but from the beginning he had no illusions that litigation would produce resounding victories. His maverick motto was 'Sue the Bastards,' and he envisioned his lawsuits as show trials to dramatize environmental truths that would ultimately compel members of the legislative and executive branches of government to act. He was willing to lose court decisions if his cause prevailed in the court of public opinion." STEWART UDALL, THE QUIET CRISIS AND THE NEXT GENERATION 224 (1988).

24. In his history of the modern environmental movement, Samuel P. Hays stresses the grass roots, bottoms up nature of the movement compared to the top down elite scientific conservation movement. SAMUEL P. HAYS, BEAUTY, HEALTH AND PERMANENCE: ENVIRONMENTAL POLITICS IN THE UNITED STATES, 1955-1985 (1987).

25. *See* Scenic Hudson Preservation Conference v. FPC, 354 F.2d 608 (2d Cir. 1965), *cert. denied*, 384 U.S. 941 (U.S. May 16, 1966) (No. 1159).

26. The plaintiffs were aided by the fact that a decade earlier, the Commission had successfully defended its authority to deny a license to protect a free-flowing river, 216 F.2d 509 (7th Cir. 1954). *See* A. Dan Tarlock, et al., *Environmental Regulation of Power Plant Siting: Existing and Proposed Institutions*, 45 S. CAL. L. REV. 502, 514-523 (1972).

27. *See* Federal Power Act § 1 *et seq.*, 16 U.S.C § 791(a) *et seq.* (1920).

28. *See* SAMUEL P. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT 1890-1920 (1959).

29. *See* JOSEPH L. SAX, DEFENDING THE ENVIRONMENT: A STRATEGY FOR CITIZEN ACTION 175-192 (1971).

States Supreme Court in *Citizens to Preserve Overton Park v. Volpe*[30] which imposed a high burden on the Federal Highway Administration to justify the use of park lands for federally funded highways.

Ad hoc citizen groups are now institutionalized NGOs[31] and the major national groups represent environmental interests in the legislative process. But the lawsuit to block a federal action or to invalidate an agency regulation as ultra vires or as inadequately explained remains the ultimate trump card of the movement and continues to be wielded with great frequency. In fact, the regulated community has paid NGOs the highest compliment. With increasing success, the regulated community has adopted the movement's litigation strategies. The United States Supreme Court and lower federal courts are increasingly receptive to perverse, "creative" readings of environmental statutes to frustrate environmental protection.[32]

"Rule of law" litigation was initially seen as an interim strategy which would give way as Congress adopted the necessary command and control regulatory programs and as agencies internalized the lessons of environmental protection. However, the need for litigation did not wither away as predicted.[33] Instead, subsequent events in the 1970's and 1980's strengthened rather than lessened the need for the strategy. Congress saddled the newly created federal Environmental Protection Agency with impossible tasks such as balancing health protection with economic efficiency, and resolving difficult scientific and technical questions to promulgate fair, effective, timely and legal regula-

30. 401 U.S. 402 (1971).

31. In recent years, the mainline environmental organizations have been criticized as too powerful, too accommodating to the other interests in the political process, and out of touch with local problems.

32. *See e.g.*, Bennett v. Spear, 520 U.S. 154 (1997)(Endangered Species Act intended "to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives.")

33. A similar assumption was made about the role of the common law. Environmentalists anticipated that regulation would be far superior to common law tort actions because it was comprehensive and preventative. But the common law has persisted. Common law actions catch pollution not controlled by regulatory schemes, *e.g.* Tiegs v. Watts, 135 Wn.2d 1 (1998). In the 1980's, the common law as a general redress and deterrence strategy was revived as a law of "toxic torts." However, Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), undermines the ability of common law actions to perform these functions because it requires mechanistic, and difficult to establish, proof of cause-in-fact to support a civil action for the recovery of damages from alleged injuries resulting from exposure to many types of toxic agents.

tions.[34] "Rule of law" litigation was an effective way to keep EPA's feet to the fire and to pressure them to err on the side of environmental protection. Politics also kept the strategy alive. In 1981, the Reagan administration took office determined to roll back environmental regulation. Congress did not comply and, instead, the EPA and the federal land management agencies tried to reinterpret the strong protection mandates adopted in the 1970s to lessen protection duties. "Rule of law" litigation proved to be quite effective in stopping administrative "lawlessness.[35]

B. The Rule of Law and Environmental Law

The idea of the rule of law is the glory of the western legal tradition,[36] although it remains a highly contested principle[37] especially as modern legal thinkers have either politicized the principle or questioned its viability. Fortunately, the idea is more powerful than its critics as it comes to remind us that state power must be cabined. The rule of law debate is rooted in Aristotle's dictum that the rule of law is preferable to the rule of men.[38] A. V. Dicey reiterated the dictum and identified it as one of the distinctive features of English constitutionalism.[39] Rule of law is regu-

34. The literature on the EPA's problems includes James A. Henderson, Jr. and Richard N. Pearson, *Implementing Federal Environmental Policies: The Limits of Aspiration Commands*, 78 COLUM. L. REV. 1429 (1978); Bradley Bogarz, *Legitimizing Pollution Through Control Laws: Reflections on Scapegoating Theory*, 73 TEX. L. REV. 711 (1995); John Dwyer, *The Pathology of Symbolic Legislation*, 17 ECOLOGY L.Q. 233 (1990); Richard Lazarus, *The Tragedy of Distrust in the Implementation of Federal Environmental Law*, 54 LAW & CONTEMP. PROBS. 311 (1991).

35. *See e.g.*, Natural Resources Defense Council, Inc. v. Hodel, 618 F.Supp. 848 (E.D. Cal. 1985)(United States Department of Interior's (DOI) regulations which delegated the authority to set grazing allotments to selected ranchers contrary to both Taylor Grazing Act and Federal Land Policy Management Act which required the DOI to specify livestock numbers and seasons in each Taylor Grazing Act grazing permit to balance livestock range use with the restoration and conservation of this fragile resource.).

36. HAROLD J. BERMAN, THE NATURE OF LAW AND ITS FUNCTIONS 7 (1958).

37. *See* THE RULE OF LAW, (Ian Shapiro ed. 1994). [Hereinafter cited as THE RULE OF LAW] and Margaret Jane Radin, *Reconsidering the Rule of Law*, 69 B.U. L. REV. 781 (1989). *See also* Richard H. Fallon, Jr., *"The Rule of Law" as a Concept of Constitutional Discourse*, 97 COLUM. L. REV. 1 (1997) and ROBERT P. BURNS, A THEORY OF THE TRIAL 10-33 (1999)(standard view of trial as consistent with the rule of law wrong).

38. Personal rule "should be sovereign only in those matters on which law is unable, owing to the difficulty of framing general rules for all contingencies, to make exact pronouncements." THE POLITICS OF ARISTOTLE, Book 3, ch. 11, sec. 19 (Baker Trans. 1946).

39. *See* A. V. DICEY, THE LAW OF THE CONSTITUTION (10th ed. 1959). Dicey borrowed the idea, with acknowledgment, from an earlier writer but it was Dicey who

larly invoked to justify a particular conception of law and there are many formulations of it, but they generally share four common characteristics. First, state power must be exercised through previously announced rules of general applicability. Second, the rules must be justified by legal rather than extra-legal reasons. Power may not be exercised through *ad hoc* individual decisions grounded in personal will. Montesquieu's contrast between European, primarily British, and Ottoman law and administration has been the defining idea of law as a restraint on naked power. Third, rules must bind all members of government. The idea that no person is above the law is the basis of *United States v. Nixon*[40] which required the President to turn over the Watergate tapes to a special prosecutor. There, the Court rejected the claim of executive privilege as inconsistent "with our historic commitment to the rule of law."[41] Fourth, the laws must be administered by an independent and impartial judiciary.

The mix of these elements varies from legal system to legal system but there is more convergence than divergence. For example, the civil code is the basis of the rule of law in the continental system and the judge theoretically plays a secondary role. In contrast, the common law venerates the judge.[42] In many ways, the most powerful theory of the rule of law is the product of the unique American experience. We took Lockian and Montesquieuian theories of separation of powers and blended them with the Cokian tradition of the law declaring judge as hero. Despite formalist theories of legislative and executive supremacy, grounded in popular sovereignty, we have a long tradition of equating judges as better representatives of popular will compared to the legislative and the executive counterparts.[43]

The question still persists: can the rule of law be applied to environmental protection? This is an extremely hard question because environmental protection does not necessarily fit within the rule of law paradigm. The grand objectives of environmental law

made the concept central to Anglo-American law. RICHARD A. COSGROVE, THE RULE OF LAW: ALBERT VEEN DICEY: VICTORIAN JURIST 67-75 (1980).

40. 418 U.S. 683 (1974).

41. *Id.* at 708.

42. *See* BENJAMIN CARDOZO, THE NATURE OF THE JUDICIAL PROCESS (1922).

43. My colleague David Gerber brilliantly elucidates the distinctive feature of the common law in his forthcoming book, THE SPIRIT OF COMMON LAW. In recent times, the historian Gordon Wood has powerfully articulated and documented the origins of this idea. *See, e.g., The Origins of Vested Rights in the Early Republic*, 85 VA. L. REV. 1421 (1999).

are only partially related to the protection of human dignity and property. Environmental law is both anthropocentric and non-anthropocentric; it seeks to protect society from future risks of serious health problems, such as cancer, genetic mutation and disease epidemics, and the irreversible impairment of ecosystem services. However, the actual human benefits of environmental protection are hard to demonstrate and much protection is implemented on the belief that nature should be protected for intrinsic reasons. Thus, much of environmental law remains a very contested, radical idea which sits outside of the western constitutional and common law tradition.[44] Instead of drawing on past, widely accepted societal norms such as fairness and due process, it depends on new ethical principles. There is relatively little past law to apply except the common law of nuisance. For example, environmental law is the only modern area of law that has flourished in the face of Supreme Court indifference or blatant hostility.[45] Nonetheless, the rule of law both describes and justifies judicial environmental protection. In American jurisprudence, the central question in the

44. The western legal tradition identifies "constitutionalism" as the fundamental legal basis for organizing society. The basic norm of western constitiutionalism is the recognition of negative liberties against the government. Government action is always measured against two standards: (1) consistency with delegated authority and (2) the non-infringement of fundamental individual rights. Law is also primarily negative: it gives back what was taken away. It is also a regime which treats all persons equally, recognizes and protects their fundamental rights, and does so by the application of clear standards in a consistent and fair manner against both other private parties and the state. The Constitution, for example, is not a source of environmental rights and duties because the values that environmentalism promotes are not primarily those of the Enlightenment. The Constitution is frequently defined as a negative charter of liberties, but environmental protection requires the affirmative exercise of regulatory power. Expert consensus maintains that constitutions should be confined to negative rather than affirmative rights. *See* Richard J. Posner, *The Costs of Rights: Implications for Central and Eastern Europe and for the United States*, 32 TULSA L. REV. 1 (1996); J.B. Ruhl, *The Metrics of Constitutional Amendments: And Why Proposed Environmental Quality Amendments Don't Measure Up*, 74 NOTRE DAME L. REV. 46 (1999). The efforts of an indigenous group in Indonesia to seek redress for the cultural and environmental degradation caused by mining is instructive. The group's Alien Tort Act claims were dismissed because the Act only applies to shockingly egregious violations of international law that have been generally recognized. The sources cited by plaintiff were dismissed as "merely . . . a general sense of environmental responsibility . . . [which] state abstract rights and liberties devoid of articulable or discernable standards and regulations to identify practices that constitute international environmental abuses or torts." Principle 2 of The Rio Declaration was not applicable because it (1) confirms state sovereignty over natural resources, and (2) only prohibits acts which injure another nation. *See* Beanal v. Freeport-Moran, Inc., 969 F.Supp. 362 (E.D. La. 1997), *aff'd*, 1999 U.S. App. Lexis 31365 (11th Cir. 1999).

45. See Richard Lazarus, *Restoring What's Environmental About Environmental Law In The Supreme Court*, 47 U.C.L.A. L. REV. 703 (2000).

rule of law debate, as it has always been, is the role of judges in making law. Rule of law litigation was particularly well suited to the creation of environmental law because the debate about the role of judges implies that lawmaking by constitutionally governed officers is more legitimate than lawmaking by nonconstitutionally governed administrative agencies. Environmental law as practiced is primarily a substantive subset of administrative law and litigation fits within the long tradition of using the courts to check the arbitrary exercise of power by the executive.

This said, rule of law litigation's formal fit is largely illusionary because the purpose of litigation was to transfer political power from legislatures, the executive and the administrative agencies to the courts. Ironically, the most politically conservative theory of the concept best describes the formal jurisprudential explanation for environmental litigation, but it does so by disguising its ultimate purpose. The current formalist theory of the rule of law is epitomized by Mr. Justice Antonin Scalia's attempt to engraft the German Rechtsstaat onto the American experience. His much cited and criticized article, *The Rule of Law as A Law of Rules,*[46] articulates fidelity to clear constitutional and settled common law rules as the core of the rule of law. Ronald Dworkin's argument that the principal function of the rule of law is to protect and expand individual rights and liberties is the opposite, modern liberal political theory. This theory[47] could be adapted to justify "rule of law" litigation as the extension of political and civil rights to non-human communities, but it does not in fact describe the jurisprudence of environmental litigation.

C. The Structure of Rule of Law Litigation: Thinking Unger But Pleading Hart

"Rule of law" litigation initially was a creative effort to create a new law out of whole cloth without disclosing the truly radical nature of the project in the great tradition of disguised common

46. 56 U. CHI. L. REV. 1175 (1989).

47. *See* RODERICK N. NASH, THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS (1989), argues that environmental rights represent a progressive extension of dignity, albeit from humans to non-humans. As my colleague, Anita Bernstein, has noted in the context of judicial tort reform, the most effective creation of new torts occurs when the proponent appears to be doing nothing more than rationalizing existing law. *See* Anita Bernstein, *How to Make a Tort: Three Paradoxes*, 75 TEX. L. REV. 1539 (1997). Professor Hope Babcock, who was almost present at the creation, has pointed out that the early NGOs had no such grand strategy in mind. However, the technique was invoked to uphold the rule of law.

law reform. To do this, NGO lawyers relied on orthodox theories of the rule of law, in combination with the judicial activism then in vogue, to advance environmentalism. Early environmental law suits generally advanced one of three theories to convince judge to enjoin environmentally destructive activities. Judges were first asked to find that an agency acted *ultra vires* in taking the contested action. The successful suit to end clear cutting through the national forest system was won on the theory that the 1897 Organic Act required that the Service mark every "dead, matured or large growth of trees" in an area as suitable for harvest before it could be cut.[48] The failure to follow a clear legal mandate is still the most effective type of lawsuit. The second type of suit argued that an agency had the discretion to act to protect the environment and failed to exercise the discretion or to justify adequately the failure to use it.[49] The third type of suit alleged the familiar failure to follow strictly proscribed procedures. Judge J. Skelly Wright's reading of NEPA in *Calvert Cliffs Coordinating Council, Inc. v. United States Atomic Energy Comm'n*[50] institutionalized this type of law suit.

In jurisprudential terms, lawyers created a new law out of whole cloth without disclosing the truly radical nature of the project. This was accomplished by paradoxically pleading the theories of H.L.A. Hart to advance the theory of law more closely associated with the soon-to-emerge critical legal studies movement (CLS). Or, at the very least, the aim was to open judges minds to the central idea of the Henry Hart and Sacks legal process school: that judges could articulate the underlying fundamental values of the relevant legal regime to resolve disputes. Environmental law preceded the CLS movement by several years, and has been relatively uninfluenced by it. Nonetheless, it is an

48. *See* West Virginia Division of the Izzack Walton League of America v. Butz, 522 F.2d 945 (4th Cir. 1975). See Oliver A. Houck, *The Water, the Trees, and the Land: Three Nearly Forgotten Cases That Changes the American Landscape*, 70 TUL. L. REV. 2279 (1996).

49. *See e.g.*, Zabel v. Tabb, 430 F.2d 199 (5th Cir. 1970) (The U.S. Army Corps of Engineers has authority to deny dredge and fill permits for environmental reasons); Calvert Cliffs Coordinating Council, Inc. v. United States Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971)(The Atomic Energy Commission (AEC) has an independent duty, reversed by Congress in the Clean Water Act, to consider water quality impacts of nuclear power plant discharges). *Cf. Sierra Club v. Marita*, 46 F.3d 606 (7th Cir. 1995)(In an unsuccessful argument, the U.S. Forest Service had no duty to use conservation biology to create biodiversity reserves in a second growth forest in northern Wisconsin.).

50. 449 F.2d 1109 (D.C. Cir. 1971).

example of a parallel radical legal movement. The partially successful project of environmental law is much more concrete and incremental compared to the social reordering initially envisioned by the CLS movement. Still, the two movements share a common vision of law as the reflection of the real distribution of political power and wealth in the society and, thus, relative and normative rather than absolute and objective. From the start, the goal of environmentalism has been to challenge the ability of powerful corporations and their congressional and administrative allies to cause environmental degradation at will. However, this radical, Germanic, if not Marxian, theory of law has been muted and kept beneath of the surface of environmental law.

In contrast to environmental law, the CLS movement responded to the rediscovery that law could serve political and financial elites by deconstructing it and trying to transform it. Environmental law would be a perfect case for the kind of post-modern transformative jurisprudence advocated by Roberto Unger and others.[51] It is non-formal, indeterminate law at its best, more rhetoric than law, and ultimately seeks to destabilize and redistribute the boundaries of property.[52] There is, however, a crucial difference between the two movements. The CLS movement rejected incremental legal change in favor of fundamental political reform. As environmentalism was perceived as a legitimate and non-radical political goal, environmentalists had the choice of pursuing both incremental or "liberal" political and legal reform. Thus, for the most part, environmental lawyers may have thought Unger but they have litigated H.L.A. Hart, or the Harvard Hart and Sacks legal process school.

The formal liberal model of environment law presented by NGO lawyers essentially tracked, probably unconsciously, the theory of law propounded by the leading British scholar of jurisprudence in this century, who is, at first blush, an unlikely source of United States environmental law. Professor H.L.A. Hart was one of the leading post-World War II exponents of analytical jurisprudence derived from the strong positivist tradition in Great Brit-

51. MALCOLM M. FEELEY & EDWARD L. RUBIN, JUDICIAL POLICY MAKING AND THE MODERN STATE: HOW COURTS REFORMED AMERICA'S PRISONS 243-244 (1998) argue that, in post-modern society, the rule of law is achieved through process and the institutional structure rather than to fidelity to existing text.

52. *See* ROBERTO MANGABIERA UNGER, WHAT SHOULD LEGAL ANALYSIS BECOME? 152 (1996).

ain.[53] His core idea is that law is a set of pre-existing rules that are relatively narrow and formal with penumbras of uncertainty.[54] Rules are basically the communication of a preexisting standard intended to be binding on the relevant parties. He distinguished between primary and secondary rules. Primary rules are commands followed by sanctions. Secondary rules confer the power to create and interpret both types of rules, but noncompliance results only in the nullification of the power rather than a sanction. Hart recognized that a complete system of *a priori* rules was impossible, if not undesirable, and the judges must always exercise discretion. His project, however, was to close the gap between rule and discretion by developing a theory of law as consistent, coherent rules. In his famous formulation, coherence is achieved by the development of rules of recognition, widely accepted societal background rules.[55] This theory allowed lawyers to avoid the central tension between "rule of law" litigation and the rule of law requirement: that judicial exercises of the state's coercive power require that they be grounded in law.[56]

H.L.A. Hart's model was difficult to apply to environmental law because in 1970 there were no general, widely accepted environmental rules of recognition as he would define them. A more progressive, incremental theory was needed to complement his

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53. H.L.A. HART, THE CONCEPT OF LAW (1961). Hart's attempts to state a complete and comprehensive theory of law in the face of the inevitable problem that rules break down at the edges requires considerable restatement. Frank Hubbard, *"One Man's Theory . . .": A Metatheoretical Analysis of H.L.A. Hart's Model of Law*, 26 MD.L. REV. 39 (1976).

54. H. L. A. Hart's legal philosophy evolved over time and has been subject to intense criticism and exegesis. However, the debate about how formalistic Hart's jurisprudence is, see MICHAEL MARTIN, THE LEGAL PHILOSOPHY OF H.L.A. HART: A CRITICAL APPRAISAL 15-67 (1987), or the famous Hart-Dworkin debate about the role of morals in the exercise of judicial discretion, Ronald Dworkin, *The Model of Rules*, 35 U. CHI. L. REV. 14 (1967), does not detract from the basic point that the Hart model of rules describes the strategy of much of environmental litigation. The Hart model focuses the court on the application of pre-existing rules rather than on more opened-ended moral justifications for the decision. *See* JEFFRIE G. MURPHY AND JULES L. COLEMAN, THE PHILOSOPHY OF LAW: AN INTRODUCTION TO JURISPRUDENCE 42-60 (1984).

55. H.L.A. Hart's effort to ground law in accepted norms which cannot be questioned has been justly criticized as incoherent. *See* George C. Christie, NORMS AND AUTHORITY 83-86 (1982).

56. Professor Stephen P. Garvey has identified three definitions of the rule of law. It can mean that judges are constrained in how far they can realistically impose their vision on society; that judicial rules must meet a predictability standard; or, all judicial exercises of state coercion must be justified by law. (Book Review) *Did Making Over The Prisons Require Making Up Law?* 84 CORNELL L. REV. 1476, 1494-1495 (1999).

formal and static model of rules in cases where no clear legislative rules existed. The Henry Hart and Sacks Harvard legal process school provided a complementary theory of environmental litigation which partially, but not wholly, solved the rule of law problem. Legal process theory was in vogue just before the environmental movement, although it went into decline as it was perceived as the intellectual basis for an attack on *Brown v. Board of Education*.[57] Hart and Sacks developed a theory of adjudication that involved a constant interplay among four sources of law: rules, standards, rule like norms, and principles.[58] In more modern terms, law is as much about standards as it is about rules because it allows for reasoned judicial reform.[59] This theory legitimated a relatively more open-ended, progressive process of adjudication which allowed judges to test the validity of preexisting norms by reinterpreting them in light of contemporary social and economic conditions, provided that their decisions met the test of reasoned elaboration. Environmentalism is a changed social condition and environmental law, for those judges who struggled to understand it, fit the Hart and Sacks model quite well.

IV. The Problem of Rules

A. The Evolution Away from Command and Control Regulation

Environmental law, now a mature area of the law, is undergoing a substantial evolution which calls into question the continued effectiveness of the "rule of law" litigation strategy. As environmental law enters its fourth decade, there are several new developments that call into question the continued ability of rule of law litigation to provide or stimulate effective environmental protection. The most fundamental and long term challenge comes from the efforts to supplement command and control regulation and centralized rational planning which concentrates on the largest members of the regulated community, i.e., large industries and

57. Virginia E. Nolan and Edmond Ursin, *The Deacademification of Tort Theory*, 48 KAN. L. REV. 59, 68-70 (1999), elaborate the limited judicial lawmaking contemplated by the legal process school.

58. *See* ANTHONY SEBOK, LEGAL POSITIVISM IN AMERICAN JURISPRUDENCE 139-146 (1998) is an important rehabilitation of this theory.

59. *See* Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L. REV. 557 (1992); Kathleen M. Sullivan, *The Supreme Court, 1991 Term-Forward: The Justices of Rules and Standards*, 106 HARV. L. REV. 22, 57-69 (1992); MARK KELMAN, A GUIDE TO CRITICAL LEGAL STUDIES 15-63 (1987); and FREDERICK SCHAUER, PLAYING BY THE RULES: A PHILOSOPHICAL EXAMINATION OF RULE-BASED DECISIONMAKING IN LAW AND IN LIFE 104 (1991).

major public lands users, with experimental, collaborative governance regimes. This process, if one can call the various *ad hoc* efforts anything, seeks greater decentralized consensus-based regulation run by public and private "stakeholders."[60] For example, we are now seeking to induce industries to exceed standards, to reduce waste streams and total pollution and to mitigate on- and off-site environmental damage caused by industrial and commodity production activities.[61] This development is complimented by our increased reliance on market proxies and on the more direct involvement of small entities and the individual consumer in resource use choices that impact the environment.[62]

The fundamental jurisprudential problems for environmental law that this evolution presents are that few substantive rules, as H.L.A. Hart would define them, have emerged from environmental law to date, and that such rules are less likely to be developed in the future. Although the rules may have come from two similar sources, ethics and science, they have failed to deliver relatively clear, uniform rules. Many collaborative governance processes represent an effort to institutionalize Leopold's teaching by moving to a more holistic landscape vision of large natural, semi-natural, and artificial landscapes which form inter-linked ecosystems to paradoxically mitigate against the development of rules. This vision requires *ad hoc*, place-based solutions to enhance and conserve biodiversity, as well as the greater use of economic instruments such as pollution, wetlands, or biodiversity conservation trading. Environmental management is not, in the opinion of most experts, amenable to a simple set of pre-established rules.[63] Courts are crucial to the initial development of an area of law but

60. MARK SAGOFF, *The View From the Quincy Library: Civil Engagement in Environmental Problem Solving, in* CIVIL SOCIETY, DEMOCRACY AND CIVIL RENEWAL 151-183 (Rovert Fullinwider ed., 1999).

61. For a thoughtful articulation of the movement from "that evil polluter" to us *see* William Ruckelshaus, *Stopping the Pendulum*, THE ENVIRONMENTAL FORUM 25 (November/December, 1995) *reprinted in* LAW AND THE ENVIRONMENT at 397. *See generally* Daniel Esty, *Optimal Environmental Governance*, 74 N.Y.U. L. REV. 1495 (1999).

62. Professor Jody Freeman of UCLA has emerged as a leading theorist of the post-modern administrative state. *See* Jody Freeman, *The Private Rule in Public Governance*, 75 N.Y.U. L. REV. (forthcoming 2000).

63. *But see* RICHARD EPSTEIN, SIMPLE RULES FOR A COMPLEX WORLD 275-305 (1995). Professor Epstein virtually begins and ends with nuisance prevention as the basis for environmental regulation. *See* Eric W. Orts, *Simple Rules and the Perils of Reductionist Legal Thought (Review of Simple Rules for a Complex World by Richard A. Epstein)*, 75 B.U. L. REV. 1441, 1469-1472 (1995), for a cogent discussion of why it is not always a gift to be simple.

their influence inevitably decays as legislation, administration and the more general internalization of legal norms occurs.[64] This condition is not always conducive to environmental protection, as the progressive decline of NEPA's influence illustrates. Finally, to compound the problem, Congress has come up with a much more effective way to retard environmental protection in the form of the appropriations rider, which is much less amendable to judicial control and rule development.

These changes are both the product of the inevitable evolution of environmentalism and a judicial landscape that has changed, perhaps degraded, since the late 1960s. Taken together, these developments challenge two aspects of "rule of law" litigation. First, the end product of litigation is blurred. Litigation is intended to reach a final decision and to resolve a dispute. Environmental litigation can either be a decision that is an *ultra vires* action or it can be a decision that the process was flawed and must be corrected. Ecosystem experiments make it much more difficult for courts to find a final action to review. Process violations are easier to identify and redress, although this technique will be less useful in the future. Second, successful innovation may require all parties to forego strict adherence to existing laws. Collaborative governance is basically the use of stakeholder groups to achieve consensus on a specific resource management plan or a specific mixed public-private regulatory scheme. This collaboration helps to achieve a result that is either superior to, or more politically acceptable than, existing legal mandates and entitlements against those whose actions threaten the achievement of environmental quality. Consensus inevitably involves compromise; all parties must agree to forebear while claiming some potential legal advantage.[65] Successful collaborative governance often requires that stakeholders transcend the rule of law to reach a solution that shares risk over a long period of time and achieves better results than those produced by strict adherence to legal entitlements.

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64. *Cf.* H. Marlow Green, *Can The Common Law Survive in the Modern Statutory Environment?* 8 CORNELL J. L. & PUB. POL'Y 89, 109 (1998). (Empirical study of decline of state common law environmental tort claims due to displacement by federal actions which concludes that one could hypothesize that there will soon (perhaps by the year 2010) be no common law cases at the state level left to report.)

65. Mordechai Schecter, *Economy and the Environment: A New Partnership*, 21 ISR. ENV'T BULL. 10 (1998), observes that statutes are not written to encourage innovative cooperative solutions and thus there must often be less than full enforcement and a creative reading to effectuate a solution.

B. The Problem of Science: Nature Refuses to Cooperate

Changes in the science of ecology will lessen the importance of "rule of law" litigation. The inability to develop rules derives both from the newness of the area and the fact that environmental law is fundamentally science-based.[66] There are no uniform scientific rules that can be consistently applied to all situations. Nor are there are uniform rules for ecosystem management or for risk protection. To complicate matters, the beneficiaries of biodiversity protection, flora and fauna, can assert no rights to counter the uncertainties that surround all efforts to manage resources scientifically. Biodiversity is always something that can be traded off for other values, and the fairness of the process of protection is as important as the substantive results. This may be good law but it is not always good biodiversity protection. The reason is simple: the protection of biodiversity devalues human dignity because it violates individual rights, such as property and the right to fair and consistent treatment by the government. Environmental ethics, to the extent that it seeks to create non-human rights, has been unable to develop substantive rules that are capable of making the choices among competing resource options that environmental protection requires a choice among competing resource uses. This problem has been with us from the beginning of the environmental movement and has not been solved. Similarly, there is no neo-Kantian principle of absolute entitlement from risk. Risk protection is inherently relative and must be informed by benefit-cost analysis. In short, environmental protection inevitably requires the exercise of informed, but *ad hoc*, situation-based judgment.

Changes in ecology make it more difficult to subject environmental ethics to the rule of science-based laws than environmentalists initially assumed. Environmental lawyers have long hoped that equilibrium ecology as stated in Eugene Odum's classic texts and reduced to an ur-principle by Leopold's dictum "let nature be" (as distinguished from the more complex idea of land health or stewardship) would be the foundation of environmental law. Ecology allowed lawyers to use the rule of law litigation strategy to

66. This argument does not deny that there is an ethical component to environmental law, but it does argue that environmentalism must be grounded in the western rational tradition and that ethics must be supported by science. I have argued this point at length in A. Dan Tarlock, *Environmental Law: Ethics or Science?* 7 DUKE ENVTL. L. & POL'Y F. 193 (1996).

convince courts to adopt nature's rules as legal rules.[67] However, simple ecology and ethics are not a good basis for the law of ecosystem management for three primary reasons. First, the idea of nature as placed apart from humans will not hold in the future. From a biodiversity conservation perspective, nature is important for the services she provides. Second, the challenge for the future will be to restore degraded areas and to create the functional equivalent of "natural" systems. Many environmentalists resist the ideas of restoration and creation asserting that there is a firm distinction between real and artificial nature, and that it is unethical for humans to attempt to create nature.[68] However, this unrealistic vision of the landscape in which we live has no future.

The third factor that inhibits rule development is that ecosystem management requires *ad hoc*, inherently contingent rather than uniform, fixed solutions. Just as environmental lawyers were embracing equilibrium ecology, static views of nature were being replaced by more dynamic ones which made it more difficult to develop operational rules apart from specific ecosystems. The equilibrium paradigm solved the critical legitimacy problem for the development of a new branch of law. The equilibrium paradigm has been rejected in ecology, a trend that goes back to the 1930s,[69] and replaced with a complex, stochastic, non-equilibrium one. In his path-breaking but still under-appreciated book, DISCORDANT HARMONIES, Professor Daniel Botkin "deconstructed" the equilibrium paradigm as a misguided effort to match science to theological and enlightened scientific visions of a perfect universe or a perfectly functioning machine. His basic argument is that the images of nature, which have influenced ecology, are static when in fact the kinds of resource-use problems society faces require a

67. See Drury, *supra* n. 20 at 184-185 (1998).

68. The leading proponent of this idea is Eric Katz. *See The Problem of Ecological Restoration*, 18 ENVTL. ETHICS 18 (1996) and NATURE AS SUBJECT: HUMAN OBLIGATION AND NATURAL COMMUNITY (1997). The argument that the distinction is supportable is effectively refuted in Yuek-Sze Lo, *Natural and Artifactual: Restored Nature As Subject*, 21 ENVTL. ETHICS 247 (1999). See also ROBERT ELLIOT, FAKING NATURE: THE ETHICS OF ENVIRONMENTAL RESTORATION (1997).

69. Lawyers will find Judy L. Meyer, *Changing Concepts of System Management*, *in* SUSTAINING OUR WATER RESOURCES 78 (Water Science and Technology Board ed. 1993) and Judy L. Meyer, *The Dance of Nature: New Concepts in Ecology*, 69 CHI. KENT L. REV. 875 (1994), a good introduction to modern ecology and its influence on environmental management. The changes build on the substitution of a non-equilibrium for an equilibrium paradigm in ecology. *See generally* Fred Bosselman and A. Dan Tarlock, *The Influence of Ecological Science on American Law: An Introduction*, 69 CHI.-KENT L. REV. 847 (1994).

dynamic view of nature. Moreover, it is one that starts from the premises that human action is a principal force operating upon ecosystems and that system disturbances are both predictable and random. Ecosystems are patches or collections of conditions that exist for finite periods of time. The accelerating interaction between humans and the natural environment makes it impossible to return to an ideal state of nature. "[N]ature moves and changes and involves risks and uncertainties and . . . our own judgments of our actions must be made against this moving target."[70]

Botkin's theories have profound ramifications for environmental law. The non-equilibrium paradigm undermines the project to construct a system of neo-Kantian environmental ethics around Aldo Leopold's dictum that "[a] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[71] The non-equilibrium paradigm makes it difficult to sustain the existing ethically-based justifications for environmental law because the paradigm focuses attention on the primacy of science as the basis for environmentalism and environmental law. As Stephen Budiansky has written, "The idea of risky nature is one that is hard for many people to swallow. Environmentalists recoil at the notion precisely because it seems to give man license to transform nature at will."[72] At best, ecosystems can be managed rather than restored or preserved, and management will be a series of calculated risky experiments. The New York Court of Appeals recognized this in 1917 when it held that the state could reintroduce beavers because "governments have made such experiments in the belief that the public good would be promoted."[73]

C. The New Problem of Discretion

The search for alternative management processes and changes in ecology revive the old problem of rules versus administrative discretion, which environmental litigation and law have both dismissed and exalted. Environmental law can be seen as another chapter in the central dilemma for the modern administra-

70. DANIEL BOTKIN, DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY (1990).

71. *See* J. Baird Callicott, *Do Deconstructive Ecology and Sociobiology Undermine Leopold's Land Ethic?* 18 ENVTL. ETHICS 353 (1996) directly confronts this argument and argues that Leopold is still right but this static principle "must be dynamized."

72. NATURE'S KEEPERS, THE NEW SCIENCE OF NATURE MANAGEMENT 98 (1995).

73. Barrett v. State, 220 N.Y. 423, 116 N.E.99 (1917).

tive state, that is, whether the exercise of delegated discretion complies with the rule of law. It can also be seen as an effort to replace the administrative state with other governance mechanisms. Environmentalism has both exalted democracy and has had an uneasy relationship with democratic governance. The New Deal capped the movement that began in the 1880s to govern American economic life through expert administrative agencies. The aim of New Deal administrative law was to expand the lawful exercise of discretion and to confine judicial review to the correction of procedural irregularities and clear exercises of *ultra vires* authority. It only partially succeeded because the 1946 Administrative Procedure Act (APA) codified the constitutional limitations imposed on agency procedures and retained the Cokian-Marshallian idea of judicial scrutiny of administrative action.

Environmentalism is one of the first major post-New Deal social movements. It carried forward the New Deal tradition of deference to expertise and exposed the myth that expert administration could avoid the value conflicts inherent in all resource-use choices. Environmentalism entered the political arena at the height of the post-New Deal administrative state, but Rachael Carson's *Silent Spring* and the growing concern over the dangers of nuclear weapons testing and power generation were undermining the fundamental premise of that state: a boundless faith in technological progress coordinated by experts. It is not surprising then that the idea of discretion exercised by experts subject to judicial review for extraordinary deviations from statutory authority, which is the heart of conservation-liberal compromise in the APA, bedeviled environmental NGOs in the 1960's.[74] One of environmental law's many ironies is *Citizens to Preserve Overton Park v. Volpe*,[75] which opened informal administrative action to a "hard look" judicial review. *Overton Park* revived the Cokian idea of judicial restraint on the powerful state, which New Dealers argued was no longer necessary,[76] at a time when such a state was necessary for environmental protection.

74. Judge Richard J. Posner concisely explains why Post-World War II Americans accepted with relatively little criticism the work of administrative agencies. *See* Richard J. Posner, *The Rise and Fall of Administrative Law*, 72 CHI.-KENT L. REV. 953 (1997).

75. 401 U.S. 402 (1971).

76. *See e.g.*, JOHN DICKINSON, *Administrative Justice and the Supremacy of Law in the United States*, *in* HARVARD STUDIES IN ADMINISTRATIVE LAW, vol. 2 (Harvard Univ. Press 1927).

Environmental NGOs had to attack the very idea of expert discretion because the resource management agencies promoted endless environmental disruption and degradation. They also used their broad conservation and multi-use mandates to ignore or marginalize environmental values. The political principle that they used to attack it was democratic governance. Environmentalism grew out of the genuine grass roots nature of the movement and the ability of the movement to borrow the energy and support of the anti-war movement that had reached its peak and was declining. Democratic principles enabled the movement to argue (1) that participation in agency decision-making should be expanded and (2) that decisions were not technical but "popular" ones.[77] Rather, they were value choices that were not informed by expertise and thus appropriate for lay judicial rather than "expert" administrative resolution. This legacy is exemplified in the strong opposition to remove decisions based on scientific uncertainty to an expert body such as a science court. Modern risk assessment and management is often characterized as a pseudo-scientific screen to disguise the true value choices at stake in a decision to limit the use and discharge of harmful substances. However, the Frankfurter-Brandeis view that limited judicial activism is necessary to preserve majority governance is once again in the ascendancy.[78]

The evolution of environmental law makes all levels of discretion, application and enforcement, even more important than they have been. Environmental protection needs to be carried out on larger landscape scales, but the ability of rules to structure this process, other than to provide the necessary legal framework, is diminishing. We can set objectives, even performance targets, but we can never be sure that the objectives will be achieved. This means that environmental protection is increasingly an exercise in risk sharing rather than the strict enforcement of statutory mandates. In legal terms, discretion must be exercised for long

77. For a full articulation of this theory *see* Thomas W. Merrill, *Capture Theory and the Courts: 1967-1983*, 72 CHI.-KENT L. REV. 1039, 1043 (1997), argues that judicial assertiveness between 1967-1983 "can be explained by judicial disenchantment with the idea of policymaking by expert and nonpolitical elites."

78. *See* Richard J. Pierce, *Is Standing Law or Politics?* 77 N.C. L. REV. 1767-1773 (1999); *Judicial Review of Agency Action in a Period of Diminishing Agency Resources*, 49 ADMIN. L. REV. 61 (1997); and *The Due Process Counterrevolution of the 1990s*, 96 COLUM. L. REV. 1973 (1996). For an argument that agency discretion subject to open-ended legislative standards is consistent with the rule of law, *see* Thomas O. Sargentich, *The Critique of Active Judicial Review of Administrative Agencies: A Reevaluation*, 49 ADMIN. L. REV. 599 (1997).

periods of time and thus it becomes more difficult to determine when an action is arbitrary. Additionally, in consensual, decentralized processes, participants must adapt statutory mandates that were not written with the addressed problem in mind, so a "rule of law" suit to declare an action *ultra vires* may be counterproductive. Often, the best that we can do is to apply adaptive management to ecosystem management. Adaptive management, in contrast to the idea of a singular application of a fixed rule to resolve a dispute, is premised on the assumption that management strategies should change in response to new scientific information. A recent National Research Council-National Academy of Sciences study captures the essence of adaptive management:

> Adaptive planning and management involve a decision-making process based on trial, monitoring, and feedback. Rather than developing a fixed goal and an inflexible plan to achieve the goal, adaptive management recognizes the imperfect knowledge of interdependencies existing within and among natural and social systems, which requires plans to be modified as technical knowledge improves . . . .[79]

Students of organizational behavior and computer science have always counseled the need for feedback loops to reassess policy as new information accumulates, but this has never been taken seriously in environmental law and policy. In fact, environmentalists dislike the idea because it suggests that protection levels may vary over time thereby conflicting with the way that environmentalists have used law to achieve protection goals. Our environmental laws accept a scientific premise, factor in a generous margin of error, and then essentially require its continued application regardless of subsequent research findings and thinking. This attitude cannot persist as we recognize that much environmental management is an experiment and that there may never be a "final decision."

V. Some Specific Problems of Modern "Rule of Law" Litigation

The limits of "rule of law" litigation can be seen in recent efforts to discipline innovation, experimental ecosystem of management. Much of the biodiversity branch of modern environmental

79. NATIONAL RESEARCH COUNCIL, RESTORATION OF AQUATIC ECOSYSTEMS 357 (1992).

law can be characterized as an attempt to practice ecosystem management. Ecosystem management must deal with three fundamental problems presented by the landscape and time scales that such management presents, and "rule of law" litigation is only partially suitable to address these issues. The greater, more complex and ambitious the experiment, the less potential "rule of law" litigation has to influence its conduct and to promote innovative, effective ecosystem management. Environmental law is at best a law of process. NEPA and related lawsuits proceed on the premise that decision-making processes are flawed because of a failure to consider sufficient information or feasible alternatives. Students of NEPA and other rational planning processes have long known that efforts to specify processes have inherent limitations and decay over time as agencies comprehend the formal, judicial rules of the game and become better players. As environmental law matures, questions of substance will become more important. The substance will take the form of specific performance standards as opposed to general rules as H.L.A. Hart would define them. In fact, environmental law may become a branch of contracts rather than administrative law.

This said, biodiversity conservation experiments do not necessarily mean the end of rule of law litigation, but in fact will stimulate many suits. Many in the environmental community argue that rule of law suits are more necessary than ever to prevent these unproven processes from undermining environmental objectives, but it is unlikely that the "classic" suits to stop an activity dead in its tracks or to delay for as long as possible will be as important and effective over time. The legal system must ultimately deal with the inherent uncertainties and risks of failure in ecosystem management plans. For example, ripeness may become a greater barrier to future litigation because it will be more difficult to identify the effective point on a continuum for judicial intervention.[80]

The creation of a multi-species reserve in Orange County, California illustrates how the risks and uncertainties inherent in these experiments make rule of law litigation more problematic. Since 1991, federal, state, and local governments, private landowners, and other stakeholders have cooperated to create a multi-species habitat reserve to preserve a remnant of the coastal sage

80. *See, e.g.*, Ohio Forestry Ass'n v. Sierra Club, 523 U.S. 726 (1998)(immediate judicial review of forest management plan not ripe, in part, because review would prevent agency refinement of its policies).

scrub ecosystem in southern California. The potential listing of a small song bird, the California Gnat Catcher under the Endangered Species Act (ESA) precipitated the process, and in 1996, a public-private reserve was created to protect the bird, remnants of the coastal sage ecosystem and to allow development consistent with the species' survival.[81] It will be decades, if ever, before we will know whether the reserve will fulfill its intended purpose. For example, developers and scientists are still contesting the bird count upon which development permissions depend.[82] For this and other reasons, environmentalists remain uneasy with the public-private reserve that was created. "Rule of law" litigation was recently used to try and force the federal government to do more to save the California Gnat Catcher.

The successful litigation is a case of winning the battle but not the war, and it arguably did little to expand protection of the species or to promote multi-species protection. The federal government ultimately listed the Gnatcatcher by an ESA § 4(d) special rule as threatened rather than endangered to enable it to rely on state-private cooperation to create a reserve. Thus, the U.S. Department of the Interior's Fish and Wildlife Service (FWS) did not designate its critical habitat because identification of its habitat might precipitate quick clearing to eliminate the threat to development. The ESA gives the FWS considerable discretion not to list habitat when designation would actually jeopardize the continued existence of the species.[83] An environmental NGO successfully challenged the failure of the FWS to designate critical habitat for

81. *See, e.g.*, Marc Ebbin, *Is the Southern California Approach to Conservation Succeeding?* 24 ECOLOGY L.Q. 695 (1998); STEPHANIE S. PINCERTL, TRANSFORMING CALIFORNIA: A POLITICAL HISTORY OF LAND USE AND DEVELOPMENT 279-286 (1999).

82. In 1999, the U.S. Department of the Interior's Fish and Wildlife Service (FWS) estimated that there were 4,966 pairs and this allowed some habitat to be cleared, but the count was disputed by a San Bernadino County Museum biologist. THE SAN DIEGO UNION AND TRIBUNE, May 15, 1999 at A-3.

83. Early cases challenging the failure to designate habitat held that the failure to designate would not be an abuse of discretion. Some courts have accepted as a justification for the Secretary's refusal to designate critical habitat the likelihood that designation will encourage species destruction. *See, e.g.*, Fund for Animals v. Babbitt, 903 F.Supp. 96 (D.D.C. 1995), *amended*, 967 F.Supp. 6 (D.D.C. 1997). But recent cases suggest that it will be difficult to justify a refusal to designate. *See e.g.*, Forest Guardians v. Babbitt, 1998 WL 889368 (10th Cir., Dec. 22, 1998); Building Ind. Ass'n v. Babbitt, 979 F.Supp. 893 (D.D.C. 1997). Non-designation does not excuse non-compliance with the Act. Jeopardy can still be found if there is no designation, United States v. Glenn Colusa Irrigation Dist., 788 F.Supp. 1126 (E.D. Cal. 1992). However, the failure to designate makes it somewhat easier to find no jeopardy. Pyramid Lake Paiute Tribe v. U.S. Dep't of the Navy, 898 F.2d 1410 (9th Cir. 1990); Enos v. Marsh, 769 F.2d 1363 (9th Cir. 1985).

the coastal California gnatcatcher in part because the FWS's alleged increased threat "fails to balance the pros and cons of designation as Congress expressly required under section 4 of the Act . . . The listing did not explain how such evidence shows that designation would cause more landowners to destroy, rather than protect, gnatcatcher sites."[84] The victory was a essentially a symbolic one because on remand the FWS limited the designation of critical habitat to federal lands and non-federal lands with a nexus. Moreover, the Agency refused to designate the NCCP reserve lands, deemed critical to the survival of the species, because the designation of those lands would not benefit the species.[85] The litigation did not derail or modify a very creative example of bioregionalism at work but it also did not advance ecosystem protection.

More generally, tension between "rule of law" litigation and the need to create incentives for private and public stakeholder participation in management processes manifests itself in the debate over the allocation of the responsibilities for changed conditions and management failures. Private parties must forego the enjoyment of their full development entitlements in return for public approval of ecosystem management plans as consistent with environmental protection and related mandates. To encourage this, acceptable ways must be found to limit the risk exposure of the participants over time. The federal government, and ultimately NGOs, must walk a thin line between offering less than full enforcement of a statute as an incentive for a superior solution[86] and maintaining a credible threat of a more drastic alternative to cooperation. Otherwise, landscape-scale experiments will not go forward and biodiversity protection will not work.

Many environmental NGOs object to this characterization of these new processes which hide the fact that the "deals" which have been struck displace hard-fought for federal standards that push all the hard management and effectiveness questions to the future thereby shifting the responsibility for all risks to the fed-

84. NRDC v. United States Dep't of Interior, 113 F.3d 1121 (9th Cir. 1997).

85. *See* 64 Fed. Reg. 5967, February 8, 1999.

86. In his pioneering exploration of under-enforcement of environment law, Daniel Farber concludes that under-enforcement both has the potential to encourage innovation but "also has an inevitable cost in terms of damage to our concept of rule of law." *Taking Slippage Seriously: Noncompliance and Creative Compliance With Environmental Law*, 23 HARV. ENVTL. L. REV. 297, 325 (1999). *See generally* DANIEL FARBER, ECO-PRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD (1999).

eral government. The price for participation is often immunity from responsibility of future, changed conditions. The Department of Interior responded to this concern by issuing, after NGO protest, its "no surprises" rule. The rule effectively shifts the responsibility for future protection measures to the federal government once a Habitat Conservation Plan is approved.

These solutions present a rich target of opportunity for "rule of law" litigation because deals raise both *ultra vires* and constitutional issues. The case against these deals is that natural resources management is not in fact place-driven; it is centralized. The great conservation battles of this century have been fought to eliminate or minimize place-based, that is local and low, standards by subjecting them to the discipline of national scientific standards, and this lesson was carried forward into environmental protection legislation. Congress could, of course, authorize agencies to adopt placed-based solutions as the national standard, but environmentalists remain profoundly skeptical of doing so. The most notable effort to base a resource conservation program on place-based standards, the Taylor Grazing Act, has been a disaster for watersheds. Thus, state and federal agencies generally lack the authority accorded to national agencies to adopt local or placed-based solutions. The more likely scenario, as illustrated by the California Bay Delta "process" is not complete retro-devolution but experiments with the user-based stakeholder groups, prodded by substantial federal and state involvement,[87] to develop acceptable ecosystem management solutions to achieve the objectives of federal environmental programs.

The most successful *ultra vires* challenge to deal-making is *Oregon Natural Resources Council v. Daley*,[88] but the lesson of the case is unclear. Along the Pacific Coast, the populations of evolutionary significant units of coastal Coho salmon have been declining due to a variety of anthropogenic and natural causes. The anthropogenic causes include timber harvest practices, livestock grazing, and water diversions. The decision whether to list the Coho as a threatened species under the ESA has been a political football throughout the 1990s because protection and restoration require intensive public and private land use and water management. There is no quick technological fix, and the reserve strategy

87. *See* Jody Freeman, *Collaborative Governance in the Administrative State*, 45 U.C.L.A. L. REV. 1 (1997).

88. Oregon Natural Resources Council v. Daley, 6 F.Supp.2d 1139 (D. Ore. 1998), *stay denied*, 16 F.Supp. 1256.

applied to terrestrial fauna is inapplicable. In 1997, the National Marine Fisheries Service (NMFS) withdrew an earlier proposal to list Coho units in Oregon. The Agency decided not to list it as threatened because the Oregon Coastal Salmon Restoration Initiative, which supplemented the Northwest Forest Management Plan adopted in 1994 to save the Spotted Owl, would reverse the population decline. California units were, however, listed because the state apparently made a calculated political decision not to formulate a similar initiative. Scientific opinion within NMFS was divided on the effectiveness of the initiative and on the need to list the species.

A Magistrate Judge invalidated the decision not to list because NMFS applied the wrong ESA standard. A species must be listed if it is likely to become extinct in the foreseeable future, but the NMFS only evaluated the effect of the Initiative on population declines over a two year period. The primary flaw in NMFS's approach was to base its decision not on science but on faith on future actions taken by the legislative and executive branches of Oregon. "NMFS . . . was unwilling to make the hard choice required by the ESA . . . ." Oregon's initiative relied in part on watershed councils where landowner participation was "largely voluntary," and NMFS had rejected California's action plan, in part, because the state had not funded a paper watershed initiative and landowner participation was voluntary. This led to the conclusion that reliance on the state's initiative was arbitrary and capricious because it relied on unimplemented, largely voluntary future actions.[89] The Court found the agency's failure to explain why Oregon's initiative did not pose the same risks as California's pseudo-plan "telling."[90] "However laudable Oregon's efforts to employ new management techniques to try to restore the Oregon Coast ESU, such future voluntary conservation effort cannot be a substitute for listing."[91] The case is a hard one and can be interpreted as a laudable effort by a court to expose a pseudo-protec-

89. A series of previous district court opinions held that the FWS could not rely on possible future management actions by other agencies. *See* Biodiversity Legal Foundation v. Babbitt, 943 F.Supp. 23 (D.D.C. 1996); Friends of the Wild Swan, 945 F.Supp. 1388 (D. Or. 1996). The Ninth Circuit held that the FWS could not excuse its duty to designate critical habitat for the California Gnatcatcher on an elaborate reserve system created under a voluntary state program. Natural Resources Defense Council v. U.S. Department of Interior, 113 F.3d 1121 (9th Cir. 1997).

90. Oregon Natural Resources Council v. Daley, 6 F.Supp.2d 1139, 1159 (D. Ore. 1998).

91. *Id.*

tion plan, but, as I develop below, the case can also be interpreted as a premature intervention in a risky but promising management strategy.

The joint efforts of the Sierra Club, the National Audubon Society, the Idaho Farm Bureau and the Mountain States Legal Foundation to block the reintroduction of wolves into all of Idaho south of Interstate 90 is a clearer example of the limitations of "rule of law" judicial invalidation of a large-scale experiment. Litigation protected phantom, rather than real, wolves. Changed societal perceptions of the wolf and better scientific understanding of their behavior led to efforts to reintroduce the species in Minnesota and Northern Rockies[92] after they had been almost extirpated from the United States.[93] Reintroduction is controversial among ranchers because of livestock losses[94] and among some national environmental NGOs[95] because it may put the wolves which have naturally reestablished themselves in the Northern Rockies at risk. The ultimate scientific issue is how many wolves naturally exist in Idaho and the extent of likely contact and inbreeding between the two groups.

The Northern Rocky Mountain Wolf Recovery Team defined a viable wolf population, or pack, as two breeding pairs.[96] There were many reported wolf sightings in Idaho, but two breeding pairs could not be located by the FWS. Thus, the Service concluded that a reintroduction plan was necessary to produce three breeding pairs in three targeted areas because no population ex-

92. *See* Thomas McNamee, THE RETURN OF THE WOLF TO YELLOWSTONE (1997).

93. *See e.g.,* David L. Mech, THE WOLF: ECOLOGY AND BEHAVIOR OF AN ENDANGERED SPECIES (1970); Rick McIntyre, A SOCIETY OF WOLVES: NATIONAL PARKS AND THE BATTLE OVER THE WOLF (1993). For a history of the recovery program see Timothy B. Strauch, *The Wolf By The Ears: The Conseration of the Northern Mountain Wolf in Yellowstone National Park*, 27 LAND & WATER L. REV. 33 (1992).

94. The actual documented livestock kills by wolves are relatively rare and there are private and public sources of compensation, although there may be no duty on the part of the federal government to compensate. Mountain States Legal Foundation v. Hodel, 799 F.2d 1423 (10th Cir. 1986), *cert. denied*, 480 U.S. 951 (1987), but the losses are concentrated and deeply felt. *See* Brian N. Beisher, *Are Ranchers Legitimately Trying to Save Their Hides Or Are They Just Crying Wolf—What Must Be Resolved Before Wolf Reintroduction To Yellowstone National Park Proceeds?*, 29 LAND & WATER L. REV. 417 (1993). Holly Doremus, *Restoring Endangered Species: The Importance of Being Wild*, 23 HARV. ENVTL. L. REV. 1 (1999) presents a case for no compensation.

95. The National Wildlife Federation and the Defenders of Wildlife intervened in *Wyoming Farm Bureau Federation v. Babbitt* to support the recovery plan.

96. Final Environmental Impact Statement, THE REINTRODUCTION OF GRAY WOLVES TO YELLOWSTONE NATIONAL PARK AND CENTRAL IDAHO 2-5 (1994).

isted in Idaho.[97] Taking advantage of the flexibility introduced into the ESA, the FWS classified both the pre-1994 "natural" wolves in Idaho as well as the proposed reintroduced Canadian gray wolves as a nonessential experimental population.[98] The wolves were classified as threatened rather than endangered species, and therefore could be killed by private landowners if they were caught killing domestic livestock. The Sierra Club and the National Audubon Society attacked the decision as withdrawal of pre-existing protection from the "natural" wolves. The substantive issue was whether ESA Section 10(j), which limits experimental populations to those which are separate from geographically isolated populations, was violated.

The district court deferred to DOI's conclusion that there was no known population but held that DOI violated the wholly geographically separate requirement because the DOI administrative record contained statements that members of the natural wolf population existed in the experimental area.[99] The statute requires reasonably predictable separation by fixed migration patterns or natural or man-made barriers. Audubon argued that the reintroduction was a *de facto* delisting of naturally occurring wolves. The real issue is the level of risk that the experiment entails and the required confidence level. In this case, the district court appeared to reject a sound scientific experiment with no offsetting benefit to either the environment or the idea of rule of law.

Almost three years later, the Tenth Circuit reversed and held that the Endangered Species Act does not require that "experimental and natural populations be forever kept distinct" because such an inflexible reading would undermine all reintroduction programs.[100] However, the immediate damage had been done; a promising ecosystem restoration experiment which in the Tenth Circuit's words addressed "biological reality," had been derailed by "rule of law" litigation.

VI. Conclusion

The conduct of large-scale landscape management experiments does not eliminate the need for the fundamental objective

97. 59 Fed. Reg. 60252, 60254, November 22, 1994.

98. 16 U.S.C. § 1539(j).

99. See Note, *A Native Returns: The Endangered Species Act and Wolf Reintroduction to the Northern Rocky Mountains*, 20 COLUM. J. ENVTL. L. 329, 355-359 (1995).

100. Wyoming Farm Bureau Federation v. Babbitt, 199 F.3d 1224 (10th Cir. 2000).

of "rule of law" litigation or agency accountability, but the importance of such litigation will decline over time. It is not hard to craft "rules" to invalidate decisions to defer the listing of candidate species. For example, courts have held that the FWS may not rely on future actions contemplated by a conservation agreement to deny a listing or downgrade the priority of the species if the species otherwise warrants protection.[101] Accountability will ultimately come more from factors internal to the process. The fundamental flaw of the district court cases such as *Natural Resources Defense Council v. Daley* and *Wyoming Farm Bureau Federation* is that the interpretation of the ESA adopted by the courts demands a level of initial certainty that is incompatible with the idea of an experiment. The courts cut off the experiment too early. It is unrealistic to demand in advance that the experimental process work. An approach that would reconcile possible new directions in environmental law with the rule of law, would be to focus on how to hold the systems managers accountable over the time horizon of the experiment.

Specifically, I suggest three inquiries that courts should make. First, a court should borrow the concept of scientific method applied in *Daubert* to ask if the experiment as constructed is consistent with the relevant scientific opinion. Essentially, the court must attempt to distinguish between good faith and sham or politically tainted experiments; obviously only the former should be allowed to go forward. The second inquiry asks if the responsible federal agencies are actively involved in the process. If so, there should be a presumption that accountability exists. If not, judicial intervention may be appropriate. Accountability problems arise when the government has struck a distorted balance between accountability with private participation incentives. For example, habitat conservation banks pose such a risk. The state of California created a habitat bank in western Riverside county in California. Developers could buy credits from a conservation bank and thus destroy the habitats of threatened species where they want to build. To encourage participation, the state exempted the individual participating projects from review for 50 years. A California intermediate appellate court ruled that the complexity and uncertainties of the plan required a full environmental impact statement (EIS), as mandated in NEPA, because it was not clear

101. *See e.g.* Save Our Springs v. Babbitt, 27 F.Supp.2d 739 (W.D. Tex. 1997); Friends of the Wild Swan v. United States Fish & Game Service, 945 F.Supp. 1388 (D. Ore. 1996).

that the species would in fact be adequately protected and also because there was a need for public comment regarding the project.[102]

The third inquiry should be into the democratic nature of the process. NGOs face a participation dilemma with implications for rule of law litigation. If NGOs fail to participate, they may be able to bring rule of law challenges but they lack the ability to influence the process and the record. If they do participate (or decline an invitation to participate) in multi-stakeholder processes that produce an environmentally defensible solution, a court may invoke estoppel principles to let the solution stand. The case upholding a multi-stakeholder process that led to a 90% reduction in SO_2 emissions at the Navajo Generating Station to improve regional visibility at the Grand Canyon National Park is instructive. The court rejected a stakeholder utility challenge to the EPA's visibility rule, in part, because the process affords "no reason for this court disruptively to interject itself into the picture."[103]

My positive conclusion is that the evolution of environmental law suggests that the rule of law litigation strategy will be less effective in the future because lawsuits will play a less important role as environmental protection enters its second generation. Changes in ecology have undermined the simple faith that preventing changes in natural systems is a sufficient protection strategy, the search for non-litigation alternatives, especially stakeholder consensus processes, to resolve environmental disputes is accelerating.

My heretical, normative conclusion is that if environmental protection is to succeed as a legitimate, permanent policy perspective, it must evolve from a negative strategy of trying to stop an action that disturbs a mythical natural baseline to a pervasive, affirmative one which provides incentives for creative super-legal protection solutions that are sometimes "extra" legal. The changed role of "rule of law" litigation will more directly affect the growing efforts to conserve biodiversity than the enforcement of command and control air, water and soil pollution and risk assessment and management programs, but these programs may also be affected, especially where there is a close link to biodiversity conservation. The need for NGO vigilance and litigation will always exist, but

102. *See* San Bernadino Audubon Society v. Metropolitan Water District, 71 Cal.Rptr. 4th 382 (Cal.App. 4th Dist. 1999).

103. Central Arizona Water Conservation Dist. v. Environmental Protection Agency, 990 F.2d 1531 (9th Cir. 1993).

the changed role represents a needed correction of initial regulatory strategies. It reflects our understanding of the complex nature of environmental systems and their management. As environmental law matures, questions of substance will become more important, but the substance will take the form of specific performance standards as opposed to general rules as H.L.A. Hart would define them. Environmental law may become a branch of the law of contracts rather a law of rules.