About Free-Market Environmentalism

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(This forms the introduction to the collection of essays entitled Ecology, Liberty and Property: A Free-Market Environmental Reader." It is reproduced here by the kind permission of the author, Jonathan H. Adler. Portions of this essay area adapted from his Environmentalism at the Crossroads, 1995, Capital Research Center)

Federal air quality regulations mandate the use of fuel additives that increase the cost of gasoline yet produce no significant improvements in air quality. These additives are not without their environmental impacts, however, as one reduces one set of emissions at the expense of increasing another, and a second has caused widespread groundwater contamination.

Regulatory protection for endangered species discourages habitat conservation on private land. Stringent land-use restrictions make ownership of endangered-species habitat a liability instead of an asset, and landowners respond accordingly. In over 25 years, more species have become extinct under these regulatory "protections" than have been recovered.

A federal program for the cleanup of hazardous waste sites spends more on lawyers and paperwork than on reducing risks to public health. Since the creation of "Superfund," cleanup costs have skyrocketed to over \$25 million per site. Worse for neighboring communities, the average cleanup takes over a decade.

Under the Clean Water Act, a private company can be fined \$25,000 per day for a technical paperwork violation that produces no environmental impact whatsoever. At the same time, the law bars well-founded common law actions over interstate water pollution.

Federal mandates for automobile fuel efficiency force automakers to produce cars and light trucks that are smaller and lighter—and therefore less safe—than they would otherwise be. According to a Harvard-Brookings study, these regulations cause an additional 2,000 to 4,000 highway fatalities each year.

There is something terribly wrong with the current regime of environmental regulations. Environmental statutes and regulations designed to protect environmental quality are failing. Even laws that produced environmental gains in the 1970s are no longer up to the task. The result is a costly regulatory regime that undermines the goal of environmental protection.

The fundamental problem with existing environmental laws is that they embody a command-and-control, government-knows-best mentality. Conventional policy approaches proceed from the assumption that markets "fail" to address environmental concerns. Government intervention is called for wherever market activities impact environmental quality. Yet there is no end to the range of private activities which generate environmental effects, and centralized regulatory agencies are ill-equipped to handle myriad ecological interactions triggered or impacted by private activity. As environmental analyst Richard Stewart noted, "the system has

grown to the point where it amounts to nothing less than a massive effort at Soviet-style planning of the economy to achieve environmental goals."

Stewart's description is particularly apt. The Soviet economic model, like the conventional approach to environmental protection, was able to produce gains for a time. Collectivized agriculture did produce wheat—at least in the beginning. Over time, however, centrally-planned systems collapsed under their own weight, revealing a bankrupt core. As with the economic planning of the former Soviet nations, so too with the ecological planning of the federal regulatory state. There is a growing consensus that federal regulatory policies are too costly and ineffective. Regulations passed in the 1960s and 1970s are no longer generating satisfactory results. In many cases, well-intentioned regulatory systems are even making environmental problems worse.

Dissatisfied with the status quo approach to environmental policy, a growing number of scholars and policy analysts are turning to the marketplace to address environmental concerns. They have found in what many call "free market environmentalism" a new set of policy approaches that reconcile human needs and environmental concerns. Grounded in property rights, voluntary exchange, common law liability protections, and the rule of law, free market environmentalism seeks to integrate environmental resources into the market system. Rather than regulate each new potential risk to environmental quality, free market environmentalists advocate the creation of institutional arrangements that facilitate private solutions to environmental concerns. Markets are not perfect, but they are superior to the regulatory alternative.

New Resource Economics

Why do government agencies have such a poor record managing natural resources and public lands? This was the question posed by the economists who initially developed the ideas of free market environmentalism. "If qualified managers with good intentions were sufficient to ensure sound decisionmaking, Yellowstone would be the Eden of the national parks," observed Michael Copeland, former executive director of the Bozeman, Montana-based Political Economy Research Center (PERC). But it was widely recognized that Yellowstone National Park was grossly mismanaged. As environmental writer Alston Chase poignantly documented in Playing God in Yellowstone, "rather than preserved, [the park] is being destroyed," and public management is to blame. "The experiment of public sector ownership, management and control has been an unambiguous failure in terms of environmental quality, productivity and economic efficiency," decided John Baden, PERC's first executive director who later established the Foundation for Research on Economics and the Environment (FREE).

Baden cautioned critics of the federal bureaucracy that agency employees were neither incompetent nor immoral. The problem is, rather, that government officials and staff respond only too well to the signals government sends. "All decisions in an agency are made on the basis of information and incentives," Baden concluded. "Current institutions systematically generate both bad information and perverse incentives."

PERC executive director Terry Anderson argued that conventional natural resource economics is analytically biased in favor of government regulation. It assumes that "market failure is pervasive in natural resource allocation and that cost/benefit analysis applied by scientific, objective managers can improve on the failures." To challenge the conventional wisdom, analysts at PERC and elsewhere developed a "New Resource Economics" (NRE) which explains how institutional arrangements such as private ownership affect incentives and environmental outcomes. NRE applies the insights of Nobel economics laureates F.A. Hayek, Ronald Coase, and James Buchanan to natural resource questions. Copeland explained: "NRE developed from a concern for the environment, the integrity of which was being compromised—not only by seemingly irresponsible individuals, but by the very government agencies assigned to protect the environment!"

NRE demonstrated that public officials act in their self-interest no less than individuals in the private sector, and that bad government policies result because, unlike private decisionmaking in the marketplace, public officials are not rewarded for efficiency or punished for waste. "Wasting a resource does not result in a loss or a reduced profit," said Copeland of government bureaucracy. "Bureaucrats also tend to favor programs with visible benefits and invisible costs."

Lacking the price signals of profit and loss, public officials rarely have the information they need to plan complex systems and allocate resources. Hence, they cannot anticipate how various institutional arrangements will affect the incentives that motivate individuals. But this is necessary if we want to understand the likely impact of specific environmental programs and policies. NRE demonstrated that government failure was likely to be as pervasive as, if not more than, market imperfections. An intellectual discipline, the New Resource Economics set the theoretical groundwork for free market environmentalism.

The Theory of Free Market Environmentalism

Conventional environmental policymaking presupposes that only government action can improve environmental quality. In this view, environmental problems arise from "market failures" that produce "externalities." Government regulation is needed to correct environmental concerns that the market has "failed" to handle because they are "external" to the price signals that regulate marketplace transactions. The conventional paradigm of environmental policy justifies the regulation of economic activity because it assumes all activities—from purchasing clothing to driving a car to turning on a light bulb—have an impact on the environment that is not factored into the cost of the product or service. Economic central planning may be intellectually and historically discredited, but the "market failure" thesis justifies environmental central planning, an endeavor just as prone to ruin. In the words of Competitive Enterprise Institute president Fred L. Smith, Jr., "The disastrous road to serfdom can just as easily be paved with green bricks as with red ones." Embracing the "market failure" rationale leads to policy failure.

Free market environmentalism (FME) rejects the "market failure" model. "Rather than viewing the world in terms of market failure, we should view the problem of externalities as a failure to permit markets and create markets where they do not yet—or no longer—exist," argues Smith. Permit markets are privately owned or managed and, therefore, are in the marketplace are typically well-maintained. Resources that are unowned or politically controlled, and therefore outside the market, are more apt to be inadequately managed. "At the heart of free market environmentalism is a system of well-specified property rights to natural resources," explain Terry Anderson and Donald Leal, authors of Free Market Environmentalism. Adds Smith, "Rather than the silly slogan of some environmentalists, that 'trees should have standing,' our argument is that behind every tree should stand an owner who can act as its protector."

FME owes an intellectual debt to ecologist Garrett Hardin's discussion of the "tragedy of the commons." Hardin noted when a resource is unowned or owned in common, such as the grazing pasture in a medieval village, there is no incentive for any individual to protect it. In the medieval village it is in every cattleowner's self-interest to have his herd graze the pasture as much as possible and before any other herd. Every cattleowner who acquires additional cattle gains the benefits of a larger herd, while the cost of overusing the pasture is borne by all members of the village. Inevitably, the consequence is an overgrazed pasture, and everyone loses. Indeed, the cattleowner with foresight will anticipate that the pasture will become barren in the future, and this will give him additional incentive to overgraze. Refusing to add another cow to one's own herd does not change the incentive of every other cattleowner to do so.

The world's fisheries offer a contemporary example of the tragedy of the commons. Because oceans are unowned, each fishing fleet has no incentive to conserve or replenish the fish it takes and it has every incentive to take as many fish as possible lest the benefits of a larger catch go to someone else.14 Private ownership overcomes the commons problem because owners can prevent overuse by controlling access to the resource. As Hardin noted, "The tragedy of the commons as a food basket is averted by private property, or something formally like it." ¹⁵

Although environmental activists often disparage private ownership, the record of private owners in conserving resources is superior to that of government agencies. For instance, Terry Anderson observes that "well-established private rights to Great Lakes timber resulted in efficient markets rather than the 'rape and run' tactics alleged by conservationists." As R.J. Smith explains,

Wherever we have exclusive private ownership, whether it is organized around a profit-seeking or nonprofit undertaking, there are incentives for the private owners to preserve the resource....[P]rivate ownership allows the owner to capture the full capital value of the resource, and self-interest and economic incentive drive the owner to maintain its long-term capital value.¹⁷

Unlike public officials, private owners directly benefit from sound management decisions and suffer from poor ones.

For incentives to work, the property right to a resource must be definable, defendable, and divestible. Owners must be free to transfer their property rights to others at will. Even someone indifferent or hostile to environmental protection has an incentive to take environmental concerns into account, because despoiling the resource may reduce its value in the eyes of potential buyers. The role of government is to protect property rights for environmental resources and secure the voluntary agreements property owners contract to carry out. Moreover, FME advocates insist on the application of common law liability rules to environmental harms, such as polluting a neighbor's property, to protect property rights and to provide additional incentives for good stewardship. To harm someone's property by polluting it is no more acceptable than vandalizing it.

The importance of private ownership to sound conservation is clear from America's environmental history. When environmental groups like the National Audubon Society and the Nature Conservancy act to protect habitat and ecologically sensitive areas by purchasing land and establishing sanctuaries, they act in the marketplace to advance environmental values. R.J. Smith explains:

Private ownership includes not only hunting preserves, commercial bird breeders, parrot jungles, and safari parks, it also includes wildlife sanctuaries, Audubon Society refuges, World Wildlife Fund preserves, and a multitude of private, non-profit conservation and preservation projects.¹⁸

These organizations raise money by soliciting contributions to acquire ownership in preferred lands. Were it not for the institution of private property, these ventures to protect the environment would be impossible.

Private efforts to support the reintroduction of wolves in Montana offers another example of how market transactions can advance environmental goals. The hostility of ranchers has been a major obstacle to reintroducing predators into the wild. In the 1970s, free market economists argued that ranchers' fear of livestock losses would be addressed if those who wanted to reintroduce wolves would agree to compensate ranchers who suffered economic loss due to predators. ¹⁹

Defenders of Wildlife adopted the idea and established a Wolf Compensation Fund. "What we're trying to do is devise a system whereby all those people who care about endangered species restoration actually pay some of the bills," explained Defenders of Wildlife staffer Hank Fischer. "What this solution attempts to do is utilize economic forces—in other words, to make it desirable to have wolves." After several years, the fund had paid ranchers approximately \$12,000 for livestock losses. The program has flaws—some ranchers complain that compensation is not always paid, and federal regulations still prevent ranchers from killing wolves to protect livestock—but the Fund remains an example of how marketplace transactions can further environmental goals even when no goods are exchanged.

FME proponents would terminate government programs that cause environmental harm or inhibit private-sector solutions to environmental problems. Free market environmental policies would establish property rights, where possible, so as to internalize "externalities." In some cases, FME proponents would counsel more modest steps. For instance, in the difficult case of automobile air pollution, a "polluter pays" approach would replace regulations mandating specific emissions-control equipment and annual emissions testing. An owner would be assessed a fee proportional to the amount of pollution his auto generated. Since fees would vary in relation to pollution emission levels, owners would have incentives to have their automobiles repaired or replaced when they began to pollute significantly. Technologies currently exist to monitor emissions as autos move on the highway, providing potential enforcement mechanisms that will not inconvenience most owners of vehicles whose emission levels are negligible. This solution is not ideal because a genuine market is not created; but it is more market-oriented that current air pollution policies.²¹

The Environmental Establishment's Response

Most environmental activists reject free market environmentalism. Economist Thomas Michael Power and Sierra associate editor Paul Rauber write: "Markets are not neutral, technological devices. They are social institutions whose use has profound consequences. All societies purposely limit the extent of the market in order to protect basic values." Wedded to the state as the instrument of reform, environmental activists cannot accept the idea that market forces will produce the results they desire even when it is apparent that government regulation will not.

Nonetheless, FME has changed the discussion of environmental issues. Many environmentalists now seem to understand why environmental policies should be examined in economic terms. Says Roberto Repetto, director of the economics program at World Resources Institute, "If we can enact policies that adjust prices so they more accurately reflect all the costs associated with producing a particular pollutant or using particular resources, then society will make better decisions." Repetto advocates pollution taxes and other government interventions as ways to "internalize" externalities. Such policies are not FME, but they are evidence that the terms of debate are shifting.

Some environmentalists also see the strategic political benefit of market rhetoric and some free market policies. Ned Ford, energy chair of the Sierra Club's Ohio chapter, argues that "by forcing the marketplace to the lowest cost solution that really works, environmentalists gain credibility and enhance the opportunity for further reduction." Even President Bill Clinton has acknowledged the importance of developing a "market-based environmental-protection strategy," noting that "Adam Smith's invisible hand can have a green thumb." Too often, however, market rhetoric merely merchandises government regulatory policies. Environmentalist groups rarely adopt FME policies fully, opting instead to pick and choose free market precepts.

Attempts to use "market mechanisms" to reach predetermined environmental outcomes are the most common example of this tactic. The Environmental Defense Fund (EDF), for instance, advocates widespread use of "pollution credit trading" as a market-oriented policy. Setting an emission level as an environmental target, the EDF proposal allows companies the freedom to determine how best to reach it. Companies could buy and sell emission allotments among themselves to find the least-cost means to reach a goal set by government regulation. Explains EDF's Dan Dudek, "Who is better to know [what to do] than the people who own and operate" the facility causing pollution?²⁶

FME advocates note that this approach will not necessarily produce sound environmental policy. The Clean Air Act Amendments of 1990, for instance, include an elaborate EDF-designed pollution-credit trading scheme for sulfur oxide emissions to control acid rain. Many companies favored the policy because, by allowing them to select the least-cost pollution reduction measures, they might save millions of dollars in compliance costs. But was a sulfur oxide emission reduction plan needed at all? The most extensive US study of acid rain to date suggests that acid rain was not a substantial threat to forests and streams, despite environmentalist claims to the contrary.

John Baden warns against market mechanisms that are used "simply as tools for the efficient delivery of environmental goals...[while] the goals themselves remain collectively determined."²⁷ CEI's Fred Smith calls such policies "market socialism," as they resemble the efforts in Communist countries to use market mechanisms to reach politically determined production quotas. EDF's emission trading scheme is structurally the equivalent of the tradeable wheat production quotas established in parts of Eastern Europe. Notes Smith, "the efficiency gains of market systems occur not only in production, but in allocation as well. This means that markets are as effective at determining what is to be done as they are at determining how it should be accomplished."²⁸

The Road Ahead

Free market environmental policies will not soon be embraced by many environmental regulators, activists, or lobbyists. But the fact that "market" language—incentives, costs, trade-offs, markets, property rights, and so on—dominates current environmental discussions suggests that it presents a serious challenge to conventional environmental policy approaches. Even the most statist environmental activist organizations feel the need to embrace "market" perspectives on certain issues. As the editor of the Worldwatch Institute's book series seemed to lament in the introduction to a book on "market" mechanisms, "market economies will remain the dominant economic system for the foreseeable future." Markets may well become the basis for the next generation of environmental protections as well.

Advancing the free market environmental agenda will certainly be a challenge. On top of the obvious political obstacles, there are serious implementation questions that need to be addressed. There are tremendous legal and cultural barriers to the extension of market institutions in many areas. The technical requirements of property rights definition and

enforcement are also substantial. It is one thing to create rights in instream water flows, as is done in many states; it is quite another to contemplate property rights in the air or the deep seas. The relevant question, however, is whether these obstacles are any greater than asking the federal government to plan our collective environmental future. The experience with environmental policy to date suggests not. Central planning has clearly failed. It is time to give market institutions a chance.

Notes

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- 3. Alston Chase, Playing God in Yellowstone (New York: Harcourt Brace, 1987), p. 6.
- 4. "Economists: Free Market Better for Resource Management," United Press International, November 19, 1983.
- 5. Ibid.
- 6. Terry L. Anderson, "The New Resource Economics: Old Ideas and New Applications," American Journal of Agricultural Economics (December 1982), p. 929.
- 7. Copeland, p. 14.
- 8. Ibid, pp. 17-18.
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- 10. Fred L. Smith, Jr., "Conclusion: Environmental Policy at the Crossroads," in Environmental Politics: Public Costs, Private Rewards (New York: Praeger, 1992), p. 192.
- 11. Terry L. Anderson and Donald R. Leal, Free Market Environmentalism (San Francisco: Pacific Research Institute, 1991), p. 3.
- 12. Fred Smith, "Conclusion," p. 192.
- 13. See Garrett Hardin, "The Tragedy of the Commons," Science, December 13, 1968.
- 14. See Kent Jeffreys, "Rescuing the Oceans," in The True State of the Planet, Ron Bailey, ed. (New York: The Free Press, 1995).
- 15. Hardin, p. 1243. 16. Anderson, "The New Resource Economics," p. 933.
- 17. R.J. Smith, "Resolving the Tragedy of the Commons by Creating Private Property Rights in Wildlife," Cato Journal (Fall 1981), pp. 456-457.
- 18. Ibid., p. 456.

- 19. Ryan Amacher, et al., "The Economics of Fatal Mistakes: Fiscal Mechanisms for Preserving Endangered Predators," in Wildlife in the Marketplace, Terry Anderson and P.J. Hill, eds. (Lanham, Maryland: Rowman and Littlefield, 1995).
- 20. Quoted on "Free Market Environmentalism's Bottom Line," National Public Radio Morning Edition, September 1, 1992.
- 21. See Jonathan Adler, Reforming Arizona's Air Pollution Policy (Phoenix: Goldwater Institute, 1993).
- 22. Thomas Michael Power and Paul Rauber, "The Price is Everything," Sierra (November/December 1993), p. 94.
- 23. Joe Alper, "Protecting the Environment With the Power of the Market," Science, June 25, 1993, p. 1884.
- 24. Power and Rauber, p. 89.
- 25. Ibid., p. 88.
- 26. Karen Riley, "Rewards for Friends of the Earth," Washington Times, November 22, 1992.
- 27. Power and Rauber, p. 92.
- 28. Fred L. Smith, Jr., "Europe, Energy & the Environment: The Case Against Carbon Taxes" (Washington, DC: Competitive Enterprise Institute, 1992), p. 8 [see pp. 183-188 in this volume].
- 29. Linda Starke, "Foreword," in David Malin Roodman, The Natural Wealth of Nations (New York: W.W. Norton, 1998), p. 12.