



Cato Handbook for Policymakers

CATO
INSTITUTE

7TH EDITION

44. Environmental Policy

Congress should

- Establish a mechanism by which states can apply for regulatory waivers from the Environmental Protection Agency in order to allow states some flexibility in establishing environmental priorities and to facilitate experiments in innovative regulatory approaches;
- replace the Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act with a consumer products labeling program under the auspices of the Food and Drug Administration;
- repeal the Comprehensive Environmental Response, Compensation, and Liability Act and privatize the cleanup of Superfund sites;
- replace the Resource Conservation and Recovery Act with minimal standards for discharge into groundwater aquifers;
- eliminate federal subsidies and programs that exacerbate environmental damage; and
- replace the Endangered Species Act and section 404 of the Clean Water Act with a federal biological trust fund.

The Theory of Environmental Regulation

Air sheds, watersheds, groundwater, scenic lands, and ecologically important but sensitive ecosystems are widely considered “public goods.” That is, in an unregulated marketplace, people who pay to “consume” environmental goods and services (say, those who purchase a conservation easement for an ecologically important wetland) are unable to keep those who don’t pay from enjoying the benefits of that purchase. Accordingly,

without government regulation, there would be widespread “free riding” and less investment in environmental goods than would be economically and socially desirable.

Moreover, people who might wish to protect their property against polluters via private action will often find that the transaction costs associated with doing so are prohibitive. For instance, if one owned a small lake and discovered that the fertilizer runoff from hundreds if not thousands of homes and agricultural operations was contaminating water quality, the costs associated with tracking down the responsible parties would almost certainly be larger than the costs associated with the pollution itself.

Accordingly, those “market failures” would necessitate government intervention. While there are numerous ways that the government could intervene in environmental marketplaces to address market failure, the method employed by the federal government is public ownership of air, water, and subsurface resources as well as of some sensitive ecosystems. Congress exercises its power over those resources by delegating to executive agencies the authority to determine how resources can and can’t be used—that is, by establishing pollution and public land use regulations—usually, but not always, on the basis of assessments of human health risk. The Environmental Protection Agency is further empowered to determine the exact manner in which regulated entities are to go about meeting pollution standards—usually, but not always, dictating the installation of particular control devices or technologies.

Accurate, timely, and accessible information about environmental exposures is also considered by some to be a public good. Absent such laws as the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act, individuals, some people think, would be unable to effectively police their exposures to dangerous chemicals. A variation of this argument contends that it is so costly and time-consuming for people to gain access to the environmental health information necessary for intelligent decisionmaking that government must act in the individual’s stead and make those decisions for society as a whole.

Debates about the regulation of pollution generally begin with an acceptance of those claims. The political arguments today are over the details:

- Do concentrations of chemical *x* in the environment truly pose a health risk to the public? If so, we regulate. If not, we don’t.
- Should environmental regulations have to pass a cost–benefit test?
- Should government tell firms exactly how to go about meeting federal environmental standards, or should government simply dictate the

permissible concentration of pollutants in a given air shed or watershed and allow firms some degree of flexibility in complying with those standards?

- How stringently should regulations be enforced, and who should do the enforcing—the EPA, state governments, environmental organizations through third-party lawsuits, or some combination of the three?

The Real Environmental Debate

Although environmental debates sound like they're arguments about science and public health (with a smattering of economics tossed in), they're really debates about preferences and *whose* preferences should be imposed on society. Although participants argue that "sound science" ought to determine whose preferences determine the standards (and that *their* science is better than their opponents'), science cannot referee the debate.

Consider the dispute about the regulation of potentially unhealthy pollutants, the central mission of the EPA. The agency examines toxicological and epidemiological data to ascertain the exposure level at which suspect substances impose measurable human health risks. Even assuming that such analyses are capable of providing the requisite information (a matter, incidentally, that is hotly debated within the scientific and public health community), who is to say whether one risk tolerance is preferable to another?

The amount of resources one is willing to spend on risk avoidance is ultimately subjective. Everyone's risk tolerance is different. Scientists can help inform our decisions, but they cannot point us to the "correct" decision.

Should experts—acting on behalf of regulatory agencies—decide what sort of environmental quality people should or should not have a right to consume? In no other area of the economy do scientists have the power to rule in such a manner. After all, people are allowed to consume all kinds of things—power crystals, magnets, age-defying vitamins, and organic food—that scientists, doctors, and public health officials think are silly or even potentially counterproductive.

Many people, perhaps even a majority of voting Americans, want to secure cleaner air and cleaner water regardless of whether those improvements significantly reduce human health risks. Under the present political regime, however, no such improvements can occur without some alleged scientific justification. That is why people who wish to improve environ-

mental quality are forced to embrace whatever science they can—no matter how dubious—to get what they want. They should not, however, have to engage in such scientific gymnastics to secure desired goods or services.

The Case for Preference Neutrality

A government that is fully respectful of the right of individuals to live their lives as they wish (as long as they respect the rights of others to do likewise) would be neutral regarding the subjective preferences of its citizens. People who are more risk tolerant than others should have a right to exercise their preferences, and those who are less risk tolerant than others should have that same right. This reasonable premise has some striking policy implications because the present order is most definitely not neutral regarding environmental preferences.

Preference neutrality works well when it comes to the consumption of private goods, such as those regulated by the Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act. It does not work well, however, when it comes to the consumption of public environmental goods, which pose a far more difficult problem. Within the same city, for instance, one person cannot exercise his preference for cleaner air without infringing upon another's preference for, say, more entry-level jobs in the manufacturing sector. After all, nothing is free, and people vary (legitimately) in their willingness to trade off environmental goods and services for other goods and services.

A policy founded on preference neutrality requires that we do as little violence to minority preferences as possible. *When it comes to public goods like air and watersheds, some majority will, of necessity, be imposing its preferences on some minority.* The only way to provide safeguards for minority preferences is to require some sort of supermajority consensus before decisions about public goods are made.

Reform of the Clean Air and Clean Water Acts

As noted earlier, within limits, there are no right or wrong air or water quality standards. Political leaders need not constantly war over those issues. Accepting public preferences for cleaner air and water—even without sufficient scientific justification—still leaves a great amount of room for productive reform.

The Problem with Command-and-Control Regulation

There is little reason for government to prescribe exactly how firms are to go about complying with pollution standards. Command-and-control regulations, which require regulators to determine exactly which technologies and what manufacturing methods are to be adopted for pollution control in every single facility in the nation, place on public officials informational requirements that are difficult to meet in the real world. This task is complicated by the fact that every air shed and watershed has different carrying capacities for different pollutants.

Command-and-control regulations may often prove more efficient than alternative regulatory arrangements when dealing with a large number of difficult-to-identify pollution sources (for instance, air emissions from automobile tailpipes and water runoff from the application of fertilizers and pesticides). Yet their utility is reduced when targeting identifiable and immobile pollution sources such as manufacturing and electric power facilities. After all, individual plant managers have better incentives to discover the most efficient ways to control pollution at their facilities than do EPA technicians and consultants. That is the case, not only because those managers have more direct knowledge of their facilities and the technology of production, but because competition forces cost minimization, and even the most dedicated EPA official isn't going to lie awake nights searching for new solutions to pollution control problems.

Most regulatory analysts are in agreement that flexible regulatory approaches—such as performance-based regulation (wherein regulators dictate overall emissions levels from a facility but allow facility managers to decide how best to meet those standards), emissions trading, and pollution taxes—are often more efficient and less costly means of meeting environmental standards than are command-and-control alternatives. Unfortunately, those sorts of flexible regulatory strategies are underutilized in the United States for a host of political reasons. That should concern not only economists but environmentalists as well. The less costly it is to “buy” improvements in environmental quality, the greater the public appetite will likely be for additional initiatives to improve environmental quality.

Provision of State Regulatory Waivers

Despite the well-known problems associated with command-and-control environmental regulation, it's unlikely that Congress will find the political capital necessary to reform thousands of pages of counterproductive rules

and regulations found in more than a dozen sprawling environmental statutes, given the entrenched special interests that benefit politically and economically from their existence. Accordingly, Congress should take a page from the welfare reform experience and allow states to appeal for waivers from EPA in order to facilitate experiments in regulatory policy.

Case Western law professor Jonathan Adler proposes that Congress adopt a mechanism similar to Section 160 of the 1996 Telecommunications Act to facilitate this reform. Section 160 allows telecommunication companies to submit a request for a regulatory waiver from the Federal Communications Commission. The FCC “shall forebear from applying any regulation or any provision” of the act to a company or class of service providers if the FCC determines upon review of the petition that

- “enforcement of such regulation or provision is not necessary” to ensure that rates “are just and reasonable and are not unreasonably discriminatory,”
- “enforcement of such regulation or provision is not necessary for the protection of consumers,” or
- “forbearance from applying such provision or regulation is consistent with the public interest.”

The FCC has one year to respond or the petition is deemed granted, and any decision to grant or deny forbearance is subject to judicial review under the Administrative Procedure Act.

Adapting a mechanism akin to Section 160 of the 1996 Telecommunications Act to the environmental arena would mean allowing states to apply for forbearance from any standard or requirement administered by EPA. The state would be expected to submit supporting material detailing the basis for the request and explain why the waiver would serve the public interest. EPA would then provide public notice, seek comment from interested parties, and make a call one way or the other within one year pending judicial review under the aegis of the Administrative Procedure Act.

Some states may wish to experiment with market-oriented emissions trading programs or pollution taxes in lieu of the existing federally imposed command-and-control regimen. Others may well act to tighten existing standards. A few states might even propose reallocation of regulatory efforts in order to concentrate on some relatively more important environmental issues instead of others. A policy of preference neutrality suggests tolerance regarding any such proposals.

Allowing “50 regulatory flowers to bloom” admittedly entails some degree of risk. Although some state experiments will likely bear economic

and environmental fruit, others will probably fail to meet expectations. Such risks will certainly engender political opposition to the entire enterprise, but politicians should remember that useful innovations are virtually impossible without the risk of failure. In fact, the risks of failure underscore the value of decentralized policy experiments since localized policy failures would have far less damaging consequences than federal policy failures. Moreover, failed experiments provide useful information, cautioning reformers in other states about problems to avoid. Successful state experiments, on the other hand, could become models for reform elsewhere.

Repeal of FIFRA and TSCA

A policy of preference neutrality would be most easily applicable to consumer preferences that do not directly affect the rights of others to exercise alternative preferences (so-called private goods). TSCA (which governs the use of various chemicals and the abatement of asbestos, indoor radon concentrations, and lead-based paint) and FIFRA (which regulates the use of agricultural chemicals) impose politically derived risk preferences (and their related costs) on individuals without respect for those who are more risk tolerant than the political majority. Accordingly, both statutes should be abolished.

Of course, some people argue that the cost of obtaining good risk information is too great. That's not altogether obvious (a plethora of private, third-party reporting organizations, such as Underwriters Laboratories, Consumers Union, Green Seal, various kosher and halal food certification groups, the Better Business Bureau, and the Good Housekeeping Institute, are well-known and on the job today), and there are remedies available beyond the uniform imposition of politically derived risk tolerances. Mandatory labeling standards—perhaps accompanied by Food and Drug Administration advisories—would address the concern about this alleged market imperfection and do minimal violence to the marketplace and the rights of individual consumers.

Repeal of CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as "Superfund," addresses the potential risks posed by the past disposal of hazardous wastes. Most scientists and public health officials agree that the risks posed by sites not yet cleaned up under CERCLA are virtually nonexistent. Although those sites might

pose a hazard if they were converted to different uses—say, if a school with a dirt playground were built on top of an old Superfund site—such concerns are easily addressed by not converting such sites to problematic uses.

In reality, CERCLA is an extremely expensive land reclamation project, dedicated to turning contaminated land, which at present poses little danger of harm to nearby residents, into land as pure and clean as the driven snow. Congress should acknowledge that some sites are simply not worth reclaiming; containment and isolation should be permitted as an alternative.

Accordingly, CERCLA should be abolished. Abandoned Superfund sites should be privatized in a reverse Dutch auction in which government offers to *pay* potential bidders for assuming ownership of and responsibility for the land. The amount offered escalates until some private party is willing to accept the deal. Owners would then assume full liability for any future damage that might occur. Such a regime would set up the proper incentives for the private remediation or isolation of potentially dangerous environmental contaminants.

Repeal RCRA

The Resource Conservation and Recovery Act regulates the commercial use and disposal of potentially toxic chemicals primarily as a means of protecting groundwater aquifers from contamination. Yet RCRA is not necessary to remedy any traditional environmental market failure.

Groundwater aquifers are not a public good. Ownership is easily created through unitization, the same means employed by owners of oil wells to allocate property rights across geographically disperse fields. Owners of aquifers are quite capable of restricting consumption to people who pay for water and policing the integrity of their aquifers through the tort system.

But even if groundwater resources remain in government hands, there's little reason for such incredibly prescriptive and excessively costly regulations as the kind imposed by RCRA, a statute that stipulates detailed cradle-to-grave management standards for thousands of substances. Better to repeal RCRA and replace it with a minimal discharge standard, that is, prohibit significant discharges of pollutants (as defined by government) into groundwater and impose heavy fines and penalties—perhaps even shutdown orders—on firms discovered to be in violation of the standard.

A requirement that potential dischargers maintain special liability insurance further ensures that firms have strong incentives to minimize the chance of contamination (insurance companies would be reluctant to issue

coverage to those whose practices put the insurance company at risk). Public groundwater monitoring costs would be borne by industry, preferably through a special tax levied on the purchase of liability coverage.

End Subsidies for Resource Exploitation

The foremost engine of environmental destruction in America today is not the private sector but federal and state government. A great deal of environmental harm could be alleviated by eliminating the subsidized use of natural resources.

Five “Brownest” Programs in the Budget

- Agricultural subsidies are responsible for excessive pesticide, fungicide, and herbicide use with corresponding increases in non-point-source pollution.
- Sugar import quotas, tariffs, and price-support loans sustain a domestic sugar industry that might not otherwise exist; the destruction of the Everglades is the ecological result.
- Electricity subsidies via the power marketing administrations and the Tennessee Valley Authority artificially boost demand for energy and thereby are responsible for millions of tons of low-level radioactive waste and the disappearance of wild rivers in the West.
- Irrigation subsidies and socialized water services, which generally underwrite half of the cost of consumption, have done incalculable damage to western habitat while artificially promoting uneconomic agriculture with all the attendant environmental consequences. They also lead to tremendous overuse of water resources and worsen periodic shortages.
- Federal construction grant projects—such as the river maintenance, flood control, and agricultural reclamation undertakings of the Army Corps of Engineers—allow uneconomic projects to go forward and cause an array of serious environmental problems.

Repeal the Endangered Species Act

As Chapter 34 argues, compensating property owners for takings meant to secure public goods such as biological diversity is a simple matter of

fairness and constitutional justice. But protecting property rights is also a necessary prerequisite for ecological protection. Property owners who expect to experience economic losses if their property is identified as ecologically important have little incentive to exhibit good ecological stewardship.

The Endangered Species Act, which prevents private property owners from making certain uses of their land in order to secure the “public good” of biological diversity, should thus be repealed since it provides no compensation to landowners for public takings. Instead, a federal biological trust should be established that would be funded out of general revenues at whatever level Congress found appropriate. The trust fund would be used to purchase conservation easements (in a voluntary and noncoercive fashion) from private landowners in order to protect the habitat of endangered species.

The virtue of such a reform is that landowners would have incentives rather than disincentives to protect species habitat. Moreover, the cost of biological preservation would become more transparent, which allows better-informed decisionmaking about the use of resources. Finally, such a reform would decriminalize the “ranching” of endangered species for commercial purposes. The ESA prohibits such practices out of a misguided belief that any commercial use of an endangered species inevitably contributes to its decline. Yet the experience of the African elephant and other threatened species belies that concern and strongly suggests that, if private parties are allowed to own and trade animals as commodities, their economic value goes up, not down. That in turn provides better incentives for species protection.

Similarly, section 404 of the Clean Water Act—the provision that ostensibly empowers the EPA to regulate wetlands—should be repealed. Like the ESA, it takes private property out of otherwise inoffensive uses for a public purpose and provides disincentives for wetland conservation. Protection of wetlands habitat should be left to the federal biological trust fund.

The “Greenest” Political Agenda Is Economic Growth

There are a number of reasons why economic growth is perhaps the most important of all environmental policies. First, it takes a healthy, growing economy to afford the pollution control technologies necessitated by environmental protection. A poorer nation, for example, could scarcely

have afforded the nearly \$200 billion this nation has spent on sewage treatment plants over the past 30 years.

Second, growing consumer demand for environmental goods (parks; recreational facilities; land for hunting, fishing, and hiking; and urban air and water quality) is largely responsible for the improving quantity and quality of both public and private ecological resources. Virtually all analysts agree that, for the vast majority of consumers, environmental amenities are “luxury goods” that are in greatest demand in the wealthiest societies. Economic growth is thus indirectly responsible for improving environmental quality in that it creates the conditions necessary for increased demand for (and the corresponding increase in supply of) environmental quality.

Third, advances in technology, production methods, and manufacturing practices—both a cause and a consequence of economic growth—have historically resulted in less, not more, pollution. Even advances in nonenvironmental technologies and industries have indirectly resulted in more efficient resource consumption and less pollution.

Conclusion

Science can inform individual preferences but cannot resolve environmental conflicts. Environmental goods and services, to the greatest extent possible, should be treated like other goods and services in the marketplace. People should be free to secure their preferences about the consumption of environmental goods such as clean air or clean water regardless of whether some scientists think such preferences are legitimate or not. Likewise, people should be free, to the greatest extent possible, to make decisions consistent with their own risk tolerances regardless of scientific or even public opinion.

Policies that override individual preferences in favor of political preferences are incapable of pleasing a majority of people or resolving subjective disputes. No matter what environmental risk thresholds are set, only those at the political mean will be pleased. The best we can do when it comes to the governance of public goods is to establish mechanisms that allow people the right to secure their preferences to the greatest extent possible.

Given the different circumstances of both communities and environmental media, it makes sense to allow those most directly affected by the pollution issue in question to decide for themselves how best to deal with it. Not only will the tradeoffs associated with differing approaches be more fully appreciated, but, given the fact that people prefer to live amidst those more like them than not, local decisionmaking will almost certainly

prove less injurious to minority preferences than decisionmaking at some other level of government.

Suggested Readings

- Adler, Jonathan. "Let Fifty Flowers Bloom: Transforming the States into Laboratories of Environmental Policy." Roundtable Paper Series, American Enterprise Institute Federalism Project, September 20, 2001.
- Anderson, Terry, and Peter Hill, eds. *Environmental Federalism*. Lanham, MD: Rowman & Littlefield, 1997.
- Anderson, Terry, and Donald Leal. *Free Market Environmentalism*. New York: Palgrave, 2001.
- DeLong, James. "Privatizing Superfund: How to Clean Up Hazardous Waste." Cato Institute Policy Analysis no. 247, December 18, 1995.
- Keohane, Nathaniel, Richard Revesz, and Robert Stavins. "The Choice of Regulatory Instruments in Environmental Policy." *Harvard Environmental Law Review* 22, no. 2 (1998).
- Leal, Donald, and Roger Meiners, eds. *Government vs. Environment*. Lanham, MD: Rowman & Littlefield, 2002.
- Revesz, Richard, and Robert Stavins. "Environmental Law and Policy." Resources for the Future, Discussion Paper 04-30, June 2004.
- Stern, Thomas. *Policy Instruments for Environmental and Natural Resource Management*. Washington: Resources for the Future, 2002.
- Stroup, Richard. *Eco-nomics: What Everyone Should Know about Economics and the Environment*. Washington: Cato Institute, 2003.
- Sunstein, Cass. *Risk and Reason*. New York: Cambridge University Press, 2002.
- VanDoren, Peter. *Cancer, Chemicals, and Choices: Risk Reduction through Markets*. Washington: Cato Institute, 1999.
- Yandle, Bruce, Madhusudan Bhattarai, and Maya Vijaaraghavan. "Environmental Kuznets Curves: A Review of Findings, Methods, and Policy Implications." Political Economy Research Center, Research Study 02-1 Update, April 2004.
- Yilmaz, Yesim. "Private Regulation: A Real Alternative for Regulatory Reform." Cato Institute Policy Analysis no. 303, April 20, 1998

—Prepared by Jerry Taylor