



Second Generation—A New Strategy For Environmental Protection

Debra S. Knopman

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Progressive Foundation

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**Second Generation—A New Strategy
For Environmental Protection**

Introduction

Just over a quarter century ago, America launched the first wave of national laws and regulations aimed at protecting our environment. While largely successful, these rules and bureaucratic systems now show clear signs of age. We face a formidable array of new environmental challenges; yet debate in Washington centers on old agendas rather than on new priorities, old antagonists rather than new partnerships, and old rules rather than new incentives. It is time for dramatic change—for a second generation of environmental policy designed to tackle the new environmental challenges, make difficult choices among competing values, and preserve the environmental gains already achieved. This statement sets forth a new vision and strategy for protecting the environment and conserving our natural resources with principles to guide our actions, and an agenda designed to set the wheels of change in motion.

New Challenges

The new environmental challenges we face today—indoor pollution, toxic chemical effects on reproduction, and the degradation

of natural systems supporting human well-being, from ozone depletion and global climate change to the destruction of habitat and loss of biological diversity—were largely unrecognized 25 years ago.¹ Yet we also must confront old problems that have yet to be solved—polluted water and air, farm and suburban runoff, and exposure to chemicals in factories and on farms.²

The good news is that in facing these challenges, Americans are drawn together by the shared value of a healthy environment now and for future generations. Citizens and communities have become better informed, our local and state governments are now more competent, industrial leaders are generally more responsible, and our scientific and technological capacities are much greater than when Congress enacted the first generation of environmental legislation. The bad news is that we are saddled with a regulatory system that cannot deliver the environmental progress on these challenges that most Americans seek at acceptable economic and social costs.

The new environmental agenda demands more effective and efficient tools than those designed to solve the old problems. End-of-the-pipe technology mandates placed on industry—the work horse of existing pollution

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control law—cannot deliver the next big bang of environmental benefits. Nor can we conserve natural habitats simply by having the federal government buy more land.³ Instead, as a society we must undertake basic changes in the ways we use land, grow food, exploit energy, produce goods, and transport ourselves and our products.

This will require new terms for environmental debate, terms that can supersede the old contests between “us and them,” pitting communities against corporations and developers. Today’s problems arise from the everyday activities of all of us, as consumers and producers, which top-down regulation from Washington simply cannot encompass. Our task is to devise new ways of equipping people and communities to take more responsibility for conserving resources and harmonizing the demands of work, consumption, and the natural environment.

Legacy of the First Generation of Regulation

Between 1970 and 1990, the United States put in place a complex and powerful national regulatory system to protect our environment and natural resources; states followed the federal lead and created complementary systems.⁴ This first generation of laws and regulations rely primarily on a “command and control” approach, requiring business and local government to adopt federally pre-ordained technological solutions to reduce pollution and manage resources.⁵ These laws emphasize control of pollution after it has been produced and conservation of species after they are endangered, and direct state and local governments to play by federal rules. Finally, each law focuses on a single issue, so that the system misses important connections to other environmental and economic values and choices.

This first generation of laws has produced genuine progress and innovation. Even as the American population and economy have grown, placing greater demands on the envi-

ronment, water and air quality have improved dramatically in many places and in most others did not worsen. Cleaner air has brought enormous health benefits worth tens of billions of dollars more annually than the cost of those controls.⁶ Industry has substantially reduced its use of toxic chemicals and ozone-depleting chlorofluorocarbons.⁷ Rivers through major cities that were once too dirty to fish or swim in have been revived.⁸ Migratory bird populations have rebounded after two decades of decline.⁹ The loss of wetlands has slowed.¹⁰ And, perhaps the most important legacy of all, the success of these laws galvanized a durable public consensus for strong environmental protection.¹¹

Why Change is Necessary

The success of these laws, however, speaks mainly to problems of the past. As new environmental challenges beckon, we can no longer afford the misallocation of public and private resources which is an unintended consequence of command and control mandates, the continuing failure of Congress and the Administration to set reasonable goals and priorities, and the distance between central regulators and local problems. The flaws of the current system undermine the public consensus needed to address the complex array of new challenges.

A few examples illustrate the scale of misallocation: Because of split jurisdictions within the appropriations committees, Congress haggles over whether to cut an additional \$114 million in the enforcement budget for the Environmental Protection Agency (EPA), while \$10 billion in environmental spending by the Departments of Defense (DOD) and Energy (DOE) remain outside the bounds of the current debate.¹² DOE’s environmental budget alone is about the same as the entire EPA budget.

Congress has spent years wrangling over the numbing complexities of Superfund, a dysfunctional program which affects only about 5 percent of the \$135 billion spent

publicly and privately each year for pollution control.¹³ Further, while 90 percent of the roughly \$50 billion spent annually under the Clean Water Act goes to technology controls on point sources of pollution like factories and treatment plants, in most watersheds the greatest remaining threat to water quality comes from more diffuse sources like drainage from agricultural lands and urban development.¹⁴

The existing system of laws and regulations has already scored most of the easy gains. Squeezing still more environmental benefits from aging treatment plants and factories that already have significantly reduced their emissions, or from public lands and water reserved for species conservation, will require much higher costs to produce much smaller results than the earlier efforts.¹⁵

More progress at reasonable cost is possible, but *not* through more one-size-fits-all technology mandates from Washington that discourage efficiency and innovation from regulators and the regulated alike.¹⁶ Too many companies have simply done the minimum required in the simplest way allowed. Even as firms increasingly see the benefits of pollution control and prevention for their productivity, competitiveness, and image as responsible corporate citizens, their ability to craft innovative solutions is dampened by the inefficiencies and sometimes perverse incentives of the current command and control system.¹⁷

Central rule-making has also spawned a culture of litigation that undermines the ethic of civic responsibility and consensus building. Proposed regulations are now routinely greeted with lawsuits, and the courts have become the venue of choice for resolving environmental disputes. Moving disputes out of the courts would open the discussion of environmental ends and means to broader community participation. Communities want to shape their own future, which can be seen in the many consensus-building efforts initiated throughout the country to solve regional environmental problems.¹⁸

We do not accept the basic premise of these first generation laws that the federal government always knows best and, through regulatory fiat, can always do best. The present system was born out of the failures of the states' efforts in the 1960s to curb air and water pollution and the reckless exploitation of their natural resources. Since then, many regional authorities, states, and local governments have gained a real capacity for managing technical programs, often more competently than the federal government.¹⁹

As the inadequacies of central rule-making become more apparent, a new consensus for fundamental change in environmental policy is emerging. The outlines of this consensus can be seen in a new report by the President's Council on Sustainable Development.²⁰ Notably, the report sets forth national goals and indicators of progress toward achieving them. It further endorses a transition from adversarial to collaborative approaches; the use of performance measures and market incentives; community empowerment; the coordination of environmental, agricultural, transportation, and energy policies; and changes in tax and subsidy policies. However, the Council's report avoids altogether a key challenge: how, through democratic processes, should priorities among problems be set and tradeoffs among competing objectives reconciled.

Moreover, despite a growing consensus for change, the conventional left-right debate in Washington remains a formidable obstacle to reform. Republicans, misreading their 1994 congressional victory, launched an ill-advised effort to disable the machinery of environmental regulation. They were stung badly by the adverse public reaction, including polls that show that even most Republicans don't trust the GOP to sensibly reform environmental policy. For their part, Democrats and environmentalists make a grave mistake if they interpret the GOP rebuff as a vote for the status quo. Instead of guarding the old structures or rushing to dismantle them, the real challenge is to advance a better approach to achieving environmental progress.

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Principles for the Second Generation of Environmental Protection

Top-down, bureaucratic regulation will not solve the environmental challenges before us. It's time for a second generation of environmental action that will reflect the spirit of innovation and decentralization that animates the new economy and the entire Information Age. We propose a new "opportunity and outcome" approach that can score new environmental gains with higher economic efficiency and less political divisiveness than the current system. Here's what a shift from central rule-making to an opportunity and outcome strategy can mean:

- Opportunities and incentives will drive continuous and efficient improvements in environmental quality.
- Ineffective prescriptive controls will be supplanted by economic incentives that can spur innovation and control costs.
- Compliance with environmental laws will depend upon achieving environmental outcomes, not simply on adherence to a rigid process.
- Decisions about how to achieve these results will be placed with those closest to the problem.

- Businesses that achieve results will be rewarded with greater flexibility.

This opportunity and outcome strategy is based on five organizing principles that we believe must underpin a second generation of environmental policy:

1. Set goals and priorities

The nation's environmental goals and priorities should be set through a democratic process fully informed by sound science and economics. The current system constitutes the regulatory equivalent of flying blind: Of the 12 laws that guide the EPA programs, 10 contain virtually *no explicit environmental goals*, but rather are laden with prescriptions for control and details about process. (The Clean Water and Clean Air Acts are the two exceptions).²¹ For example, a goal related to safe workplaces might be: the number of industrial chemicals shown to be used safely will increase by 80 percent in the next 10 years. The EPA authorities are only a piece of the problem. Few explicit goals are found in the laws governing natural and biological resources.²² Rather than tackle the hard questions about how to reconcile competing goals

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and priorities, accumulated piecemeal over the last two decades, Congress prefers to micro-manage the regulatory process. In the absence of consensus about goals, it is almost inevitable that the debate over regulatory means should stalemate.

We should use benefit-cost analysis, risk assessment, and other analytical tools to shed light on the tradeoffs among competing environmental goals and between environmental and other values. Although formal benefit-cost analysis is neither necessary nor sufficient to design sensible environmental policy, it can provide a very useful framework for organizing and assimilating disparate and often nonmonetary information about health, safety, equity, and ecology. If properly done, benefit-cost analysis can help in the process of setting reasonable goals and priorities and generally raise the level of public debate.²³

Priority setting also should occur at the regional and local as well as national levels. Regional authorities, often frustrated by conflicting priorities set by federal programs, should set their own environmental agenda consistent with national goals and standards for restricting the movement of pollution between states and the creation of pollution havens.

2. Harness market forces and stimulate innovation

Our current regulatory system is both too prescriptive and too narrow in its scope to produce continued environmental improvement. To spur innovation and stimulate broad environmental progress, we should give individuals, firms, and government self-interested economic incentives for reducing the waste and pollution they generate and the nonrenewable resources they consume. Incentives should have the further effect of reducing litigation over regulations. Existing technology standards that are ineffective should be replaced with appropriate performance- and market-based incentives, including the strategic use of publicly available information. Public education on environ-

mental stewardship can have a powerful effect on consumer and producer behavior, as public health campaigns against cigarette smoking and for seat belt use demonstrated.

Market-based incentives should be selected carefully to fit the problem because one-size-fits-all makes no more sense for the new tools than for the old command and control regulation. For example, markets in tradeable emission credits can reduce regional air and water pollution in a cost-effective way by focusing the reductions on the firms that can do so most efficiently. Deposit-refund programs create efficient incentives for the safe disposal of hazardous products like car batteries and old tires. Pollution taxes on solid and hazardous waste can reduce waste generation.²⁴ Creating new property rights for species and habitat conservation, such as conservation easements, can begin to capture the value of environmental goods.²⁵ To function properly, each of these new market-based tools needs enforceable ground rules and clear environmental performance measures.

Creating economic incentives for environmental quality is not a new idea, but ideological resistance and bureaucratic inertia have relegated it to the margins of the debate. It's time to stop the foot-dragging and move market-based incentives to the mainstream of environmental policy, along with reforms for better environmental monitoring and greater public accountability. These approaches will work if politicians and regulators distinguish means from ends and recognize the environmental gains they can achieve with economic incentives and other alternatives to conventional regulation.

3. Decentralize decision making

As new technologies disseminate information beyond the control of central institutions, national government is no longer the only place where important environmental decisions can be reached. General access to environmental and economic data and analytical tools like geographic information systems²⁶ admit the greater public into discussions that have, in the past, been confined to technical

experts. Indeed, healthy debate about environmental priorities and tradeoffs demands that communities assume greater responsibility for managing their own environmental problems. However, the top-heavy bureaucracy of the current system actually frustrates the exercise of community responsibility and dampens the innovative spirit that those who are close to a problem can bring to the table.

The level of government best equipped to address an environmental problem should be determined by the geographic source and extent of the problem. Watersheds, aquifers, airsheds, and ecosystems can all be used to define the boundaries of particular environmental problems. Moreover, there are practical reasons beyond geography for devolving environmental decision making. Some highly diffused regional problems defy centralized solutions. In addition, community participation in decision making is critical in dealing with community specific problems such as indoor air pollution, responsible care of waste sites, and habitat conservation. And as the government's financial resources at all levels continue to shrink in the coming years, the case for more efficient forms of regulation become even more compelling.

These forms of devolution do *not* mean abandoning our national commitment to environmental protection. The federal government should continue to play a vital role, along with other levels of government, in setting standards, monitoring and enforcing compliance, and providing technical assistance and research. The operation of the Safe Drinking Water Act, for example, could be largely turned over to state and local governments, while the federal government could continue to provide technical information and guidance on standards. The federal government should target its limited resources to cross-boundary and international issues, such as greenhouse gas emissions, the quality of interstate waters, and the control of toxic chemicals. In this area, the EPA's support of the northeastern states' Ozone Transport Commission has been a model of collaboration.²⁷

4. Promote flexible means to achieve goals

We need a new compact between regulators and environmental managers—public and private—that rewards responsible stewardship with flexibility. Flexible or “alternative” compliance is a powerful tool along with market-based incentives and community empowerment, allowing environmental managers to devise their own means of achieving or exceeding environmental standards. Such flexibility can not only substantially reduce compliance costs, but also foster more cooperative partnerships and encourage greater innovation in meeting environmental goals.

Experience with flexible compliance, while still limited, has already produced promising results. The Netherlands now relies on a system of industry-wide covenants to achieve environmental goals through such nonadversarial means. Closer to home, Minnesota recently struck a bargain with the 3M Corporation permitting the firm to modify its production processes at a St. Paul tape factory in any way it chose, so long as it achieved *greater* environmental gains than the law required. The added flexibility reduced 3M's compliance costs while producing more benefits for the environment.²⁸

5. Measure environmental results

The opportunity and outcome strategy will require a greater commitment to scientifically sound and consistent environmental monitoring and research, with the federal government taking the lead. These strategic functions are prerequisites for rational public debate of goals, priorities, and results-oriented policies. Congress will need better data to carry out its broad, policy-setting role; and communities will need better access to this information to play their role in setting goals and priorities and in understanding what is happening within their own boundaries.

Unfortunately, the nation tolerates an embarrassingly poor base of environmental information. This is a demand problem—neither Congress nor the states have been willing to

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adequately fund data collection. Further, technology-based standards can sometimes ease pressure on governments to collect better information about the state of the environment. Ironically, technology-driven mandates were originally justified in the 1970s, in part, because national information about environmental

quality was too poor to implement anything else. With few exceptions, notably in air quality, we are not much better informed than we were 25 years ago. A better approach to environmental protection for the future will demand high-quality information about conditions and trends in the environment.

Initiatives to Advance the Second Generation Agenda

To translate these principles into concrete policies and actions, we propose seven initiatives, each entailing a radical departure from the way we do business today.

1. Move the debate about goals and priorities to center stage

Every level across the country, from local communities to the United States Congress, should participate in a new national debate about the proper goals and priorities for the next generation of environmental protection and natural resource conservation. And at the heart of this debate should be what tradeoffs we are willing to make among competing values and interests; these judgments should be made not by insulated judges and bureaucrats, but by those who can be held politically accountable.

Local efforts to set environmental priorities have already begun in some places, at least on a limited scale. For example: in south Florida, a Governor's task force on environmental restoration is addressing degradation in the Everglades; in southern California, the Natural Communities Conservation Planning effort has undertaken to conserve habitats for endangered species so that building morato-

ria can eventually end; and the states around the Great Lakes have formed a regional initiative on water quality.²⁹ For its part, the EPA has conducted comparative risk and priority setting exercises in 25 states. Each of these efforts has met with varying degrees of success but they still speak to the willingness of regional stakeholders to come together and set priorities for environmental action.

Washington needs to get its house in order and initiate a new process that can drive a truly national debate and set genuine national environmental goals. We propose a three-part strategy under which every other year Congress would consider a joint resolution outlining the nation's environmental and natural resources goals and priorities and enact legislation to carry it out.

First, the Administration should provide an initial draft resolution and supporting materials to justify its goals and priorities based on input from federal agencies, the states, blue ribbon panels, citizen advisory groups, and regional bodies. The National Academy of Sciences also could review the scientific assumptions underlying the draft resolution and make its own recommendations to Congress.

Second, Congress should take up the resolution using the recommendations made by

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the National Academy of Sciences on science-based environmental priorities, other risk and benefit-cost analyses, and information garnered from extensive public hearings to evaluate the draft. The environmental resolution would work within the broad spending limits set by the annual budget resolutions.

Third, the resolution should be followed by a reconciliation bill that would implement the approved goals and priorities, including changes in funding, new areas of flexibility, and resolutions for conflicts and inconsistencies among statutes. And every year, to clarify the choices about how Congress should allocate federal resources for the environment, a single subcommittee of the Senate and House appropriations committees should act on appropriations for all environmental, natural resources, and energy programs. Congress has never done this before.

2. Empower communities and regions to solve their own environmental problems

Communities and regions should be rewarded for good stewardship. In most places, the toughest challenges in environmental protection are rooted in local land use decisions, which also happen to be the traditional engine of economic development. Land use decisions with major environmental implications include highway and mass transit construction and investment, new housing development, agricultural drainage and storm water discharge, conservation of wetlands, aquatic and terrestrial habitats, siting and cleaning up waste, and protecting drinking water.³⁰ By their local character and intersection with private property rights, these decisions also are the most problematic for the current top-down system to cope with. Their solution will require the engagement of local citizens and landowners working to be better stewards of the land.

Congress should stop forcing communities to fit their land use decisions within narrowly drawn and fragmented federal mandates, and instead give them the flexibil-

ity to integrate their own land use decisions to produce greater environmental benefits. As a first step, Congress should waive procedural hoops and allow states to consolidate funding for relevant programs into block grants for those jurisdictions that choose to “opt in” to the integrated land use strategy. Moreover, these incentives should encourage local governments and regional bodies to explicitly set their goals and determine their priorities.

Local decisions would still be subject to federal performance standards in order to both prevent the degradation of resources outside a local jurisdiction and protect national resources such as national parks and refuges. Federal agencies would provide technical assistance in developing new performance measures and policy approaches such as market-based incentives, and independently monitor and assess the community’s environmental progress. In areas with substantial public land holdings, stronger local-state-federal partnerships will be needed. Communities that chose not to accept these responsibilities would continue to live under existing regulation. For those communities or regions that “opted in,” federal funding levels over time would be on a sliding scale tied to actual environmental performance.

3. Leverage publicly available environmental information

The keystone of a more flexible, outcome-based, decentralized system is credible environmental data, monitoring, and enforcement. The EPA should move to an information gathering and enforcement role much like a Securities and Exchange Commission (SEC) for the environment. Congress should direct the EPA to identify a full suite of environmental performance measures that are scientifically sound and understandable to the public. It should then direct the EPA to integrate these measures with the myriad reporting requirements of the various current statutes and consolidate them into single filings. These filings would be audited by independent, licensed third parties on the model

of the SEC in financial reporting, and made available online to the public (and, like financial reporting, proprietary information could be safeguarded). A firm's failure to file complete reports also would be made public. The likely market response would be an environmental stewardship rating system, in which firms would be independently rated by their environmental performance each year, along the lines of Moody's ratings of corporate creditworthiness.

This type of public reporting would have the further effect of helping to set enforcement priorities. We should reward or, at a minimum, not encumber those who voluntarily pursue and deliver timely, effective, results-oriented environmental management. The foot-draggers and less responsible firms, those most likely to have a low stewardship rating, would be the focus of conventional enforcement efforts. We should promote the practice of voluntary self-auditing in which firms seek their own information to determine how well they are meeting environmental standards. This would give responsible firms the opportunity to self-correct compliance problems before their rating got downgraded. Trade associations would have an interest in promoting these practices among their members as they seek flexibility in complying with industry-wide standards.

4. Use markets, not mandates

By focusing environmental regulation on real-world results rather than on compliance with rules, our approach to reform would elevate a host of market-based regulatory strategies including public information and product labeling. There is already substantial evidence that economic incentives can serve environmental goals. On a local basis, communities as diverse as Perkasi, Pennsylvania and Seattle, Washington have reduced garbage generation by 20 percent to 50 percent by charging fees for waste collection based on weight.³¹ On a broader scale, the sulfur dioxide trading program enacted in 1990 is reducing acid rain while saving at least \$2 billion to \$3 billion annually over the conven-

tional approach,³² and regional air emissions trading programs are under development in Southern California and the Northeast. Finally, the federal program to reduce the use of ozone-depleting chemicals is proceeding with a combination of emissions trading, charges, labeling, and phase out dates.³³ A similar market-based approach could be used to reduce greenhouse gases by combining emissions trading in greenhouse gases with congressionally fixed dates for overall national emissions reductions that are consistent with international agreements.³⁴

There is no dearth of additional ideas for environmental incentives. In fact, seven years ago the bipartisan Project '88 gathered scores of innovative market-based strategies that deserve to be tested at all levels of government.³⁵ Local governments should take the lead in waste reduction efforts. States should experiment with intrastate markets for water rights. At the national level, Congress should give the EPA and other agencies explicit statutory incentives to use such innovative tools, and require agencies that maintain command and control approaches to defend their decisions in reports to Congress.

5. Reward good stewardship with flexibility

We must reward responsible, effective stewardship with flexibility. In the first round of reconciliation, Congress should give the EPA the authority it needs to accelerate and expand its alternative compliance program (Project XL, for excellence and leadership), its Performance Partnership Grants program with the states, and its Common Sense sectoral initiative.³⁶ Similar authority for flexible compliance should be granted to the Department of the Interior to enter into stewardship compacts with regional authorities for habitat conservation and public lands management. In all these instances, small businesses and local governments will need technical assistance to be able to take advantage of the increased flexibility.

As an example of how flexibility could work, Intel Corp. has entered into a partner-

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ship with the EPA and the State of Oregon to explore flexible means of complying with the requirements of the Clean Air Act. Intel is demonstrating through pollution prevention practices that it can reduce air emissions at least as well as the traditional end-of-pipe controls. In return, Intel is liberated from the time consuming requirement of seeking changes in its air permit each time it makes even minor changes in its manufacturing processes.³⁷

Flexible compliance can free both public agencies and private firms from the burdens of regulatory bureaucracy. The quid pro quo is accountability. Those who deliver publicly verifiable environmental results should be allowed to meet their requirements largely as they choose. With credible monitoring, enforcement, and public access to information, any failure to live up to the bargain would be detected and privileges of flexible compliance revoked. Current regulation would remain as the default system for those unable or unwilling to move to the new flexible arrangements.

6. End government subsidies that undermine environmental goals

Congress should repeal or reform the wide array of spending subsidies and tax breaks that work at cross purposes with environmental protection and resource conservation. The examples are numerous: Public subsidies for irrigation water in the arid west were part of the federal government's development strategy for populating the west in the early part of the century.³⁸ However, encouraging growth in the west is no longer an explicit federal goal; it is happening on its own accord yet the subsidies remain.

Below market timber sales and mining patents on public lands, many of which are prime targets for conservation of endangered species habitat, continue to be egregious examples of federal policy at war with itself. Tax subsidies for fossil fuel development work against efforts to reduce greenhouse gas emissions. Timber sales, mining, and oil and gas development will still occur with the removal of subsidies and price supports, but there is no compelling national interest to bias the market decision in

favor of resource exploitation. Moreover, some of the billions of dollars currently expended through such subsidy programs and tax provisions could be used to support the new system of market-based, results-oriented environmental policy.

7. Radically restructure the EPA

The EPA itself must change in basic ways. The EPA is a mirror of congressional action over the last 25 years: each new law gave rise to a new office in Washington which in turn spawned more offices with a similarly narrow scope in the EPA's 10 regions. An organization built around a welter of distinct laws and top-down mandates cannot lead the way toward a new and radically different approach. Although many other government agencies influence environmental quality, the EPA is in the critical path of so many public and private decisions that letting its organizational problems fester will continue to be a serious drag on implementing fundamental change.

Congress should totally restructure the EPA to carry out the new challenges of flexible, outcome-based regulation and decentralized decision making. In a new organization, the EPA's regional offices should be rebuilt to integrate programs across types of pollution and economic sectors, and facilitate the devolution of authority to state and local governments where many local problems can best be solved. In these cases, the EPA must change its role from decision maker to information provider, and be a leader in facilitating the access of accurate environmental information to the public.

A lean headquarters should be designed to support common regional information needs, provide leadership on benefit-cost analyses, set risk-based procedures for testing toxic substances in commerce, focus on issues facing major economic sectors, and facilitate technical assistance, integrated standards, and enforcement. The "media" offices of air, water, and solid waste that presently dominate the EPA from top to bottom should be replaced by offices structured along sectoral-, place-, and substance-based programs.³⁹

Final Words

We yield to no one in our support for a clean, healthy environment and the vigorous conservation of our precious natural resources. However, it is clear to us that the old environmental debate, sharply polarized and dominated by an “us versus them” moralism, has reached a dead end. The first generation of environmental regulation born from this debate can no longer deliver the high level of protection Americans rightly demand in an effective, efficient, and democratically accountable manner. With this declaration, we begin the process of moving beyond that exhausted debate by describing a new and radically different approach for tackling our environmental problems. We welcome constructive suggestions from any and all Americans who appreciate the need for change and wish to join us in building a second generation of environmental policies, grounded in the new economic, social, and political realities of the Information Age.

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End Notes

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- ² U.S. Environmental Protection Agency (EPA). September 1990. *Reducing Risk: Setting Priorities And Strategies For Environmental Protection* EPA-EC-90-021. Washington, DC: U.S. Environmental Protection Agency (EPA); ———. February 1987. *Unfinished Business: A Comparative Assessment of Environmental Problems Overview Report*. Washington, DC: U.S. Environmental Protection Agency (EPA).
- ³ Natural Heritage Data Center Network. 1993. *Perspectives on Species Imperilment*. Arlington, VA: The Nature Conservancy. Two thirds of currently listed federal endangered and threatened species have at least half of their known occurrences on private lands.
- ⁴ The federal government did not lead all the states. In automobile emissions, for example, the federal government followed California's regulatory approach.
- ⁵ Many requirements in current law are cast as performance standards, but because reference technologies are incorporated into implementing regulations, these requirements become de facto technological mandates.
- ⁶ For early estimates, see Myrick A. Freeman, III. 1979. *The Benefits of Environmental Improvement: Theory and Practice*. Baltimore, MD: Johns Hopkins Press and Resources for the Future. More recent results are being developed in a benefit-cost study mandated under Section 812 of the Clean Air Act Amendments of 1990. Early results of this study were reviewed in a public meeting held by the EPA in June 1995.
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- ¹⁰ U.S. Department of Agriculture, Natural Resources Conservation Service. Revised January 1995. *Summary Report: 1992 National Resources Inventory*. Washington, DC.
- ¹¹ Everett Carll Ladd and Karlyn H. Bowman. 1995. *Attitudes toward the Environment Twenty Five Years after Earth Day*. Washington, DC: AEI Press.
- ¹² White House. December 14, 1995. *Vice President Gore Highlights Impact of Budget Cuts on the Nation's Water Quality*. Washington, DC: White House Press Office; *Budget of the United States Government Fiscal Year 1996*.
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- ¹⁶ Daryl Ditz, Janet Ranganathan, and R. Darryl Banks, eds. 1995. *Green Ledgers: Case Studies in Corporate Environmental Accounting*. Washington, DC: World Resources Institute.
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- ¹⁸Regions where this is occurring include: South Florida, Southern California, the Great Lakes, Platte River Basin, Pacific Northwest, and Austin, Texas. The Clinton Administration has played a critical role in supporting and participating in these regional efforts.
- ¹⁹National Academy of Public Administration (NAPA). April 1995. *Setting Priorities, Getting Results: A New Direction for EPA* (Chapter 4). Washington, DC: NAPA.
- ²⁰President's Council on Sustainable Development. February 1996. *Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment*. Washington, DC: Government Printing Office.
- ²¹The other laws are: Coastal Zone Management Act of 1972; Comprehensive Environmental Response and Cleanup Act (Superfund); Emergency Response and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); National Environmental Protection Act; Pollution Prevention Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; Toxicities Substances Control Act.
- ²²These laws include: Anadromous Fish Conservation Act; Coastal Zone Management Act of 1972; Endangered Species Act; Fish and Wildlife Conservation Act; Forest and Rangeland Renewable Resources Planning Act of 1974; Marine Protection, Research and Sanctuaries Act; Migratory Bird Conservation Act; Mining Law of 1872; Multiple-Use Sustained-Yield Act of 1960; North American Wetlands Conservation Act; Surface Mining Control Act of 1980; Taylor Grazing Act; Wilderness Acts; and many other problem- or project-specific statutes.
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- ²⁹U.S. Environmental Protection Agency (EPA). 1995. *Great Lakes Water Quality Initiative, A Summary*. EPA-820-S-95-001. Washington, DC: U.S. Environmental Protection Agency (EPA); State of Florida, Office of the Governor. March 3, 1994. *Governor's Commission for a Sustainable South Florida*. Executive Order 94-54; California Resources Agency and the Department of Fish and Game. 1995. *Natural Communities Conservation Planning (NCCP): Innovation in Multi-Species Protection in the Coastal Sage Scrub Habitat of Southern California*. Report to the Legislature. Sacramento, CA: California Resources Agency.
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