

PUTTING OUR HABITAT IN ORDER

Environmental Priorities for the Next Administration

JAMES M. STROCK

When the U.S. Environmental Protection Agency was established in 1970, the nation was scarred by widespread environmental degradation, which in many cases led to health and welfare threats of crisis proportions. In Cleveland, Ohio, the center of our industrial heartland, the Cuyahoga River literally exploded into flames. Vast areas of the Atlantic Coast and the Great Lakes shoreline were closed to swimming and fishing. The shores of the Potomac River near Washington, D.C., were marked by signs warning citizens not to touch the water. Sixty million people across the nation used water treatment systems that discharged raw sewage, including more than two million tons per year of organic waste, into surface waters. Wetlands—which moderate floods and droughts by absorbing peak flows and then releasing waters in subsequent low-flow periods, and protect water quality through silt absorption and removal of pollutants—were being devoured by helter-skelter development. Between 1950 and 1970, Florida lost 169,000 acres, and California nearly 50,000 acres. In 1970 alone, more than 30 million pounds of the pesticide DDT were used, despite the well-known warnings of Rachel Carson's *Silent Spring*, which had dramatically fostered public environmental awareness. Indeed, DDT residues in human tissues were measured as high as eight parts per million, and the pesticide was linked to the imminent extinction of birds of prey, including America's great national symbol, the bald eagle.

Sailboats on the Potomac

In some areas the nation's environmental achievements since 1970 are so visible that they bring to mind the inscription in honor of Sir Christopher Wren in St. Paul's Cathedral, London: "If you seek for a monument, gaze around." Thousands of miles of rivers, lakes, and streams have been restored for human uses. The many sailboats on the Potomac are but one testament to the progress. The air in our cities is much cleaner than it was two decades ago: Lead levels have declined by 87 percent since 1977; sulfur dioxide levels by 37 percent; particulates by 23 percent. Even the ubiquitous pollutants ozone and carbon monoxide, recently in the news because of continuing problems in many areas, are down by 13 percent and 32 percent, respectively, in the same period. Today, 127 million Ameri-

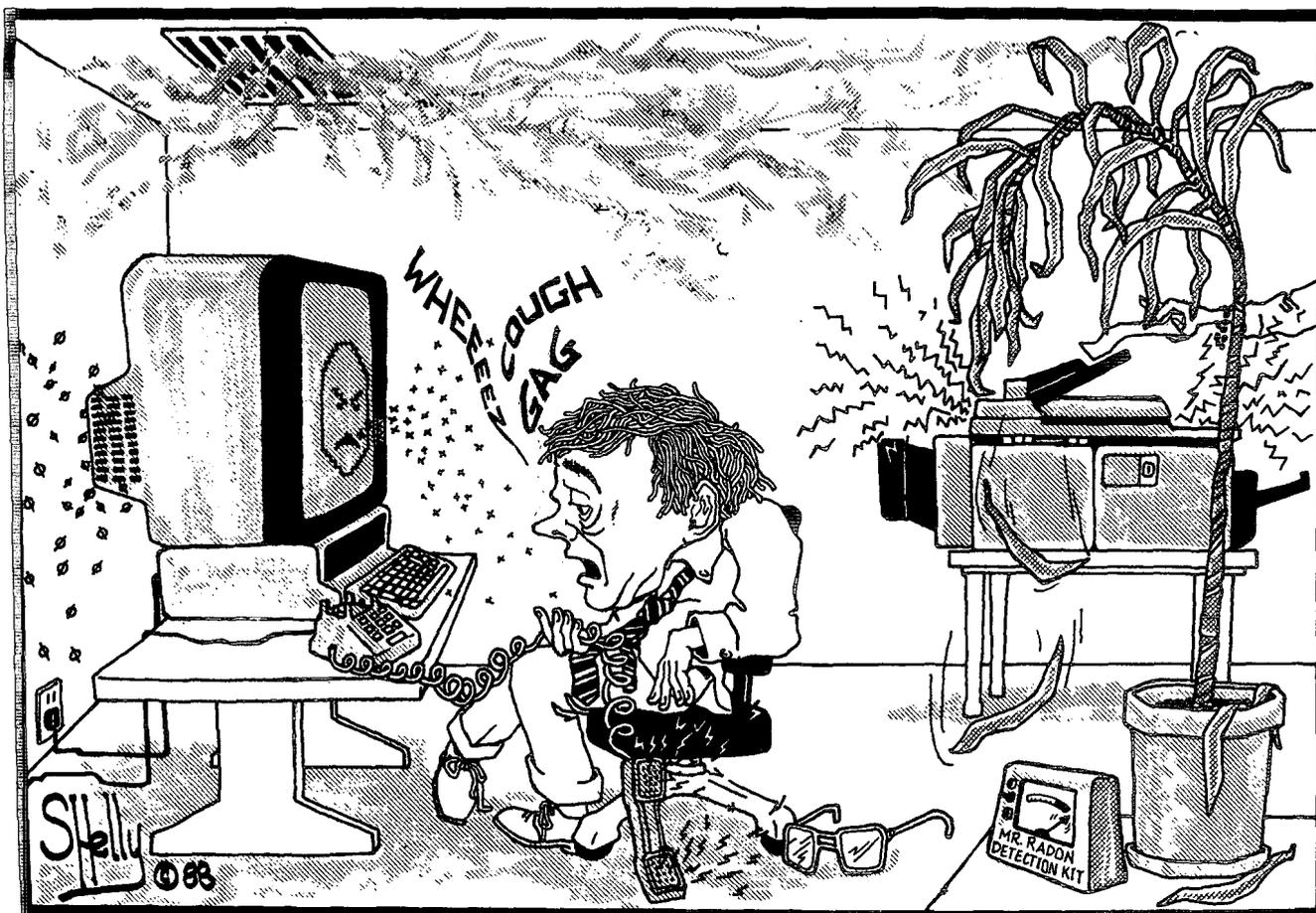
cans are served by adequate public sewage treatment systems—up from 85 million in 1972. What is more, despite the gloomy prognostications of some environmentalists and industrialists alike, these environmental achievements have taken place in a time of significant economic and population growth. There are 20 percent more people in the United States than there were 20 years ago, and the inflation-adjusted gross national produce has increased by more than 50 percent.

The triumphs of environmental policy, however, are also accompanied by unfulfilled promises and unmet needs. The public is increasingly questioning the effectiveness of the nation's largest environmental program, the Superfund hazardous waste cleanup effort. More generally, EPA itself now stands at a crossroads as its research points to the need to redress problems that do not readily respond to the command-and-control regulation favored in the 1970s. Emerging issues such as radon gas and other indoor air pollution in private homes, and global atmospheric changes are harbingers of a new era. EPA "best available technology" and "zero discharge" policies that have sharply reduced conventional pollutants such as particulates and untreated sewage may be less appropriate for toxic contaminants, which cannot be totally eradicated in the face of unavoidable resource and technological limitations.

Eco-Conservatism

Curiously, as the inadequacy of the existing environmental regulatory framework becomes increasingly apparent, too few conservatives are taking part in the dialogue. Perhaps this is because the term "environmentalism" has for some become a rubric for liberal nostrums in areas ranging from nuclear war (the ultimate "environmental" crisis) to an exhumed Luddism (holding that the activities and desires of modern men and women are inherently destructive

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Shelly Fischman for Policy Review

The most serious environmental problems of the 1990s, such as radon gas and indoor air pollution, do not readily respond to the command-and-control regulation favored in the 1970s.

to the natural environment).

One suspects, however, that relatively few liberals take such positions seriously today, and conservatives should not grant them a respect they do not deserve. Just as the nation's defense debate has been hobbled by the proclivity of prominent liberals to decry the nature of war itself or to oppose every new weapons system as a matter of course, the knee-jerk rejection of environmental concerns by many conservatives has harmed natural resources policy. Such a stance leaves the assumptions underlying the debate unexamined.

For Republicans—whose leaders include the two presidents most responsible for our nation's modern environmental policy, Theodore Roosevelt and Richard Nixon—not to retreat from concern for the environment not only avoids facing the future, but also amounts to turning backs on the best of the past. Indeed, the historical antecedent of the current environmental movement is the conservation movement of earlier generations—and the link between conservation and conservatism is manifest in their common derivation.

Ruckelshaus's Good Idea

The American people hold environmental protection to be among the most important of government obligations. For example, a 1986 CBS News-*New York Times* poll found agreement, by a margin of more than 2 to 1, with the statement: "Protecting the environment is so important

that requirements and standards cannot be too high, and continuing environmental improvements must be made regardless of cost." Similarly, a 1986 Harris Survey reported even greater opposition to "cutting [federal] funds to be used to clean up the environment and toxic waste dumps" in order to meet the Gramm-Rudman deficit reduction targets.

Nonetheless, for environmental protection—no less than for national defense and other areas of required federal government action—governance implies choice, and we must provide the public with the means to make knowledgeable, voluntary choices in environmental policy. The most promising method, urged with force by William D. Ruckelshaus during his second tenure as EPA administrator, is to institutionalize risk-assessment methodologies—relating risk to health, environment, and public welfare—to determine priorities in environmental protection.

This task is urgent, because our current environmental budgetary priorities are out of sync with the comparative risks presented. For example, the federal government is marshaling far too many budgetary resources for hazardous waste cleanup, despite mounting evidence that the risks presented are of a lesser magnitude than other environmental threats, such as radon gas exposure, stratospheric ozone depletion, global warming, accidental chemical releases, and water pollution from agricultural sources.

As EPA stated in its recent report, *Unfinished Business*:

A Comparative Assessment of Environmental Problems, there are many reasons why risk assessments may vary from policy priorities. In some situations, factors other than risk (such as the availability of remedial or protective technology) may be important. Calculations of relative risk nationally may not provide accurate indicators of the risks found in local areas, where, for example, a Superfund site is located or wetlands are endangered. Most important, the existing priorities appear to follow public opinion. A detailed, two-year Roper Poll cited by the agency, and consistent with other available data, found the public most concerned about chemical waste disposal, water pollution,

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chemical plant accidents, and air pollution, in that order. On the other hand, indoor air pollution and global warming, for example, are viewed by the public as relatively low risks, contrary to a growing body of scientific research.

Outmoded Statutes

Major political questions are at stake in the debate over whether to use risk assessment in environmental decision-making. Most federal environmental statutes do not contemplate a balancing of risks—whether relating to health, welfare, or ecosystem protection—but instead focus on the required, uniform utilization of best technology by producers of specified pollutants. Further, the statutes tend to be medium specific, relating to air and water separately, for example, and there is no explicit notion of comparing risks as they appear in different media. If scientific risk assessment begins to play an important role in setting priorities, then the mechanistic application of uniform, best technology requirements will come under increased scrutiny within the separate statutes. It will also become apparent that the existing divisions between the statutes based upon separate media are largely the result of historical accident, and efforts to integrate the scattered statutory status quo into a unified, organic environmental statutory system will move from the desks of academia to the podiums of workaday politics.

Because it would throw into relief existing divisions of authority between the EPA and other health and safety regulatory bodies, the application of risk principles may also lead to a reconsideration of the proper purview of “environmental” law and regulation generally. Already,

the lines are being blurred between the domains of EPA, the Occupational Safety and Health Administration, the Food and Drug Administration, and the Consumer Product Safety Commission, for example. In the face of new analytical tools and knowledge, statutory divisions based solely on place of exposure—such as workplace, products, environment, and diet—rather than the overall risk presented by specific pollutants, are becoming outmoded.

Five-Mile-per-Hour Speed Limit

Predictable criticisms will be raised against the use of risk assessments in environmental policy-making. Some observers express concern that human health effects from low-level toxic exposures cannot be satisfactorily extrapolated from laboratory studies based upon higher level exposures to animals. Others worry that, as a practical matter, risk assessments may include assumptions that lead ostensibly “value-free” mathematical calculations toward politically predetermined positions. More fundamentally, some advocates urge that, as a matter of principle, comparative risk measurements have no proper place in the environmental debate. Indeed, a few explicitly reject the notion of choice itself as a legitimate factor in environmental debate, arguing that all known sources of pollution must be fought equally, toward a goal of zero residual risk, without respect to budgetary limitations.

This view, representing what may be the most widespread and significant criticism of the institutionalization of risk-based decision-making, ignores that the American public has long made sophisticated judgments about relative risk in many settings, including some directly relating to public health and safety (the federal highway speed limit debate is an obvious and oft-cited example; clearly a five mile per hour speed limit on federal highways could cut risk far below the levels presented at 55 or 65 miles per hour limits). Such critics correctly foresee that there may be situations where risk analysis could lead to popular support for a political decision to remove the greater degree of risk in a given situation, while leaving behind residual risk that could be removed only at a very high cost, if at all. The key is to sufficiently inform affected members of the public so that they can judge for themselves, in the context of environmental protection needs generally, whether to assume any such residual risks.

Unless resources are unlimited—which is highly unlikely—then priorities have to be set for environmental protection. As with national defense debates, one need not be uncommitted to the goal of protecting the public to raise questions about where public resources should be targeted; indeed, to do otherwise is, in the words of Churchill, to make “the perfect enemy of the good.” When resources are not utilized in the best conceivable manner in one area they become unavailable for use in other, even more significant areas. Those aspiring to political leadership must recognize that, irrespective of the state of public opinion today, the American people will rightly hold policymakers accountable if current environmental protection strategies ultimately come to be viewed as a modern Maginot line, effective only in the theoretical context of past battles that we will not face in the future. In particular, the massive federal statutory and budgetary commitment to

hazardous waste regulation, juxtaposed against the paltry attention given to indoor air pollution threats, merits careful public examination.

Superfund, Bonanza for Lawyers

If an American has heard of one environmental statute, it is probably Superfund. Poll after poll has shown that chemical waste disposal tops the public's list of environmental threats. The specter of toxic chemicals leaking into drinking water is too frightening to be ignored. Further, persistent reports of clandestine dumping of such chemicals by treacherous environmental predators, sometimes linked to organized crime, has led to nothing short of terror in victimized communities. To meet the public demand, the Congress dramatically expanded the Superfund statute in 1986, increasing the law from 44 to 132 pages in length and raising federal funding from \$1.6 billion to \$8.5 billion over five years.

Observers on all sides are concluding that Superfund is simply not working, despite the infusion of resources provided by Congress. Beset by conflicting political cross-currents, the Superfund program is marked by fissures that, taken together, point toward severe structural distress:

- The EPA has identified nearly 1,000 sites for its National Priorities List (NPL) of the most serious environmental threats that require federal attention—yet by the agency's own reckoning, only 24 sites have been cleaned and only 13 have been removed from the NPL.

- Average cost per cleanup of sites is now expected to be between \$20 and \$30 million, more than double the figure prior to congressional reauthorization and revision of Superfund in 1986, so that the cost of cleaning the current NPL sites alone will likely exceed \$20 billion. In looking at the entire universe of hazardous waste sites, the congressional Office of Technology Assessment has predicted that the combined cost to government and industry could exceed \$300 billion—and a respected OTA representative recently allowed that even this figure may prove to be far too low.

- Extravagant "transaction costs," including fees for lawyers and technical consultants, at some sites are almost as expensive as the actual cleanup.

- To meet an ambitious series of congressionally imposed schedules for cleanup progress, EPA has had to resort to short-term, immediately available cleanup methods that do not permanently destroy the hazardous substances. Such an emphasis may lead to only temporary remedies that will themselves become future Superfund problems.

There is no single, simple change of government policy that could meet these challenges. While some industry and environmental advocates have suggested wholesale revision of the Superfund statute, such a course would be politically unrealistic until existing statutory provisions have been more widely used and accompanied by EPA management reforms.

The most immediate need for change is in the enforcement program. Superfund includes some of the most extraordinary enforcement authorities in American law. Liability under the act is "strict, joint and several, and retrospective," broadly meaning that any single disposer of

hazardous substances may be held responsible for the cleanup of an entire site, irrespective of fault, causal link to environmental harm in question, or the number of additional parties who also may have contributed to the site in question, or the fact that the disposal at issue occurred prior to the passage of Superfund (perhaps even in compliance with then-existing requirements).

The government has two basic alternatives in enforcing the strictures of Superfund. It may initiate a response at a site itself (probably at an expense far greater than if PRPs—potentially responsible parties—undertook the identical action with private contractors under their own supervision), and subsequently seek to recover those costs (including government legal fees) from the PRPs. Alternatively, and much less commonly in practice, the government may order PRPs themselves to undertake a response

The environmental negligence of the Soviet Union and Eastern Europe has measurable deleterious effects on nearby countries.

action under a sword of potential treble damages for violation. This allows the government to pick small numbers of litigation targets, who would then have the right to seek to recover from PRPs who are "hiding in the weeds" in addition, private suits. Despite the threat inherent in this remarkable legal armory, PRPs are not stepping forward and organizing cleanup efforts to nearly the degree needed. Many environmental group and industry advocates agree that the agency must make the threat of enforcement much more credible to encourage voluntary settlement agreements—which, in the long term, hold the promise of less litigation overall. Today, all too many PRPs appear to calculate that, given the enormous liabilities at stake, they are best off remaining outside settlement efforts, awaiting the outcome of a government suit against named PRPs, gaining time or perhaps less liability exposure while awaiting a subsequent contribution suit from the parties initially sued by the government.

The government should increase settlement incentives on two tracks: More parties should face initial suit by the government, despite the expenses attendant upon such suits; and, at the same time, EPA should continue ongoing efforts to craft positive incentives for settlers, such as insurance mechanisms for future expenses at sites, which would in turn be unavailable to recalcitrant parties.

Observers may differ on whether the existing Superfund regime can be made to work more effectively, but there will be no way for the public to know for sure unless the enforcement authorities are used to the maximum possible extent. An invigorated enforcement program would aid PRPs seeking settlement incentives and would highlight remaining management, technical, technological, and legal issues. Most important, it would finally allow the law to be

judged on its own merits in achieving environmental goals, providing a basis for subsequent congressional efforts to make the program more effective.

Thinking Globally

There are growing reminders of the interconnections between the actions of individual nations on the global environment as a whole. As the pace of industrial activity and commercial intercourse has continued its ineluctable acceleration, so have the international consequences become more apparent. In North America, there are the well-publicized questions relating to "acid rain" in our relations with Canada, as well as air and water pollution issues with Mexico. Far beyond our borders we have also witnessed the tragedy of the Union Carbide disaster in Bhopal, India, with which we are connected through corporate paternity, as well as the Soviet nuclear disaster at Chernobyl, which some scientists suggest may have morbidity effects as far away as the American Midwest. The so-called greenhouse

Litigation-related costs at some Superfund sites are almost as expensive as the actual cleanup.

effect, whereby an accumulation of man-made gases, including carbon dioxide, methanol, and nitrous oxide, could increase the earth's temperature, may affect many nations, including the United States. Coastal areas may be threatened by rising sea levels and climate changes may alter patterns of water availability, particularly in the Midwest. Similarly, there is widespread agreement, reflected in the Montreal Treaty, approved by the Senate on March 14, 1988, that the emission of chlorofluorocarbons and halons has depleted the stratospheric atmosphere, further contributing to global warming trends.

The Montreal Treaty is particularly significant because, as noted by Richard Benedick, the principal U.S. negotiator, it is the first time that nations are attempting to impose emissions controls on a significant industrial sector in anticipation of, rather than in response to, significant damage to human health and the ecosystem. This achievement is particularly striking, because it points toward several factors that should also apply in the future. First, the United States remains indispensable to the resolution of global environmental issues, both because of the relative size of our economy and our unique ability to contribute to necessary research. Second, global environmental policy, like that viewed solely in domestic terms, often requires that decisions be made on the basis of incomplete knowledge, because of the grievous risks posed by lack of action. This suggests that our government must make research of international ecological problems a high priority, particularly where, as suggested in some global warming

scenarios, the effects of environmental change may harm American interests while benefiting some other nations.

The United States must also continue to expand ongoing efforts to ensure that the environmental needs of the Third World are not trampled in the midst of development efforts. It is clearly in the American national interest that organizations such as the World Bank, the Agency for International Development, and the Inter-American Development Bank take into account such issues as ecosystem protection in making development recommendations. The destruction of wetlands in South America, for example, not only imperils the agricultural resources of the nations in which they are located, but also adds to global climate concerns.

The United States should also assume a position of leadership in Third World environmental efforts more generally. Given the international interconnections of environmental concerns, and the understandable hesitation of less developed nations to pay heed to environmental concerns in their rush to escape immediate problems of poverty, pestilence, and disease, there is no alternative. In this undertaking, the U.S. must also pressure Communist nations, whose environmental records are generally horrendous. In particular, the environmental negligence of the Soviet Union and its Eastern European satellites has immediate and measurable deleterious effects on nearby countries.

Bigger Research Budget

Strong leadership is required in the years ahead as the environmental agenda changes rapidly. In order to provide such leadership, we should revive the White House Council on Environmental Quality, or otherwise establish a center for executive branch policy coordination. Responsibility for environmental decision-making is now scattered among a host of executive agencies, each with separate motivating concerns and history. Congressional authority is also diffused—EPA reported in 1986 that 15 House committees and 21 subcommittees, as well as 10 Senate committees and 12 subcommittees exercised jurisdiction over the agency in the 99th Congress. The division of authority between and within the legislative and executive can only be rationalized through presidential initiative.

It is also essential that budgeting for environmental research and data collection and monitoring, both domestic and international, receive greater attention than in the past. Some conservatives, notably David Stockman, have resisted increased funding for environmental research, ostensibly on the grounds that it merely provides new avenues for bureaucratic growth. However, if risk assessment is to become a major factor in environmental decision-making, research and data collection will be matters of the highest priority.

Finally, it is necessary that conservatives wholeheartedly enter the environmental debate of our time. Voices for reasoned choice and democratic accountability are desperately needed in this arena, where, as Theodore Roosevelt so often reminded us, we serve as the stewards of the interests of coming generations presently unable to speak in their own behalf. 