

Environmental



Politics

AND

Policy

Walter A. Rosenbaum

Environmental Politics and Policy

Fourth Edition

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Preface

Political prophecy is a notoriously risky business, but anyone who writes a book about contemporary environmental policy inevitably becomes a practitioner. One becomes acutely aware that education is a gamble with the future: a wager that what one teaches—or most of it—is what the next generation will need to know. This book is addressed in good part to an audience that will live mostly in the next century, its imagination and ambition resolutely fixed on tomorrow. Thus, writing thoughtfully about current environmental politics compels a fixed gaze on the horizon, a constant reflecting not only on what is but also on what may be—what will matter to those on the outward journey.

I intend that this new edition of *Environmental Politics and Policy*, at the very edge of a new century, reflect a sensitivity to the magnified importance of the future in weighing the state of current environmental affairs. I have retained from previous editions the fundamental conceptual and factual elements that colleagues and students have indicated through the years are especially useful, so readers will find considerable continuity between this edition and the three previous ones in content, organization, and style. As before, the book emphasizes the political context of environmental issues and the political implications of policy decisions by using the policy cycle and policy process as a conceptual framework. The use of substantive policy issues—air and water pollution, hazardous waste, and more—as an organizing principle remains as well. I continue to believe that a practical example is worth a paragraph of abstractions, so I have included an abundance of contemporary illustrations and case studies to keep the discussion fresh and interesting. I have also retained current appraisals of environmental quality in the analyses of specific policy domains, brief descriptions of the important substantive regulatory policies in each major policy area, and suggested readings. Of course, data and other information have been updated where necessary.

I have also made significant changes to this edition. The most important is the addition of Chapter 10, a wholly new discussion of the structure of international environmental politics and its growing importance

to the United States. The inclusion of this chapter represents my belief that regional and global environmental politics will become increasingly important to Americans in the next century and, in the process, will profoundly alter the character of domestic environmental policy making. Other additions include an expanded discussion of environmental justice (in Chapter 4) and a review of economic alternatives to command-and-control regulation (in Chapter 5) in recognition of their growing importance in current policy debates. Associated with the discussion of economic approaches to regulation is an early appraisal of experience with emissions trading in air pollution. A new discussion of endocrine disruptors has been added to the chapter on hazardous and toxic substances to illuminate an emerging problem likely to increase in importance within the decade. In the same chapter, a discussion of Superfund—everyone's favorite regulatory disaster—emphasizes important improvements in recent years that may change the tenor of debate over this hugely expensive undertaking. Finally, the narrative now embraces events and issues arising from Bill Clinton's presidency.

I am indebted to my reviewers, Gordon Bennett, William R. Lowry, and Dennis Pirages, for their many constructive contributions to the new edition and to my editor, Tracy Villano, for her meticulous and thoughtful review of the manuscript. Mistakes of omission and commission are—alas!—still mine. Brenda Carter, as always, has been a source of continual encouragement and support for the book. This new edition marks a collaboration of almost twenty years with CQ Press for which I am most appreciative.

*Environmental
Politics
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Fourth Edition

Contents

Tables, Figures, and Boxes	ix
Preface	xi
1. <i>The Politics of Regulatory Discontent</i>	1
Prelude: "Operation Deep Freeze"	1
The Realities of Environmental Governance	4
"Deeply and Fundamentally Flawed"	10
From Era I to Era II	11
Environmental Era II: A New Mood, a Different Agenda	13
The Environmental Movement	28
Environmentalism and Its Critics	37
The Public and Environmentalism	41
Conclusion	45
Suggested Readings	49
2. <i>The Politics of Environmental Policy</i>	50
The Policy Cycle	52
Constitutional Constraints	55
Incrementalism	58
Interest-Group Liberalism	59
Political Feasibility	61
The Political Seasons	62
The Institutional Setting	69
The Administrative Setting	82
Conclusion	92
Suggested Readings	95
3. <i>Making Policy: Institutional Challenges</i>	97
Institutional Problems	98
EPA's Organizational Structure	107
The Impact of Federalism	113
Bureaucratic Pluralism and Competition	117
Conclusion	118
Suggested Readings	120

4. <i>To Govern Is to Choose:</i>	
<i>Risk Assessment and Environmental Justice</i>	122
The Alar Scare	123
Risk Assessment and the Limits of Science	125
What Risks Are Acceptable?	138
Risk and Discrimination: The Problem of Environmental Justice	144
The Politicizing of Science	148
Gambling with the Future	150
Conclusion	152
Suggested Readings	156
5. <i>More Choice: The Battle over</i>	
<i>Regulatory Economics</i>	157
The Benefit-Cost Debate	158
Using the Marketplace Incentives	169
Conclusion	175
Suggested Readings	177
6. <i>"Command and Control" in Action:</i>	
<i>Air and Water Pollution Regulation</i>	178
Command and Control	179
The Political Anatomy of Regulation	184
The Nation's Air Quality	189
The Clean Air Act of 1970 and Its Amendments	192
Regulating Water Quality	203
Conclusion	220
Suggested Readings	222
7. <i>A Regulatory Thicket: Toxic and</i>	
<i>Hazardous Substances</i>	223
An Ambiguous Inheritance	224
The Rush to Regulate	234
Federal Law: Regulation from the Cradle to the Grave?	241
The Regulatory Thicket	246
Conclusion	256
Suggested Readings	259
8. <i>Black Gold and Nuclear Dreams:</i>	
<i>The Politics of Energy</i>	261
Energy Consumption	262
Imported Oil and Fossil Fuels: A Perilous Combination	263
Nuclear Twilight or Second Dawn?	266

The Nuclear Regulatory Commission in the Middle	277
Stubborn Hope: Breakthrough Technology, the White House, and the Greenhouse	279
The Cold War's Wasteland: Nuclear Weapons Facilities	281
Black Gold	286
Conclusion	292
Suggested Readings	296
 9. <i>Our 700 Million Acres: The Battle for Public Lands</i>	
Public Lands	297
The Public Domain	298
Conflicts over Multiple Use	302
Energy and Public Lands	314
The Fate of the Forests	319
How Much Wilderness Is Enough?	328
Conclusion	331
Suggested Readings	333
 10. <i>The United States and Climate Diplomacy: The Emerging Politics of Global Environmentalism</i>	
Transboundary Environmental Politics	336
Climate Diplomacy: Ozone Politics and the Montreal Protocols	349
Climate Diplomacy: Acid Precipitation	352
Climate Diplomacy: Climate Warming	355
Conclusion: The End as the Beginning	361
Suggested Readings	364
 List of Abbreviations	 365
Index	369

Tables, Figures, and Boxes

Tables

1-1 Major Toxic Chemical Laws Administered by the EPA	27
1-2 Estimated Total Capital Expenditures for Pollution Control by U.S. Non-Farm Industries, 1972–2000	28
1-3 Reported Membership in Seven Environmental Interest Groups, 1989, 1992, and 1997	35
4-1 How Experts and the Public Estimate Environmental Risks	129
6-1 National Ambient Air Quality Standards	182
6-2 Health Effects of Regulated Pollutants	190
6-3 Percent Change in National Air Quality Concentrations and Emissions, 1987–1996	191
6-4 Areas Classified as “Extreme Ozone” and “Serious Carbon Monoxide” Nonattainment Areas Under the 1990 Amendments to the Clean Air Act	195
6-5 Major Sources of Groundwater Contamination Reported by States	214
7-1 Chemicals or Industrial Processes Associated with Cancer Induction in Humans	227
7-2 TRI Releases by State or Territory, 1995	232
7-3 Hazardous Waste Sites on the National Priority List, by State or Territory, 1995	234
7-4 Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, by State or Territory, 1995	248
9-1 Total and Federally Owned Land, by State, 1993	300

Figures

6-1 Percent and Quality of Waterbodies Assessed, 1995	205
6-2 Leading Stressors Causing Water Quality Impairment	206
6-3 Estimated Share of Nitrogen Delivered to Streams by Point and Nonpoint Sources	211
7-1 Distribution of TRI Releases, 1988–1995	230

x *Tables, Figures, and Boxes*

8-1 Commercial Nuclear Power Reactors in the United States, December 31, 1995	269
8-2 Location of Spent Nuclear Fuel and High-Level Waste, 1996	273
8-3 Historical and Projected Cumulative Volumes of Untreated High-Level Waste in Storage	283
8-4 Projected Cumulative Number of High-Level Waste Canisters	284
9-1 Percentage of State Acreage Managed by the U.S. Bureau of Land Management	304

Boxes

2-1 Congressional Committees and Their Jurisdictions	72
2-2 Federal Agencies with Environmental Regulatory Responsibility	74
2-3 Major Responsibilities of the EPA	84

Chapter 1

The Politics of Regulatory Discontent

The difficulty of converting scientific findings into political action is a function of the uncertainty of the science and the pain generated by the action.

—William D. Ruckelshaus, former administrator
of the Environmental Protection Agency

Late in 1995 federal officials in Miami, Florida, announced an important milestone in their continuing fight against the illicit trade in controlled substances. Irma Henning, a Ft. Lauderdale shipping company executive, had been caught attempting to conceal 4,000 pounds of an illegal substance with a street value of \$32 million—the largest single seizure of its kind in U.S. history. Her felony would cost her \$250,000 in fines and five years in jail, but U.S. Customs agents acknowledged that such smuggling had become pervasive. “We know there are bigger people out there,” observed one agent. Several months later, after four additional Miami smugglers were prosecuted on similar charges, the U.S. Attorney’s Office admitted that Miami had become “a convenient location for this kind of trade. We are a major port and a major hub for the Central, Latin and South American markets.”¹ To readers of *U.S.A. Today* and other wire services reporting the story, it all might at first have seemed familiar, a tired variation on *Miami Vice*. But this was different: the criminals were freon smugglers.

Prelude: “Operation Deep Freeze”

The illicit freon trade, already spreading along the Mexican and Canadian borders, is expected to increase as federal law gradually eliminates domestic freon production. Less than a decade ago, freon was a commonplace, an essential chemical with hundreds of industrial and

2 *Environmental Politics and Policy*

commercial uses and a component in practically every home refrigerator and automobile air conditioner. Now freon is a chemical contraband because environmental science has discovered that it is also an efficient, extraordinarily durable atmospheric pollutant.

The swift metamorphosis of freon from wonder chemical to global menace is one measure of how quickly and pervasively the social consciousness of Americans has been transformed by environmentalism. The politics of that transformation has profoundly affected our economic and political life. The powerful national and international forces that have emerged in the process are likely to shape American environmental policy into the next century. Awaiting them on the other side of that threshold are some of the most daunting challenges to environmental protection yet.

Federal officials estimate that the street value of freon smuggled through South Florida now approaches that of the region's narcotics trade. A massive crackdown on the illicit freon trade in 1995, known as Operation Cool Breeze, was the first of many such operations.² The soaring value of freon and the social repercussions that follow demonstrate how inextricably entwined the politics and science of national and international environmental management have become, and, in the process, how deeply and directly global and domestic ecological policies affect the average American economically.

From Wonder Chemical to Contraband

The domestic cost of freon is propelled upward by a U.S. agreement to join 140 other nations in an international treaty to eliminate rapidly the worldwide manufacture and use of chlorofluorocarbons (CFCs), now recognized as a principal cause of the destruction of the earth's stratospheric ozone layer. By the late 1980s atmospheric scientists, armed with convincing evidence that CFCs and related chemical compounds were dangerously reducing the ozone (most dramatically illustrated by the famous "ozone hole" over Antarctica), were warning world leaders that continued depletion of stratospheric ozone would mean sharp worldwide increases in skin cancer, eye diseases, crop failure, and other major ecological damage. In response, in 1987 140 nations signed the Montreal Protocol committing them to reduce CFC production by 50 percent by 1998. When evidence pointed conclusively to continuing rapid deterioration of stratospheric ozone, the developed nations agreed to eliminate all their CFC production by the year 2000. In 1992, they advanced this target date to 1996. Developing nations, however, were given an additional ten years to eliminate their CFC production in recognition of the greater technical and economic difficulties they would encounter in meeting this goal.

Global Protection Hits Home

The United States met its CFC emission control targets by rapidly eliminating the domestic production of new freon and by assessing a graduated tax on available domestically manufactured CFC-12 and closely related chemicals. The freon tax, introduced in 1990 at \$1.37/lb., increased to \$5.35/lb. in 1995 and has risen \$ 0.45/lb. annually since. The average American is likely to feel the economic impact first in the garage. The rapid disappearance of domestic CFC-12 (or R-12) production, the freon used in all 80 million U.S. automobile air conditioners manufactured before 1992, means that motorists with older cars will have to replenish their freon by finding an existing stock of fresh CFC-12, by retrofitting the car to use a newer, substitute cooling agent, or by using recycled CFC-12. In the mid-1990s other regulated forms of CFC were also used in 160 million home refrigerators, 5 million commercial refrigerators, and more than 80,000 large commercial buildings. Additionally, CFCs were a major component in rubber insulating foam for commercial and home appliances and home construction, and for solvents widely used in the electrical industry. Newer, more expensive CFC substitutes, or costly retrofitting, will be required in virtually all instances.³

The U.S. Environmental Protection Agency (EPA) estimates that the \$45 billion cost to rid the United States of CFC emissions is more than offset by the \$32 trillion in crop damage, skin disease, and ecological ills averted. This may be scant comfort, however, for the average American motorist who must absorb much of this cost. In the latter 1990s, for example, the tax accounted for more than half the price of an average tank of new freon, inflating the cost from about \$72 in 1995 to about \$232 in the latter 1990s and more in following years. For the average American driving an older car or truck, this translates into a 300–350 percent price increase: an air conditioner recharge with new freon—if it is available—that cost 60 cents in 1992 cost more than \$20 in 1998. Retrofitting the car to use a new CFC substitute instead cost between \$200–450.⁴ The motorist might decide instead to purchase recycled freon for the older auto. But recycled freon, often produced abroad, frequently contains impurities difficult to detect yet capable of destroying an auto air conditioning system at a replacement cost averaging about \$1,000. In short, for the average American this is environmental protection with a bite. The discomfort is likely to increase as more than 10 million older cars are retrofitted with freon substitutes before the turn of the century.⁵

Smuggler's Gold From Gas

Meanwhile, freon smuggling has become a growth industry. Contraband freon, obtained in Russia, China, India, England, or other nations

where CFC production is still legal, can be purchased at a fraction of the cost of domestic freon. Smuggled into the United States as “recycled” freon, it is sold at a handsome profit to auto services and consumers. Alternatively, freon produced abroad can be intentionally mislabeled as cargo headed through the United States to a foreign destination (such transit is still legal) and then diverted to domestic use. Either way, the U.S. government loses hundreds of millions in tax dollars annually. The U.S. Justice Department estimates that more than 20 million pounds of freon was smuggled into the United States in 1996, meeting, among other needs, about 90 percent of freon demand in South Florida. Auto mechanics, service centers, and other large freon consumers may resist the temptation to use smuggled products, but they risk angering customers by raising the freon charge, or losing their patrons to other, cheaper freon providers. Many auto service centers have already reported a consumer backlash. “Buyers are way off,” observed a Los Angeles service center manager. “And the average customer gets upset at us, not the government,” he lamented.

Are We Protecting the Ozone Layer? Yes . . . Maybe

A broad scientific consensus about the reality of stratospheric ozone depletion and scientists’ ability to portray the consequences in vivid public images of grave human health and ecological damage contributed enormously in the latter 1980s in persuading national officials to act incisively on the issue. But it has been harder to produce equally persuasive ecological evidence to demonstrate the wisdom of the Montreal Protocol even though most scientists remain confident that CFC regulation is imperative and, in the long run, effective. While atmospheric studies in the early 1990s seemed to suggest a gradual improvement in the stratospheric ozone layer, particularly a significant reduction of the Southern hemispheric “ozone hole,” later evidence sometimes seemed contradictory, as when the National Oceanic and Atmospheric Administration (NOAA) reported in late 1997 that the Antarctic ozone hole was “back, as big as ever.”⁶ Coming at a time when the economic costs of CFC reductions will be felt with increasing frequency by American industry and the average consumer, such reports diminish the scientific and regulatory credibility of CFC controls precisely when their political vulnerability increases.

The Realities of Environmental Governance

The struggle to regulate CFCs illuminates many important characteristics of U.S. environmental policy at the dawn of the twenty-first cen-

tury. The rising cost of freon is one indication that American consumers can increasingly expect to pay a substantial and undisguised premium—measured not only in money but in personal convenience and creature comfort as well—for the quality of environmental protection they expect from their government. In Southern California, millions of residents are being asked to buy new lawn mowers or extensively repair their existing ones, to abandon the backyard barbeque or find alternatives to charcoal lighters, and to purchase auto fuel only from service stations with expensive new vapor controls on their gas pumps to enable Los Angeles and surrounding counties to comply with air quality standards required by the Clean Air Act Amendments of 1990. In Houston, Los Angeles, and Chicago, among many other major urban areas, local governments are considering placing limits on both the number of motor vehicles and vehicular access to business and commercial facilities in order to reduce urban smog. At the same time, concern over the relentlessly rising aggregate economic cost of environmental protection for the entire nation and for hundreds of vital economic sectors now virtually dominates the national debate on environmental policy.

The continuing scientific ambiguity about the ecological effectiveness of global freon regulation in tandem with the worldwide expansion of freon smuggling also highlight the persistent disputes about the ecological impact of existing environmental laws and the ongoing enforcement difficulties common to virtually all major domestic environmental laws. At the same time, the American public continues to believe firmly in the reality of environmental problems and in the necessity for an aggressive governmental response. And public officials routinely promise to deliver it. Moreover, Americans customarily expect a high quality of environmental management and repeatedly profess (at least in the abstract) a will to accept the costs and sacrifices necessary to achieve it. Federal and state governments struggle to translate this public mood into prompt, economical, and effective environmental governance even as the drumbeat of credible scientific warning about the increasing scope and severity of environmental ills and the imperative for incisive remedial action sounds on. The result is a volatile domestic political climate characterized by widespread public and governmental dissatisfaction with existing environmental laws, continuing national debate over the alternatives, a growing sense of scientific urgency to take effective action, and a critical searching of the nation's experience with environmental regulation over the last thirty years for a "learning curve" to direct policy reform into the next century.

Moreover, global issues like stratospheric ozone depletion increasingly crowd a national environmental agenda once almost exclusively confined to domestic problems. These international issues confront policy makers

with the necessity for new policy skills, a new spatial and temporal perspective on ecological management, and new scientific sophistication appropriate to the new order of environmental problems they will confront.

The search for regulatory capability is also complicated because it is difficult, if not impossible, to know confidently how much responsibility for continuing environmental ills, or the appearance of new ones, is due to the failure of public institutions. The crabwise implementation and bloated costs of current environmental regulation nurture a petulant national mood that too easily blames public officials and institutions for almost all of the real or assumed failures of regulatory policy. Contemporary environmental controversy abounds, for instance, with implicit assumptions about how much Superfund—the legislation allocating grants to the states for cleaning up abandoned toxic waste sites—could accomplish *if* government were more effective, or how much better urban air quality would be *if* the Clean Air Act were adequately funded, or why newly discovered ground water pollutants wouldn't have appeared *if* the government had acted more wisely. Nature cannot so easily be held accountable to Congress. Persistent environmental problems may be inherently refractory under the best management, new problems may appear as a result of recently created technologies or may be discovered only with the gradual advance of scientific research. Additionally, existing regulations may be maligned for alleged failures with little consideration of how the environment would have fared had the laws not existed. It is important, therefore, to recognize that environmental problems often persist, or evolve, in spite of government and that judgments about environmental laws and institutions be tempered by an appreciation for the complexity of the ecological world.

Ecological Complexity: A Trio of Ecological Puzzles

In the last decade, the following three random events occurred in the United States. First, an outbreak of cryptosporidium, a potentially severe human intestinal infection caused by a water-borne parasite, occurred in Milwaukee, infecting 403,000 people and killing between 50 and 100 of them. At the time, Milwaukee's public water supply complied with all federal drinking water standards intended to protect the public from such well-known public health hazards, and public health officials were initially perplexed to explain the infestation. Second, fish samples taken from Florida's Everglades were found to contain as much as 4.4 parts per million (ppm) of methyl mercury—more than four times the level considered safe by the federal government and one of the highest concentrations ever recorded in the United States. Methyl mercury is rarely found