

FOURTH EDITION

# ENVIRONMENTAL POLITICS

DOMESTIC AND GLOBAL DIMENSIONS

Jacqueline Vaughn Switzer



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# ENVIRONMENTAL POLITICS

## DOMESTIC AND GLOBAL DIMENSIONS

*Fourth Edition*

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**JACQUELINE VAUGHN SWITZER**

*Northern Arizona University*

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For my dear friend  
Lyudmila Kovalyova  
Sumy, Ukraine

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# Preface

This fourth edition of *Environmental Politics* is written in the context of two separate, but interrelated events that will undoubtedly affect the pace of environmental policy making for several years. The terrorist attacks on the World Trade Center on September 11, 2001, and the United States' war with Iraq in 2003 have dominated discussion and the media. Suggesting that there are other important issues on the political agenda—the economy, health care, education—is not meant to trivialize these events or the people involved.

At the same time, these events are important to an analysis of environmental politics because it helps to explain why environmental legislation and policies are farther from the top of the policy agenda at this time. At the federal level, the war and homeland security have crowded out proposals to revise the Endangered Species Act or Superfund reauthorization. Gaining political support for appropriations to fight terrorism pushes grazing reform further down the policy agenda. Energy programs at the state level are less likely to be considered by legislatures than finding ways to pay for mandated security measures or public services that have been cut as a result of the tumbling economy. Even locally, concerns about municipal water quality are focused less on total coliform and more on securing water supplies from terrorism.

This is not to say that environmental politics has been ignored since the third edition of this book was published. Thousands of participants at the Johannesburg Summit came to South Africa to attempt to build bridges across nations. The U.S. Supreme Court upheld the designations of national monuments that had been made by President Clinton as he was leaving office in 2001. The governor of California signed legislation that moved the state forward in global climate change policy. While there are signs that protection of the environment is on hold, rather than forgotten, the spring 2003 marches across the world are about war rather than Earth Day.

It is in this context that the fourth edition has been written. As in previous volumes, the process model is used as a paradigm for exploring environmental politics and policy. The model helps us to understand the interaction among institutions, such as the president and the administrative agencies, Congress, and the courts. The process model also provides a way to explain the role of non-governmental organizations both in the United States and abroad as essential stakeholders. Ultimately, the process model permits us to understand how politics affects policy making and progress toward solving environmental problems.

Because the debate over international environmental policy has broadened, the book is written with an enhanced focus on global concerns and transnational actors. Concurrently, there is an expansion of the coverage of international environmental law, identifying the agreements that have been reached thus far, along with an analysis of their effectiveness. Materials have been significantly updated to provide the basis for timely discussions of key issues.

*Environmental Politics* has been praised for its objectivity and its clear explanations of controversies that are often framed in political rhetoric. While it does not attempt to provide in-depth coverage of every issue, it does provide an overview that goes beyond the “headline news” approach. The “Another View, Another Voice” segments provide personal glimpses of individuals, organizations, and events that influence environmental politics in contrast to the more formal explanations found in other books.

To place environmental politics in context, the introduction provides an overview of the policy process. Essential to that context is the historical overview found in Chapter 1, which explores the philosophical and political beginnings of environmental concern. Chapter 2 identifies the key stakeholders who influence policy, followed by an explanation of the role of institutions in the process in Chapter 3. Chapters 4 through 11 are devoted to specific environmental issues, from public lands and U.S. forest policy in Chapter 4, to water scarcity and pollution in Chapter 7. Although many of the problems associated with environmental protection are overlapping and interrelated, these chapters bring the reader up-to-date on the most critical issues and analyze the progress that has been made. Several of the chapters have been revised to incorporate a more global view, rather than focus primarily on the United States. Coverage of biodiversity issues in Chapter 9 examines international regimes; issues affecting the global commons have been expanded in Chapter 10. New to this edition are sections on transnational advocacy networks, the impact of the Internet and cyberspace on participation and decision making, ecological restoration and fire management, and brownfields.

Writing the final chapter on emerging trends in environmental policy is always a challenge for several reasons. The political agenda is dynamic and constantly changing, moving “new” issues up for consideration, pushing “old” problems toward the bottom until crisis or another catalyst brings them back. In reality, problems like air quality and water pollution are never really solved. We make progress toward meeting standards and goals, and then revise the goals or raise the standards higher. Some of the issues outlined in Chapter 12, such as urban sprawl, have been around for a long time but are gaining new attention from researchers and officials. Others, like biopiracy and biosafety, have developed as a result of new technologies and ethical debates.

It is these changes in the political and scientific realms that always encourage me to work on a new edition of this book. I hope you will share in my excitement about those changes and the opportunities they bring.

## ACKNOWLEDGMENTS

The most helpful reviewers are those who use this book in their classes, whether faculty or students. I am always appreciative of their candid comments, both formal and informal. I like to think that with each edition of *Environmental Politics*, I am a little closer to providing an objective and timely resource. For the fourth edition, I am indebted to the five scholars who provided manuscript reviews from the previous edition to guide me in this revision: Kenneth K. Frank, Brenau University; Stephen M. Meyer, Massachusetts Institute of Technology; Martin Nie, University of Montana; D.W. “Sid” Olufs, Pacific Lutheran University; and Brent S. Steel, Oregon State University.

This edition also marks the acquisition of the book by Wadsworth Publishing, and I have benefited from the editorial assistance of Scott Spoolman, Leslie Connor, and Linda DeMasi, a terrific cover designed by Sue Hart, and the support of David Tatom. I tried hard not to exploit the talents of two graduate students at Northern Arizona University who provided research assistance and moral support throughout the project: Emily Lethenstrom and Leslie Cutting. Lastly, I have appreciated the support of my family, Jack and Vernie Vaughn. I am not sure if they have read all the previous editions, but they always put copies out on the coffee table when company comes.

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# Contents

<b>An Environmental Politics Time Line</b>	<b>Inside Front Cover</b>
<b>Preface</b>	<b>v</b>
<b>List of Tables</b>	<b>xiii</b>
<b>List of Figures</b>	<b>xiv</b>
<b>About the Author</b>	<b>xv</b>
<b>Introduction</b>	<b>1</b>
 <b>CHAPTER 1 A Historical Framework for Environmental Protection</b>	 <b>11</b>
Germination of an Idea: From the Colonial Period to 1900	12
Progressive Reforms and Conservationism: 1900–1945	15
Recreation and the Age of Ecology: Post–World War II to 1969	17
Earth Days and Deregulation: 1970–1992	19
Global Awareness and Gridlock: 1993–2230	23
Rollback: 2001–	28
<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
<i>Allan K. Fitzsimmons</i>	30
Notes	32
For Further Reading	35
 <b>CHAPTER 2 Participants in the Environmental Debate</b>	 <b>37</b>
U.S. Environmental Organizations	38
The Environmental Justice Movement	42
Radical Environmentalism and Deep Ecology	44
Environmental Opposition in the United States	46
<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
<i>The National Association of Homebuilders</i>	50
The Global Dimension	53
Green Political Parties	56
International Governmental Organizations	59
Transnational Advocacy Networks	61
Notes	62
For Further Reading	64

<b>CHAPTER 3</b>	<b>The Political Process</b>	<b>67</b>
	The Executive Branch Agencies	69
	Presidential Leadership	73
	Congressional Policy Making	84
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>John Chafee</i>	86
	Courts and Environmental Politics	91
	State and Local Policy Making	93
	The Media and the Environment	96
	Cyberspace and Policy Making	98
	Notes	99
	For Further Reading	103
<b>CHAPTER 4</b>	<b>Public and Private Lands</b>	<b>105</b>
	The Public Lands	107
	“The Best Idea America Ever Had”: The National Parks	108
	U.S. Timber Management Policy	113
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>Gloria Flora</i>	116
	Grazing Rights and Wrongs	120
	Ecological Restoration	124
	Mining Law and Public Lands	127
	Private Property and Public Lands	129
	Trends in Land Use and Management	132
	Notes	133
	For Further Reading	136
<b>CHAPTER 5</b>	<b>Waste Management and the Global Toxics Legacy</b>	<b>139</b>
	The Nature of Waste: Generation and Disposal	140
	The Universe of Wastes	141
	RCRA and Superfund	149
	Brownfields	154
	Yucca Mountain and Nuclear Waste	154
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>Kenny C. Guinn</i>	157
	Cleaning Up Military Waste	158
	The Global Dimension	160
	American Policy Stalled: Too Little, Too Late	164
	Notes	165
	For Further Reading	166
<b>CHAPTER 6</b>	<b>The Politics of Energy</b>	<b>169</b>
	The Energy Pie	171
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>Dennis Weaver</i>	176
	The Nuclear Power Debate	178
	CAFE Standards	180
	The California Experience	181

	The History of Policy Paralysis	182
	The Global Dimension	188
	Notes	191
	For Further Reading	193
<b>CHAPTER 7</b>	<b>Managing Water Resources</b>	<b>195</b>
	Water Scarcity in Global Context	196
	Water Resource Management in the United States	198
	Impacts and Solutions	203
	Wetlands	204
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>The East Prairie Project</i>	206
	The Nature and Causes of Water Pollution	209
	The Politics of Water Quality	212
	Toxic Contamination	216
	The Global Dimension	219
	Notes	221
	For Further Reading	223
<b>CHAPTER 8</b>	<b>Air Quality: Pollution and Solutions</b>	<b>225</b>
	Assessing Air Pollution	229
	The Responsibility Dilemma	232
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>John Dingell and Henry Waxman</i>	236
	Assessing the Impact of Pollution	241
	Toxic Air Pollutants	242
	Visibility	244
	Transboundary Air Pollution	247
	Notes	250
	For Further Reading	253
<b>CHAPTER 9</b>	<b>Biodiversity</b>	<b>255</b>
	Protective Legislation	257
	The Making of Wildlife Policy	260
	The Role of Organized Interests	266
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>Kieran Suckling</i>	267
	International Biodiversity Agreements and Policies	269
	Protecting the World's Forests	274
	Notes	279
	For Further Reading	281
<b>CHAPTER 10</b>	<b>The Global Commons</b>	<b>283</b>
	The Atmosphere	284
	<b>ANOTHER VIEW, ANOTHER VOICE:</b>	
	<i>David Suzuki</i>	286
	Global Climate Change	287
	Stratospheric Ozone Depletion	294

	The Oceans	298
	Protecting the Seas from Pollution	302
	Notes	304
	For Further Reading	306
<b>CHAPTER 11</b>	<b>The Human Explosion: Managing Population Growth</b>	<b>309</b>
	The Role of the United States	310
	Population and Sustainability	312
	Trends in Population and Projections	314
	U.S. Population Trends and Policies	318
	Global Family Planning Efforts	320
	<b>ANOTHER VIEW, ANOTHER VOICE:</b> <i>The Alan Guttmacher Institute</i>	321
	Implications for Policymakers	325
	Notes	327
	For Further Reading	328
<b>CHAPTER 12</b>	<b>Emerging Issues in Environmental Policy</b>	<b>331</b>
	Biopiracy and Genetic Patents	331
	Biosafety and the Precautionary Principle	334
	Grazing Permit Buyouts	335
	Hydropolitics	337
	Sprawling Out	339
	Notes	340
	For Further Reading	341
<b>APPENDIX A</b>	<b>Major U.S. Environmental Legislation, 1947–2002</b>	<b>343</b>
<b>APPENDIX B</b>	<b>Major International Environmental Agreements, 1900–2002</b>	<b>347</b>
<b>APPENDIX C</b>	<b>Environmental Film Resources</b>	<b>349</b>
	<b>INDEX</b>	<b>353</b>
<b>Useful Resources on the Internet</b>	<b>Inside Back Cover</b>	

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# List of Tables

<b>TABLE 2.1</b>	Major International Environmental/Developmental Nongovernmental Organizations (NGOs)	54
<b>TABLE 2.2</b>	Major Green Political Parties (by Region)	56
<b>TABLE 2.3</b>	Major International Environmental/Developmental Intergovernmental Organizations (IGOs)	61
<b>TABLE 3.1</b>	Presidentially Designated National Monuments, 1908–2002	68
<b>TABLE 3.2</b>	Agencies of the U.S. Department of the Interior	70
<b>TABLE 3.3</b>	EPA Regional Office Responsibility (by State and Territory)	71
<b>TABLE 3.4</b>	Other Federal Agencies and Commissions with Environmental Policy Jurisdiction	71
<b>TABLE 3.5</b>	Environmental Agency Leadership, 1970–2003	74
<b>TABLE 4.1</b>	Historically Significant U.S. Wildland Fires, 1825–2002	106
<b>TABLE 4.2</b>	Designation of National Park System Units, 2002	109
<b>TABLE 4.3</b>	Grazing Permits and Leases Administered by the Bureau of Land Management, 2001 (by State)	121
<b>TABLE 4.4</b>	Major U.S. Mining Laws	128
<b>TABLE 6.1</b>	U.S. Energy Production, 1950–2000 (by Source)	172
<b>TABLE 6.2</b>	U.S. Energy Supply and Projections, 1998–2020	173
<b>TABLE 6.3</b>	U.S. Energy Consumption, 1998–2020	177
<b>TABLE 6.4</b>	Percentage of Electricity Generated by Nuclear Power, 2000 (by Country)	190
<b>TABLE 7.1</b>	Common Household Uses of Drinking Water	197
<b>TABLE 7.2</b>	The Top Twenty-Five Environmentally Harmful and Financially Wasteful Corps Projects, 2002	201
<b>TABLE 7.3</b>	Summary of Quality of Assessed Rivers, Lakes, and Estuaries	211
<b>TABLE 7.4</b>	Leading Causes and Sources of Impairment in Assessed Rivers, Lake, and Estuaries	211
<b>TABLE 7.5</b>	Annual Water Use in Different Countries	219
<b>TABLE 8.1</b>	Metropolitan Areas with the Worst Ozone Air Pollution, 2000–2002	227
<b>TABLE 8.2</b>	Metropolitan Areas with the Least Ozone Air Pollution	227

<b>TABLE 8.3</b>	Components of Air Pollution	229
<b>TABLE 9.1</b>	Summary of Listed Species and Recovery Plans as of 08/31/2002	263
<b>TABLE 9.2</b>	Overall Biodiversity Patterns, 2002 (Top Five Ranking States)	263
<b>TABLE 10.1</b>	Major Greenhouse Gases	287
<b>TABLE 11.1</b>	State Population Growth Rankings, 1990–2000 (Five Highest and Five Lowest)	319

---

# List of Figures

<b>FIGURE 5.1</b>	Municipal Solid Waste Generation, 2000	142
<b>FIGURE 5.2</b>	U.S. Landfills 1988–2000	145
<b>FIGURE 6.1</b>	Construction of Nuclear Generating Facilities, 1953–2002	178
<b>FIGURE 9.1</b>	Number of U.S. Listed Species per Calendar Year, 1980–2001	259
<b>FIGURE 11.1</b>	World Population Growth, through 1999	315
<b>FIGURE 11.2</b>	World Population Growth, 1995–2025	316

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# Introduction

The chemical dichlorodiphenyltrichloroethane, or DDT, was created in the late nineteenth century and quickly gained acceptance for agricultural use, being liberally sprayed on crops and forest lands around the world. Its insecticidal properties were not discovered until 1939, and it was used extensively during World War II. DDT was found to be effective in killing or ridding houses of insects, particularly the *Anopheles* mosquito that spreads the disease malaria. For mosquito control, DDT is cost-effective; usually it is sprayed on the insides of buildings, around gardens, or on crops. Between the 1940s and early 1970s, an estimated 675,000 tons of DDT were applied domestically, with a peak use of 80 million tons in 1959. During the 1950s and 1960s, extensive use of the chemical eradicated malaria in most developed countries; by 1970, an estimated 500 million lives had been saved through an active spraying program.<sup>1</sup>

Rachel Carson's book *Silent Spring*, published in 1962, served as a catalyst for scientific, political, and public debate over the impact of DDT. Carson and other researchers documented the linkage between the use of the chemical and the disappearance of songbirds and raptors.<sup>2</sup> DDT was found in the tissues of many species, and as part of the food chain, eventually accumulated in human tissue as well. The book's popularity led to a series of television programs on DDT's effects, and President John F. Kennedy appointed a special panel to examine its conclusions. After three years of intensive study, U.S. Environmental Protection Agency Administrator William Ruckelshaus issued an order on June 14, 1972, that cancelled nearly all remaining federal registrations of DDT products, citing risks to the environment and the potential harm to human health, giving manufacturers and farmers six months to transition to substitute pesticides. A ban on the use of the chemical pesticide took effect on January 1, 1973; pesticide manufacturers filled legal challenges in the federal courts.<sup>3</sup>

Nearly thirty years later, delegates from around the world met in Johannesburg, South Africa, to consider a legally binding international agreement proposed by the United Nations Environment Programme (UNEP) that would control the use of twelve persistent organic pollutants, or POPs, known as the "dirty dozen." Experts agreed that there was sufficient evidence on the harmful effects of these chemicals to warrant international attention on their manufacture and use, and consideration of a potential ban.

◁ *Once used as an insecticide but now banned in the United States, DDT is still used in developing countries to kill mosquitos that carry malaria.*

## 2 Environmental Politics: Domestic and Global Dimensions

The resulting agreement, the Stockholm Convention on Certain Persistent Organic Pollutants, banned eight of the twelve substances: aldrin, chlordane, dieldrin, endrine, heptachlor, mirex, hexachlorobenzane, and toxaphene. Dioxins and furans, by-products of burning plastics and other wastes with chlorine in them, were to be treated somewhat differently, requiring special technology to control their emissions. The agreement allowed the use of polychlorinated biphenyls, or PCBs, in power-generating equipment (with some restrictions) with a requirement that alternatives be developed by 2025.

But delegates compromised on one of the most contentious chemicals under consideration—DDT—finally agreeing to restrict its use but granting an exemption for countries using DDT to combat malaria.<sup>4</sup> The decision came after more than 250 environmental groups such as Greenpeace and Physicians for Social Responsibility mounted an international campaign that called for the UNEP to ban DDT use altogether. Their demands were countered with scientific reports that showed there was no epidemiological evidence that demonstrated adverse health effects from DDT exposure. Other groups cited the successful use of DDT as the most cost-effective method of combating malaria in more than twenty developing countries, especially in sub-Saharan Africa. Noting that the World Health Organization (WHO) estimates that 400 million people are infected and one million people—mostly children—die each year from malaria, opponents of the ban argued that the health of people in malaria-endemic countries should be given greater consideration.<sup>5</sup>

How could a substance like DDT, once called the “miracle chemical,” be banned in countries like the United States and Canada, and then be politically rehabilitated decades later through an international legal instrument?

In one sense, it could be said that these changes represent a sort of environmental mood swing resulting from scientific advances and the growing gap between mostly industrialized countries of the Global North and the developing countries of the South. To understand how and why this happens, it is first important to develop an overview of the policy-making process and the people who have a stake in policy outcomes. One way of doing so is through Anthony Downs’s 1972 model, called the *issue-attention cycle*. According to Downs, the public’s interest in an issue, such as the preservation of natural resources, goes through a cycle of ebb and flow—a process that is continuous, but not always predictable. Initially, a condition must be recognized as a problem; subsequent steps to solve that problem make up the policy process.<sup>6</sup> Public policies are those developed by the arms of government, like the Department of Agriculture or the Nuclear Regulatory Commission.

There are many approaches to policy study, including political systems theory,<sup>7</sup> group theory,<sup>8</sup> elite theory,<sup>9</sup> institutionalism,<sup>10</sup> and rational choice theory.<sup>11</sup> To better understand how politics has affected environmental policy, this book uses the five steps in the sequential model adapted from the work of political scientist James Anderson.<sup>12</sup> Anderson’s text is one of the more readable and up-to-date explanations of the policy process, though there are many more that are equally useful.



The continuing debate over DDT can be used as a case study to illustrate how the model works.

1. *Problem identification and agenda formation:* In this stage, policy issues are brought to the attention of public officials in a variety of ways. Some are uncovered by the media; others become prominent through crisis or scientific study. Organized groups may demonstrate or lobby officials to focus attention on the problem, or they may enlist celebrities to bring it to the government's attention on their behalf. Some problems may exist without being recognized except by a few isolated individuals or groups, who clamor to have their voices heard. Other problems are so immediate or visible that there is an immediate call for resolution. Once identified, problems are said to be part of the policy agenda.

In the case of DDT, farmers had lauded the chemical's properties and the military had used it to protect both civilians and its own troops. The media's coverage of *Silent Spring*, including vivid images of bird shells that were too fragile to touch, and what some observers call Americans' "chemophobia" then put the spotlight on science and DDT's suspected links to human health. While the debate over its use went on for another decade, DDT continued to be used both in the United States and throughout the world.

2. *Policy formulation:* After a problem is identified as worthy of government attention, policymakers must develop proposed courses of action to solve it. Policy formulation may involve a variety of actors, which will be covered in more detail in Chapter 3. Some policies come directly from the president, such as President Bill Clinton's use of the executive order to designate the Grand Staircase-Escalante National Monument in 1996. Other policies, such as the logging of timber on public lands, are developed by federal agencies or cabinet-level departments, such as the U.S. Forest Service, a topic that is explored in Chapter 4. Congress and state legislatures are often the source of policy initiatives, including Oregon's landmark bottle bill, which established cash refunds for recycled products. Interest groups, the subject of Chapter 2, often pressure legislators or provide expertise on matters that are scientifically or technically complex. The control of greenhouse gases, for example, has been made more difficult because of issues of scientific uncertainty and the application of the precautionary principle, discussed in Chapter 10.

Initially, the U.S. Environmental Protection Agency (EPA), created in 1970 by President Nixon, was given the responsibility for coming up with a way to settle the lengthy debate over the perceived harm of DDT. Despite pressure from chemical manufacturers, and in response to the burgeoning environmental movement, the EPA decided that a short transition period leading to a total ban on the chemical's use would satisfy public concerns.<sup>13</sup>

3. *Policy adoption:* The acceptance of a particular policy is a highly politicized stage, often involving legislation or rule making, that legitimizes the policy. This is usually referred to as the authorization phase of policy making, and it often occurs outside the public's direct view. Hearings on competing proposals, meetings among stakeholders, and the publication of new standards of regulation