

CONTENTS

Preface	ix
Abbreviations	xiii
About the Author	xiv

PART I The Policy-Making Process

CHAPTER 1

Ecosystem Interdependence 1

The Steady State	4
Common Pool Resources	5
Summary	6
Notes	7

CHAPTER 2

Changing Cultural and Social Beliefs: From Conservation to Environmentalism 8

Dominant Social Paradigm	8
<i>Economics and Growth</i>	9
<i>Ecological Economics</i>	12
<i>The Role of Religion</i>	12
<i>Science and Technology: Our Views of Nature</i>	14
<i>Toward Better Science Policy</i>	17
History of the Environmental Movement	18
<i>Dominance</i>	19
<i>Early Awakening</i>	19
<i>Early Conservationist</i>	19
<i>Later Conservationist</i>	20
<i>The Reawakening</i>	20
<i>Complacency</i>	21
<i>The Little Reagan Revolution</i>	21
<i>Post-Reagan Resurgence</i>	22
Social Movements	24
Interest Groups	25

Public Opinion and the Environment 28

<i>Demographics</i>	30
<i>Elections</i>	31
<i>Environmental Discourse</i>	32
<i>Survivalism</i>	33
<i>Prometheans</i>	33
<i>Environmental Skepticism</i>	34
<i>Administrative Rationalism</i>	34
<i>Democratic Pragmatism</i>	35
<i>Economic Rationalism</i>	35
<i>Sustainable Development</i>	36
<i>Ecological Modernization</i>	36
<i>Green Romanticism</i>	37
<i>Green Rationalism</i>	37

Summary 38

Notes 38

CHAPTER 3

The Regulatory Environment 44

The Regulatory Context	44
<i>Science and Risk Analysis</i>	45
<i>Unanticipated Consequences</i>	48
<i>Cost-Benefit Analysis</i>	48
<i>The Role of Government</i>	50
<i>Approaches to Regulation</i>	51

Fundamentals of Environmental Law 54

Summary 57

Notes 57

CHAPTER 4

The Political and Institutional Setting 59

The Institutional Setting 59

<i>Formal Institutions</i>	59
<i>Informal Institutions</i>	61

Institutional Biases 64

<i>Incrementalism</i>	64
<i>Decentralization</i>	65
<i>Short-Term Bias</i>	66
<i>Ideological Bias</i>	67
<i>Private Nature of Public Policy Making</i>	68
<i>Crisis and Reforms</i>	68

The Political Setting	69
<i>Pluralism</i>	69
<i>The Regulators</i>	74

Summary	92
----------------	----

Notes	93
--------------	----

PART II Environmental Policy

CHAPTER 5

Air Pollution 98

Sources	98
<i>Health Effects</i>	101
<i>Motor Vehicles</i>	103

Air Pollution: Law, Regulations, and Enforcement	106
<i>Regulatory Innovations</i>	110
<i>Regulatory Issues</i>	113
<i>Toxic Air Pollution</i>	115
<i>Acid Rain</i>	117
<i>Stratospheric Ozone</i>	121
<i>The Greenhouse Effect (Climate Change)</i>	126

Summary	132
----------------	-----

Notes	132
--------------	-----

CHAPTER 6

Water 143

Sources	144
<i>Nonpoint Sources of Pollution</i>	146
<i>Groundwater Pollution</i>	147
<i>Health Effects of Water Pollution</i>	148

Water Law and Regulation	149
<i>Clean Water Act</i>	150

<i>The CWA and Nonpoint Pollution Sources</i>	152
<i>The CWA and the Regulatory Environment</i>	152
<i>Safe Drinking Water Act</i>	154
<i>Criticisms of Water Pollution Policy</i>	156
<i>The Paradox in Water Pollution Policy</i>	158

Summary	162
----------------	-----

Notes	163
--------------	-----

CHAPTER 7

Energy 168

History of Energy	169
<i>Industrial Revolution</i>	170
<i>Oil and War</i>	170
<i>Role of Personal Consumption</i>	171
<i>Organization of Petroleum Exporting Countries and the Oil Crises</i>	172
<i>Development of Nuclear Power</i>	175
<i>Development of a National Energy Policy</i>	176

Nonrenewable Energy Sources 181

<i>Coal</i>	181
<i>Oil</i>	182
<i>Natural Gas</i>	184
<i>Geothermal Energy</i>	184
<i>Nuclear Power</i>	185

Renewable Energy 186

<i>Hydropower</i>	187
<i>Solar Power</i>	188
<i>Wind Power</i>	190
<i>Biomass</i>	191

Conservation and Energy Efficiency: Some Suggestions for the Future 193

<i>Conservation in Homes and Buildings</i>	194
<i>Conservation in Transportation</i>	196
<i>Conservation in Industry</i>	196
<i>Obstacles to Conservation</i>	197

An Ecological Conclusion 198

Summary	199
----------------	-----

Notes	200
--------------	-----

CHAPTER 8**Toxic and Hazardous Materials and Waste Management 213****Solid Waste 214***What Is Solid Waste?* 214*Scope of the Problem* 214*Disposal Methods* 216*Regulations* 217*Solutions* 219**Hazardous Wastes 223***Nature of the Problem* 223*Disposal Methods* 225*Federal Regulations* 229*Regulatory Problems* 232*The Policy Paradox in Hazardous Waste Management* 237**Summary 239****Notes 240****CHAPTER 9****Land Management Issues 248****Local Land-Use Planning 248****Types of Land-Use Planning 249***Urban Planning* 250*Smart Growth* 252*Soil Erosion* 254*Farmland Conversion* 256*Desertification* 257**Federal Land Management 258***Multiple-Use* 258*Recreation* 259*Fee Demonstration Project* 259*Commercial Recreation Permits and**Concessions* 260*Fire Management* 260*Roadless Areas* 261**Wilderness 262***History* 262*Proposed Wilderness and Wilderness Study Areas* 264*National Park Service Management* 266*Endangered Species* 267*Ecosystem Management* 272**Summary 273****Notes 274****CHAPTER 10****International Environmental Issues 282****Population and Food Production 282****Desertification and Food Production 288****Global Pollution 289***The Ozone Layer* 289*The Greenhouse* 291*Deforestation* 293*Ocean Pollution* 294**Less Developed Countries: North vs.****South 295***International Conflict* 297**Summary 299****Notes 300****CHAPTER 11****International Environmental Management 304****International Environmentalism 304****Alternative Political Systems 306***Market-Based Economies* 306*Collective Ownership Systems* 307*Eastern Europe and the Former Soviet Union* 307*China* 309**International Environmental Management 310***Common Pool Resources* 311*Creation of an IGO* 311**Economic Globalization and the Second****Industrial Revolution 314****International Regulatory Efforts 316***Controlling Oceanic Pollution* 316*Atmospheric Conventions* 317

Hazardous Waste Control at the International Level 319

Protection of Endangered and Threatened Species 319

Trends in the International Regulatory Process 320

Summary 321

Notes 322

Conclusion 325

Appendix A

How We Study Public Policy—Theoretical Approaches 328

Appendix B

The National Environmental Policy Act of 1969, as Amended 336

Index 345