Environmental Law and the Values of Nature

Carolina Academic Press Law Casebook Series Advisory Board



Gary J. Simson, Chairman Case Western Reserve University School of Law

> John C. Coffee, Jr. Columbia University Law School

Randall Coyne University of Oklahoma College of Law

> Paul Finkelman Albany Law School

Robert M. Jarvis Shepard Broad Law Center Nova Southeastern University

Vincent R. Johnson St. Mary's University School of Law

Michael A. Olivas University of Houston Law Center

Kenneth L. Port William Mitchell College of Law

H. Jefferson Powell Duke University School of Law

Michael P. Scharf Case Western Reserve University School of Law

> Peter M. Shane Michael E. Moritz College of Law The Ohio State University

> > Emily L. Sherwin Cornell Law School

John F. Sutton, Jr. Emeritus, University of Texas School of Law

David B. Wexler John E. Rogers College of Law, University of Arizona University of Puerto Rico School of Law

Environmental Law and the Values of Nature

Richard J. Finkmoore

Professor of Law California Western School of Law

CAROLINA ACADEMIC PRESS

Durham, North Carolina

Copyright © 2010 Richard J. Finkmoore All Rights Reserved

ISBN: 978-0-89089-259-6 LCCN: 2009923264

Carolina Academic Press 700 Kent Street Durham, North Carolina 27701 Telephone (919) 489-7486 Fax (919) 493-5668 www.cap-press.com

Printed in the United States of America



Summary of Contents

Part I Modern Environmental Law in Context

Chapter 1 • Foundations: The Public Domain and Natural Resources Law	
1785–1960	5
Section A. Acquisition of the Nation's Environment 1785–1867	7
Section B. The Saturnalia of Disposition 1803–1934	31
Section C. The Emergence of Conservation 1864–1934	61
Section D. "Scientific Management" of the Public Lands 1905–1960	83
Chapter 2 • The Beginnings of American Environmental Law 1956–1969	107
Section A. Introduction	107
Section B. The Wilderness Act of 1964	126
Section C. The Land and Water Conservation Fund Act of 1965	161
Section D. The National Environmental Policy Act of 1969	167
Chapter 3 • Environmentalists Go to Court: Establishing the Role of Public	
Interest Litigation 1965–1978	257
Section A. Introduction	257
Section B. Agency Procedures and Actions	267
Section C. Obtaining Judicial Review	277
Section D. Review of Agency Decisions on the Merits	336
Chapter 4 • A Cascade of Environmental Legislation 1970–1980	345
Section A. Introduction	345
Section B. The Clean Water Act	367
Section C. Wetlands Protection	397
Section D. Oil Pollution Control: Catastrophe and Response	433
Section E. Closing the "Environmental Decade": The Carter Years	467
Chapter 5 • Resistance, "Revolution," and Reassessment 1981–1997	477
Section A. Introduction	477
Section B. Resistance in the West	487
Section C. The Reagan Assault	507
Section D. "Reform" and Gridlock in Congress	530
Section E. Alternatives to Conventional Regulation	536
Section F. The Variety of Environmental Movements	555

Part II Contemporary Issues in Environmental Law and Policy

Chapter 6 • Species Conservation: From Consensus to Conflict	587
Section A. Congress' Response to the Extinction Crisis	593
Section B. The Supreme Court and the ESA	609
Section C. Major Components of the ESA	635
Section D. Finding Flexibility in the ESA	663
Chapter 7 • Law and Ecology in the National Forests	679
Section A. The National Forest Management Act	687
Section B. Forest Planning	695
Section C. Substantive Standards for Timber Production	716
Section D. Ecology in Forest Management	720
Section E. Competing Roadless Area Rules	773
Chapter 8 • The Worth of Water: Forces for Change in Water Law	793
Section A. The Variety of Water Rights	800
Section B. The Modern Public Trust	822
Section C. Contemporary Concerns	856
Section D. Putting It All Together	868
Chapter 9 • Thinking Globally: Energy and the Atmosphere	895
Section A. Living in the Carbon Age	898
Section B. Thinking about Climate Change	940
Chapter 10 • Trends and Destinies	993
Section A. The State of the Global Environment	993
Section B. Sustainable Development	1001
Section C. Ecological Economics	1020
Section D. Prospects	1033
Appendix A: Modern Presidents and Terms of Office	1053
Appendix B: Major Federal Agencies with Environmental Responsibilities	1055
Appendix C: Acronyms and Abbreviations	1057
Index	1059

Contents

List of Maps	xxi
Table of Cases	xxiii
Author's Note	xxvii
Acknowledgments	xxix
Part I	
Modern Environmental Law in Context	
Chapter 1 • Foundations: The Public Domain and Natural Resources Law	
1785–1960	5
Section A. Acquisition of the Nation's Environment 1785–1867	7
1. Early Land Policies, Lasting Effects	7
The Land Ordinance of 1785	7
Notes	9
2. An American Landscape Then and Now	10
Values of Nature	11
The Missouri River and Northern Great Plains in 1804 and 1805	12
Notes and Questions	19
The Missouri River Today	20
Note	24
Wildlife Declines since the Early 1800s	26
Wolf Reintroduction	26
Notes and Questions	28
Environmental Restoration	28
Notes and Questions	31
Section B. The Saturnalia of Disposition 1803–1934	31
1. Consequences of the Land Laws, Intended and Otherwise	32
Preemption	32
The Homestead Act in Practice	35
Values of Nature	36
Notes	37
2. A Disposition Era Legacy: Obstacles to Resource Development	
and Protection	37
Leo Sheep Co. v. United States	38
Notes and Questions	41
United States ex rel. Bergen v. Lawrence	43
Notes and Questions	48

x CONTENTS

3. The Longevity of Nineteenth Century Statutes	50
The Miner's Law	50
Notes and Questions	55
4. The Lands Disposed Of: An Example from the Great Plains	56
Olson v. Dillerud	58
Notes and Questions	59
Section C. The Emergence of Conservation 1864–1934	61
"Man Is Everywhere a Disturbing Agent"	61
Notes and Questions	63
1. The National Park Idea	64
"The Range of Light"	64
Creation of the Parks	66
Notes and Questions	67
Values of Nature	68
Questions	70
2. Protection of the Public's Forests	70
"Any Fool Can Destroy Trees"	70
The Forest Reserves	75
Note and Questions	77
3. Firmer Control of the Federal Lands	77
Andrus v. Utah	78
Note and Questions	83
Section D. "Scientific Management" of the Public Lands 1905–1960	83
1. Guiding Principles	83
Creation of the National Forests	84
2. New Demands	88
Recreation and Timber Production after WWII	88
3. The Multiple Use Mandate in Law and Practice	92
Multiple-Use Sustained-Yield Act of 1960	92
Questions	93
Alaska's Forests	93
Sierra Club v. Hardin	94
Sierra Club v. Butz	98
Notes and Questions	99
The Tongass National Forest	99
Note	102
4. The Modern Federal Land Systems	103
The Public Lands Today	105
Chapter 2 • The Beginnings of American Environmental Law 1956–1969	107
Section A. Introduction	107
1. The Origins of Pollution Control Law	108
The Environment of Daily Life	108
2. An Increased Federal Role	110
An Era of Abundance	110
Early Federal Responses	113
3. Demands for Recreation and Preservation	115
Outdoor Recreation	115
A Call to Action	117
Notes	119

CONTENTS xi

4. Emergence of an Environmental Movement	120
Early Leaders and an Icon	122
Section B. The Wilderness Act of 1964	126
Values of Nature	126
Spiritual Values	126
Note and Questions	128
1. The Background	128
The Path to Wilderness	129
The Wilderness Act of 1964	132
Notes and Questions	135
2. Wilderness in the National Forests	137
The RARE Processes	137
Notes and Questions	139
3. Wilderness on BLM Public Lands	140
Case Study: Utah Wilderness	140
State of Utah v. Andrus (Cotter Corp.)	140
Note and Question	146
Establishment of the Grand Staircase-Escalante National Monument	149
Notes and Question	151
The Aftermath of Monument Designation	152
Norton v. Southern Utah Wilderness Alliance	155
Notes and Questions	160
Section C. The Land and Water Conservation Fund Act of 1965	161
The Purposes and Evolution of the LWCF	161
The Promise and Demise of CARA	164
Notes and Questions	166
Section D. The National Environmental Policy Act of 1969	167
The Origins of NEPA	167 169
1. The Act and Its Implementation National Environmental Policy Act of 1969	169
Calvert Cliffs' Coordinating Committee, Inc. v. United States	105
Atomic Energy Commission	174
Notes and Questions	177
Council on Environmental Quality Regulations	177
Notes and Question	183
2. When Must an EIS Be Prepared?	185
Council on Environmental Quality Regulations	185
Notes and Questions	188
Department of Transportation v. Public Citizen	188
Notes and Questions	194
Center for Biological Diversity v. National Highway Traffic Safety	
Administration	195
3. What Must an EIS Contain?	201
National Energy Supply in the 1970s	201
Natural Resources Defense Council, Inc. v. Morton	203
Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense	
Council, Inc.	207
Note and Questions	212
Council on Environmental Quality Regulations	212
Case Study: Methow Valley, Washington	215

xii CONTENTS

Background of the Early Winters Project	215
The Early Winters FEIS	222
Record of Decision	230
The Near Settlement	233
Robertson v. Methow Valley Citizens Council	235
The Demise of Early Winters	242
Notes and Questions	248
4. NEPA Nearing 40	249
Chipping Away at NEPA	249
Recommendations to "Improve" NEPA	252
Notes and Questions	254
Chapter 3 • Environmentalists Go to Court: Establishing the Role of Public	
Interest Litigation 1965–1978	257
Section A. Introduction	257
1. The Rise of the Administrative State	258
2. The Advent of Environmental Litigation	259
The Case for a Litigation Strategy	260
Origins of the Public Interest Law Firms	262
Notes and Questions	266
Section B. Agency Procedures and Actions	267
Administrative Procedure Act	267
Vermont Yankee Nuclear Power Corp. v. Natural Resources	
Defense Council, Inc.	271
Notes and Questions	275
Notes and Questions	277
Section C. Obtaining Judicial Review	277
1. The Recognition of Environmental Standing	277
The Background of Scenic Hudson	277
Scenic Hudson Preservation Conference v. Federal Power	
Commission	280
Notes and Questions	282
Case Study: Mineral King Valley, California	283
Sierra Club v. Morton	287
Notes and Questions	295
2. Raising and Lowering the Standing Hurdle	297
Notes and Questions	302
Friends of the Earth, Inc. v. Laidlaw Environmental Services, Inc.	303
Massachusetts v. Environmental Protection Agency	310
Notes and Questions	319
3. Citizen Suit Authorizations	319
Citizen Suits under the Clean Water Act	319
Notes and Questions	324
Sierra Club v. Union Oil Co.	325
Bennett v. Spear	329
Notes and Questions	336
Section D. Review of Agency Decisions on the Merits	336
Administrative Procedure Act	336
Citizens to Preserve Overton Park, Inc. v. Volpe	337
Notes and Questions	342

CONTENTS	X111

Chapter 4 • A Cascade of Environmental Legislation 1970–1980	345
Section A. Introduction	345
The Environmental Revolution	346
1. Environmental Politics in the Early 1970s	347
The Waxing and Waning of an "Environmental" President	350
2. Expansion of the National Environmental Organizations	352
The Politics of Environmental Legislation	353
The Environmental Policy System	356
3. Environmental Bipartisanship in Congress	358
Principal Federal Environmental Laws	360
The Complexity of Environmental Law	365
Section B. The Clean Water Act	367
Values of Nature	367
Origins of the Clean Water Act	368
· ·	372
1. Technology-Based Regulation of Point Sources	
The NPDES Program	372
Questions Publishy Overand Treatment Works	382
Publicly Owned Treatment Works	382
2. Nonpoint Source Pollution	384
The NPS Problem	384
Nonpoint Source Pollution Control	387
3. Water Quality-Based Controls	391
Total Maximum Daily Loads	391
Questions	394
The State of the Nation's Waters	394
Section C. Wetlands Protection	397
Values of Nature	397
The Status of Wetlands Today	399
A Brief History of Federal Wetlands Regulation	400
Solid Waste Agency of Northern Cook County v. U.S. Army Corps	
of Engineers	403
Rapanos v. United States	411
Notes and Questions	419
The Section 404 Permit Program	420
Wetlands Mitigation	426
Section D. Oil Pollution Control: Catastrophe and Response	433
Values of Nature	434
Intrinsic and Systemic Values	434
Case Study: The Exxon Valdez Oil Spill	436
How the Spill Occurred	436
The Exxon Valdez Litigation	441
In the Superior Court for the State of Alaska Third Judicial	
District	446
Questions	447
In re the Exxon Valdez, Order No. 187	447
In re the Exxon Valdez, Order No. 190	450
Questions	453
The Settlements and Their Disposition	454
Habitat Protection	455
How Much Oil Remains?	456

xiv CONTENTS

The Status of the Resources Affected	457
Notes and Questions	459
Oil Pollution Act of 1990	460
Notes and Question	465
Section E. Closing the "Environmental Decade": The Carter Years	467
The Global 2000 Report	473
Chapter 5 • Resistance, "Revolution," and Reassessment 1981–1997	477
Section A. Introduction	477
A Response to Global 2000	478
Notes and Questions	479
Environmental Politics	480
Section B. Resistance in the West	487
The Property Clause	487
1. The Sagebrush Rebellion and Its Progeny	488
The Sagebrush Rebellion	488
The County Supremacy Movement	490
Note	494
United States v. Nye County, Nevada	495
Notes and Questions	500
2. Collaborative Efforts	501
Questioning Collaboration	501
The Limits of Confrontation	503
Notes and Questions	505
Section C. The Reagan Assault	507
The Reagan Antienvironmental Revolution	507
1. Presidential Appointees and Policies	508
The Counterrevolution	509
The Reagan Revolution That Wasn't	512
Notes and Questions	514
2. Executive Office Oversight of Federal Agencies	515
Checks without Balance	516
Perspectives on the Bush Executive Order	519
Notes and Questions	521
The Information Quality Act of 2000	522
The Origins and Implementation of the IQA	522
Notes and Questions	527
3. A Judicial Realignment	527
The Changing Nature of the Federal Judiciary	527
Section D. "Reform" and Gridlock in Congress	530
The 104th Congress	531
Section E. Alternatives to Conventional Regulation	536
Consequences of Acid Rain	536
Early Efforts to Address Acid Rain	538
Emissions Trading in the U.S.	540
The Current Acid Rain Program	545
Sulfur Dioxide Program	546
Nitrogen Oxides Program	548
Permits	549
Notes and Questions	549

XV

Reinvention	550
Question	555
Section F. The Variety of Environmental Movements	555
1. The Mainstream Organizations	555
A CEO Culture	555
Increasing Numbers	557
The Environmental Movement in the 1980s	558
2. Grassroots Environmentalism and Other Alternatives to the Mainstream	561
The Antitoxics Movement	561
The Radical Wing	563
3. Environmental Justice	564
The Early Evidence	564
The Existence of Environmental Racism	567
Underlying Causes	568
Executive Order 12898	570
In the Matter of Louisiana Energy Services, L.P.	572
4. The Present and Future of American Environmentalism	574
Where Things Stand	574
New Directions for Pragmatists	575
Deep Ecology	577
Question	579
A Critique of the Movement	579
The Possibility of Failure	583
Questions	584
C	
Part II	
Contemporary Issues in Environmental Law and Policy	
Contemporary issues in Environmental Law and Foney	
Chapter 6 • Species Conservation: From Consensus to Conflict	587
Values of Nature	588
Human Dependence on Wild Species	588
Biophilia and Extinction Note	589
11000	592
Section A. Congress' Response to the Extinction Crisis	593
Enactment of the ESA	593
Endangered Species Act of 1973	599
Notes and Questions	607
Section B. The Supreme Court and the ESA	609
Approaches to Statutory Interpretation	609
The Snail Darter and the Tellico Dam	612
Tennessee Valley Authority v. Hill	614
The Aftermath of the "Snail Darter" Case	625
Notes and Questions	626
National Association of Home Builders v. Defenders of Wildlife	628
Questions	634
Section C. Major Components of the ESA	635
1. The Designation Processes	635
U	055
Defenders of Wildlife v. Norton	635

xvi CONTENTS

	N . lo .:	C 4.5
2.0	Notes and Questions	645
2. Cor	nsultation and the No Jeopardy Mandate	646
	Natural Resources Defense Council v. Kempthorne	646
0 111	Questions	654
3. The	e "No Take" Prohibition	654
	Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon	655
	Notes and Questions	663
Section I	D. Finding Flexibility in the ESA	663
	Habitat Conservation Plans	664
	Incidental Takes	666
	Note and Question	668
	A Critique of HCPs	668
	Note	671
	National Wildlife Federation v. Babbitt	671
	Consensus-Forcing under the ESA	676
Chapter 7 •	Law and Ecology in the National Forests	679
-	Values of Nature	680
	Leopold's Land Ethic	680
	Ecosystem Services	683
	Ecologistic-Scientific Value	685
	Notes and Questions	686
Section A	A. The National Forest Management Act	687
	Background of the NFMA	687
	National Forest Management Act of 1976	690
	Notes and Questions	694
Section E	3. Forest Planning	695
	Case Study: Rio Grande National Forest, Colorado	695
1. Plai	nning for the Rio Grande National Forest	695
	A Description of the Rio Grande	695
	Adoption of the 1996 Forest Plan	698
	Implementation of the Forest Plan	707
	Notes and Questions	709
	Notes and Questions	710
2. A P	aradigm Shift in Planning	711
_, _,	National Forest System Land Management Planning	711
	Notes and Questions	715
Section C	C. Substantive Standards for Timber Production	716
	rvest Methods: Clearcutting	716
1. 1141	Timber Harvesting Practices	716
2 Sus	tained Yield Management	718
2. 040	The Concept of Nondeclining Even Flow	718
	Notes and Questions	719
Section F	D. Ecology in Forest Management	720
occion i	From Wildlife Management to the New Ecology	720
1 The	e Diversity Standard and Conservation Biology	724
1. 1110	The Context of Planning for Two Wisconsin Forests	725
	Sierra Club v. Marita	729
	Note and Questions	736
	National Forest System Land Management Planning	736
	I UIIIIII	, , ,

CONTENTS	XV11

Questions	737
2. Ecosystem Management in the Pacific Northwest	737
One Description of Ecosystem Management	737
Note and Questions	739
Case Study: The Pacific Northwest Forests, Oregon and Washington	739
The Spotted Owl's Journey through the Federal Courts	739
The Clinton "Forest Summit" and Option 9	746
The Northwest Forest Plan	753
The Timber Salvage Rider	755
An Interim Assessment	758
Has Ecosystem Management in the Northwest Failed?	761
Notes and Questions	767
3. The Role of Fire	768
The Healthy Forests Initiative	768
Section E. Competing Roadless Area Rules	773
Purpose and Need for the Roadless Area Conservation Rule	773
2001 Roadless Area Rule	777
Wyoming v. U.S. Dept. of Agriculture	779
Questions	783
California ex rel. Lockyer v. Department of Agriculture	783
Notes	791
Chapter 8 • The Worth of Water: Forces for Change in Water Law	793
Values of Nature	793
The Economic Worth of Water	793
The Worth of a River	798
Note and Questions	799
Section A. The Variety of Water Rights	800
1. Private Rights: The Two Principal Systems	800
The Origins of Western Water Law	801
Water Rights Today	803
Note and Questions	806
Empire Water & Power Co. v. Cascade Town Co.	806
Note and Question	808
2. Public Rights	808
Illinois Central Railroad Co. v. Illinois	808
Note and Question	811
3. Federal Reserved Rights	812
Cappaert v. United States	814
Note and Questions	817
Quantifying Tribal Water Rights	818
Section B. The Modern Public Trust	822
Case Study: Mono Lake, California	822
The Prelude	824
The Opposition	830
The Resource	833
National Audubon Society v. Superior Court of Alpine County	841
California Fish & Game Code	849
California Trout, Inc. v. Superior Court	849

xviii CONTENTS

Questions	853
The Resolution	853
Notes	855
Section C. Contemporary Concerns	856
Water Transfers and Urban Water Conservation	856
Adapting Prior Appropriation Law to New Purposes	862
Section D. Putting It All Together	868
Case Study: The Truckee River and Pyramid Lake,	
California and Nevada	868
Nevada v. United States	868
Resource Problems and Problem-Solving	872
A Lawyer's Perspective	874
Truckee-Carson-Pyramid Lake Water Rights Settlement Act	880
Operating Criteria and Procedures for the	
Newlands Reclamation Project, Nevada (OCAP)	887
An Assessment	889
Note and Questions	892
Chapter 9 • Thinking Globally: Energy and the Atmosphere	895
Values of Nature	895
Intergenerational Equity	895
Questions	897
Section A. Living in the Carbon Age	898
1. Current Energy Sources	898
The U.S. Energy Situation	898
Energy Subsidies	904
Note and Question	904
2. Energy Conservation	905
Implementing Efficiency	905
Energy Conservation Efforts	910
The Energy Policy Act of 2005	911
Note	919
3. Vehicle Fuel Economy Standards	919
An Assessment of CAFE Standards	921
CAFE Reform	926
Notes and Questions	929
Center for Biological Diversity v. National Highway Traffic Safety	
Administration	933
Note and Questions	939
Section B. Thinking about Climate Change	940
1. The Science	940
Understanding Climate Science	940
Climate Changes, Causes and Impacts	945
The Economics of Climate Change	949
2. The International Law	954
Development of the Climate Change Regime	954
United Nations Framework Convention on Climate Change	955
Questions	958
The Kyoto Protocol	959

CONTENTS	xix
0 0 1 1 1 2 1 1 1 0	

Questions	963
Kyoto Institutions, Mechanisms, and Compliance	963
Adaptation and Mitigation	971
3. The U.S. and Climate Change Policy	975
The Development of U.S. Policy	975
Current U.S. Law and Policy	981
Chapter 10 • Trends and Destinies	993
Section A. The State of the Global Environment	993
World Scientists' Warning to Humanity (1992)	993
A Summary of Current Conditions	994
The Human Element	998
Notes and Questions	1000
Section B. Sustainable Development	1001
The Concept	1002
Notes and Questions	1004
The Rio Declaration	1005
Note and Questions	1006
The Johannesburg Summit	1006
U.S. Progress Toward Sustainability	1012
Question	1020
Section C. Ecological Economics	1020
An Introduction	1020
Measuring Well-Being	1024
Questions	1025
National Economic Accounts and the Environment	1026
An Environmental GDP	1029
Section D. Prospects	1033
Is Trend Destiny?	1033
One Scenario of the Future	1035
Note and Question	1041
A Revolution of the Mind	1042
The Most Fundamental Transition of All	1049
Question	1051
Appendix A: Modern Presidents and Terms of Office	1053
Appendix B: Major Federal Agencies with Environmental Responsibilities	1055
Appendix C: Acronyms and Abbreviations	1057
Index	1063

List of Maps

Map 1-1. The Red Rim and surrounding area	44
Map 2-1. The Grand Staircase-Escalante National Monument	152
Map 2-2. The Methow Valley and surrounding area	216
Map 3-1. The Mineral King area	287
Map 4-1. Spread of the 1989 Exxon Valdez oil spill	441
Map 7-1. Management areas for one portion of the Rio Grande National Forest	699
Map 7-2. Federal forest lands of the Pacific Northwest	747
Map 8-1. Mono Lake and surrounding area	824
Map 8-2. The Truckee River, Pyramid Lake region	869

Table of Cases

Principal cases appear in bold.

- A -

Alyeska Pipeline Service Co. v. Wilderness Society, 324

Andrus v. Utah, 78

Arizona v. California, 819, 820, 821

Arizona v. San Carlos Apache Tribe of Arizona, 819

- B -

Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon, 655

Bennett v. Spear, 329

Bennett v. City of Salem, 862 Big Hole Rancher's Assoc. v. Forest Service, 138

Border Power Plant Working Group v. Department of Energy, 195

- C -

California v. Block, 138

California ex rel. Lockyer v. Department of Agriculture, 783

California Oregon Power Co. v. Beaver Portland Cement Co., 806

California Trout, Inc. v. Superior Court, 849

Calvert Cliffs' Coordinating Committee, Inc. v. U.S. Atomic Energy Commission, 174, 530

Cappaert v. United States, 814
Carson-Truckee Water Conservancy Dis

Carson-Truckee Water Conservancy District v. Clark, 880

Center for Biological Diversity v. National Highway Traffic Safety Administration, 195, 933

Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc., 275

Citizens for Better Forestry v. U.S. Dept. of Agriculture, 716

Citizens for Environmental Quality v. United States, 697

Citizens to Preserve Overton Park, Inc. v. Volpe, 337

Coho Salmon v. Pacific Lumber Co., 295

- D -

Defenders of Wildlife v. Norton, 635 Department of Transportation v. Public Citizen, 188

- E -

Empire Water & Power Co. v. Cascade Town Co., 806

Environmental Defense Fund v. Massey, 195

Exxon Shipping Co. v. Baker, 460 In re the Exxon Valdez, Order No. 187, 447

In re the Exxon Valdez, Order No. 190, 450

- F -

Friends of Ironbridge Park v. Babbit, 167 Friends of the Earth, Inc. v. Laidlaw Environmental Services, Inc., 303 Friends of the Shwangunks, Inc. v. Clark,

167

- G -

GDF Realty Investments, Ltd. v. Norton, 608

In re the General Adjudification of All Rights to Use Water in Gila River System & Source, 821

In re the General Adjudification of All Rights to Use Water in the Big Horn River System, 821

General Electric Co. v. U.S. Dep't of Commerce, 467

Gibbs v. Babbitt, 607

- H -

Hawksbill Sea Turtle v. Federal Emergency Management Agency, 663

- I - J -

Illinois Central Railroad Co. v. Illinois, 808

- K -

Karlen v. Harris, 248 Kleppe v. New Mexico, 500

- L -

Lassen v. Arizona, 83
Lawrence v. U. S., 47
Leo Sheep Co. v. United States, 38
Loggerhead Turtle v. County Council, 295

Lujan v. Defenders of Wildlife (Lujan II), 300

Lujan v. National Wildlife Federation (Lujan I), 297

-M -

Massachusetts v. Environmental Protection Agency, 310

Mountain States Legal Foundation v. Bush, 151

- N -

National Association of Home Builders v. Defenders of Wildlife, 628 National Audubon Society v. Superior Court of Alpine County, 841 National Parks & Conservation Ass'n v. Board of State Lands, 83 National Resources Defense Council v. Morton, 203

National Resources Defense Council v. Nuclear Regulatory Commission, 195 National Wildlife Federation v. Babbitt, 671

National Wildlife Federation v. Lujan, 60 National Wildlife Federation v. United States, 694

Natural Resources Defense Council v. Kempthorne, 646

Natural Resources Defense Council v. U. S. Forest Service, 103

Neighbors of Cuddy Mountain v. U. S. Forest Service, 710

Nevada v. United States, 868, 876, 877 New York v. Thomas (Thomas I), 539 Northern California River Watch v. City of Healdsburg, 420 Northern Spotted Owl v. Hodel, 295

Norton v. Southern Utah Wilderness Alliance, 155

- O -

Ohio Forestry Association, Inc. v. Sierra Club, 709

Olson v. Dillerud, 58

- P - O -

Pacific Coast Federation of Fishermen's Associations v. NMFS, 766 Palila v. Hawaii Dep't of Land and Natural Resources, 295 Parker v. United States, 137 Pyramid Lake Paiute Tribe of Indians v. Morton, 875

- R -

Rapanos v. United States, 411 Rincon Band of Mission Indians v. Escondido Mutual Water Co., 874 Robertson v. Methow Valley Citizens Council, 235

- S -

Salt Institute v. Leavitt, 527 Scenic Hudson Preservation Conference v. Federal Power Commission, 280 Sierra Club v. Butz, 98

Sierra Club v. Hardin, 94

Sierra Club v. Hodel, 147

Sierra Club v. Marita, 729

Sierra Club v. Morton, 287

Sierra Club v. Peterson, 187

Sierra Club v. U. S. Fish & Wildlife Service, 641

Sierra Club v. Union Oil Co., 325

Solid Waste Agency of Northern Cook County v. U. S. Army Corps of Engineers, 403

State of Utah v. Andrus (Cotter Corp.), 140

Stryker's Bay Neighborhood Council, Inc. v. Karlen, 248

- T -

TCID v. Sec. of Interior, 877 Tennessee Valley Authority v. Hill, 614 Tulare County v. George W. Bush, 151

- U -

U.S. v. Nevada, 875

U. S. v. T.C.I.D, 876

Unites States ex rel. Bergen v. Lawrence, 43

United States v. Adair, 821

United States v. Erwin, 83

United States v. Gerke, 420

United States v. Goldfield Deep Mines Co. of Nevada, 77 United States v. Johnson, 420

United States v. New Mexico, 817

Unites States v. Nye County, Nevada, 495

United States v. Students Challenging Regulatory Agency Procedures (SCRAP), 296

United States v. Superior Court In and For Maricopa County, 819

Utah Ass'n of Counties v. Bush, 151

- V -

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 207, 271

Voyageurs Region National Park Ass'n v. Lujan, 138

- W - Z -

In Re Water Use Permit Applications for the Waiahole Ditch, 855

In Re Waters of Umatilla River, 862

Watson v. Kenlick Coal Co., Inc., 56

Wilderness Society v. Bosworth, 710

Winters v. United States, 812

Wyoming Outdoor Coordinating Committee v. Butz, 138

Wyoming v. U. S. Dept. of Agriculture,

Wyoming v. United States Dep't of Agriculture, 791

Author's Note

The judicial opinions, articles, and books excerpted here have been rigorously edited in order to keep the whole pertinent and manageable. All omissions from the text of the sources quoted here (with the exception of some string citations) are indicated by ellipses. Most footnotes in the originals have been omitted, and where retained have been renumbered.

A project with the scope of this casebook is possible only with the assistance of many. I have endeavored to recognize their contribution in Acknowledgments. However, any errors in this final version are mine.

I welcome comments by users of this book and suggestions for improvement. These may be sent to rjf@cwsl.edu.

Richard J. Finkmoore

Acknowledgments

The author is grateful to the many people who have assisted in the preparation of this book. The members of Faculty Support Services at California Western School of Law have provided excellent and cheerful assistance in preparing the manuscript. In particular, the author sincerely thanks Joyce Stallworth, Debra Compton, Jacqueline Sewell, Stephanie Sanchez, Diane Sopko, Hedelia Fujikawa, Ana Contreras, Meredith (Beasley) Madrigal and Mary-Ellen Norvell. Librarians Linda Weathers and Bobbi Weaver provided indispensable assistance in obtaining sources. Special appreciation is extended to Helen Komai, of Press Paper and Ink, for careful preparation of all the maps included in this volume.

Many students contributed to the development of this casebook. In particular, the author appreciates the research assistance of Joseph Przyuski, Jay Donohue, Lien-Chi Nguyen, Michael Gates, Patricia Zlaket, Eryka Dennis, Melissa King, Catherine Welton, and Kyung Latimer.

Dean Steven R. Smith and Associate Dean William Aceves provided support and encouragement which is much appreciated. Martha Hopper and Karen Clayton at Carolina Academic Press were instrumental in seeing this project to completion.

The author gratefully acknowledges the permissions granted to reproduce the following material:

- R. Kellert, The Value of Life: Biological Diversity and Human Society. © 1996 Island Press. Reproduced with permission of Island Press, Washington, DC.
- American Rivers, The Missouri Today, <www.amrivers.org/missouririver> (2003). Reprinted with permission.
- Heidi Ridgley, Opening the Door to Wolf Recovery, Defenders (Fall 1999). © 1999 by Defenders of Wildlife, Inc. Reprinted with permission of Defenders of Wildlife, Inc.
- Charles F. Wilkinson, Crossing the Next Meridian: Land, Water, and the Future of the West. © 1992 by Charles F. Wilkinson. Reproduced by permission of Island Press, Washington, DC. and the author.
- Gifford Pinchot, Breaking New Ground (1947). Reprinted with permission of Peter Pinchot.
- Samuel Trask Dana and Sally K. Fairfax, Forest and Range Policy: Its Development in the United States (2d ed. 1980). Reprinted with permission.
- Kathie Durbin, Sawdust Memories, The Amicus Journal 21-26 (Fall 1997). Reprinted with permission of Natural Resources Defense Council.
- Robert Gottlieb, Forcing the Spring: The Transformation of the American Environmental Movement (Revised ed.). © 2005 by Robert Gottlieb. Reproduced by permission of Island Press, Washington, DC. and the author.

- J. William Futrell, The History of Environmental Law, in Celia Campbell-Mohn, ed., Environmental Law from Resources to Recovery. © 1993 by West Publishing Co. Reprinted with permission of Thomson Reuters.
- Richard N. L. Andrews, Managing the Environment, Managing Ourselves: A History of American Environmental Policy (1999). © 1999 by publisher Yale University Press. Reprinted with permission of Yale University Press.
- Stewart L. Udall, The Quiet Crisis (1963). Reprinted with permission of the author.
- Samuel P. Hays, Beauty, Health, and Permanence: Environmental Politics in the United States, 1955–1985 (1987). © 1987 by Cambridge University Press. Reprinted with the permission of Cambridge University Press.
- Philip Shabecoff, A Fierce Green Fire, The American Environmental Movement (Revised ed. 2003). © 2003 by Philip Shabecoff. Reproduced by permission of Island Press, Washington, DC. and the author.
- Michael McCloskey, The Wilderness Act of 1964: Its Background and Meaning, 45 Oregon Law Review 288 (1966). © 1966 University of Oregon. Reprinted with permission.
- Mary Katherine Ishee, Roadless Lands and Wilderness Planning: A History and Overview, in Richard J. Fink, ed., The National Resources Law Manual. © 1995 by the American Bar Association. Reprinted with permission.
- Robert B. Keiter, The Monument, the Plan, and Beyond, 21 Journal of Land, Resources, and Environmental Law 521 (2001). Reprinted with permission of the publisher and the author.
- Robert L. Glicksman and George Cameron Coggins, Federal Recreational Land Policy: The Rise and Decline of the Land and Water Conservation Fund, 9 Columbia J. Env'tl L. 125 (1984). © 1984 Columbia Journal of Environmental Law. Reprinted with permission.
- Owen Demuth, Sweetening the Pot: The Conservation and Reinvestment Act Reignites the Property Rights/ Land Conservation Debate for the Twenty-first Century, 50 Buffalo Law Review 755 (2002). © 2002 Buffalo Law Review. Reproduced with permission.
- Dinah Bear, The National Environmental Policy Act: Its Origins and Evolution, 10 Natural Resources & Environment, No. 2, 3–4 (Fall 1995). © American Bar Association. Reprinted with permission.
- Doug Devin, Mazama, The Past 100 Years: Life and Events in the Upper Methow Valley & Early Winters. © 1997 by Douglas W. Devin. Reprinted with permission of the author.
- Robert G. Dreher, NEPA Under Siege: The Political Assault on the National Environmental Act (2005). Reprinted with permission of the Georgetown Environmental Law & Policy Institute, Georgetown University Law Center, Washington, D.C.
- Joseph L. Sax, Defending the Environment, A Strategy for Citizen Action xvii–xix, 108–115 (1971). Copyright 1970 Joseph L. Sax. Reprinted with permission of the author.
- John Cronin and Robert F. Kennedy, Jr., The Riverkeepers, Two Activists Fight to Reclaim Our Environment as a Basic Human Right (1997). © John Cronin and Robert F. Kennedy, Jr. Reprinted with permission of Scribner, an imprint of Simon & Schuster Adult Publishing Group.
- Laird Lucas, Citizen Suits, in Mark A. Ryan, ed., The Clean Water Act Handbook (2d ed. 2003). © American Bar Association. Reprinted with permission.
- Richard J. Lazarus, The Making of Environmental Law (2004). © 2004 by the University of Chicago. Reprinted with permission of the University of Chicago Press and the author.

- Holmes Rolston III, Conserving Natural Value (1994). © 1994 Columbia University Press. Reprinted with permission of the publisher.
- William H. Rodgers, Jr., Environmental Law: Air and Water, Volume 2, (1986). © 1986 by West Publishing Co. Reprinted with permission of Thomson Reuters.
- E. Donald Elliott, The Last Great Clean Air Act Book?, 5 Environmental Lawyer 321 (1998). © American Bar Association. Reprinted with permission.
- Karen M. McGaffey, Water Pollution Control Under the National Pollutant Discharge Elimination System, in Mark A. Ryan, ed., The Clean Water Act Handbook (2d ed. 2003). © American Bar Association. Reprinted with permission.
- Alexandra Dapolito Dunn, Publicly Owned Treatment Works (POTWs), in Mark A. Ryan, ed., The Clean Water Act Handbook (2d ed. 2003). © American Bar Association. Reprinted with permission.
- Edward B. Witte and David P. Ross, Nonpoint Source Pollution Control, in Mark A. Ryan, ed., The Clean Water Act Handbook (2d ed. 2003). © American Bar Association. Reprinted with permission.
- Laurie K. Beale and Karin Sheldon, TMDLs: Section 303(d), in Mark A. Ryan, ed., The Clean Water Act Handbook (2d ed. 2003). © American Bar Association. Reprinted with permission.
- Douglas R. Williams and Kim Diana Connolly, Federal Wetlands Regulation: An Overview in Kim Diana Connolly, Stephen M. Johnson, and Douglas R. Williams, eds., Wetlands Law and Policy: Understanding Section 404 (2005). © American Bar Association. Reprinted with permission.
- Sylvia Quast and Steven T. Miano, Wetlands: Section 404 in Mark A. Ryan, ed., The Clean Water Act Handbook (2003). © American Bar Association. Reprinted with permission.
- Royal C. Garner, Mitigation, in Kim Diana Connolly, Stephen M. Johnson and Douglas R. Williams, eds., Wetlands Law and Policy: Understanding Section 404 (2005). © American Bar Association. Reprinted with permission.
- Peter S. Menell and Richard B. Stewart, Environmental Law and Policy (Little, Brown & Co. 1994). Reproduced with permission of Aspen Publishers, a division of Wolters Kluwer Law & Business.
- In Re The Exxon Valdez, Orders No. 187 and 190, U.S. District Court 1995 American Maritime Cases 1420, 1440 (D. Alaska 1994). © 1995 American Maritime Cases, Inc. Reprinted with permission of the publisher.
- John D. Leshy, Unraveling the Sagebrush Rebellion: Law, Politics and Federal Lands. This work, copyright 1980 by John D. Leshy, was originally published in 14 U.C. Davis Law Review 317 (1980), copyright 1980 by the Regents of the University of California. Reprinted with permission.
- Robert L. Glicksman, Fear and Loathing on the Federal Lands, 45 Kansas Law Review 647 (1997). © 1997 Kansas Law Review, Inc. Reprinted with permission.
- Michael McCloskey, The Skeptic: Collaboration has its Limits, 28 High Country News 7 (May 13, 1996). © 1996 High Country News. Reprinted with permission.
- Ed Marston, Squishy-soft Processes—Hard results, 32 High Country News (August 28, 2000). © 2000 High Country News. Reprinted with permission.

- Robert V. Percival, Checks without Balance: Executive Office Oversight of the Environmental Protection Agency, 54 Law & Contemporary Problems 127 (No. 4, Autumn 1991). Reprinted with permission of publisher and author.
- That Regulatory Review Order: Who Benefits, and at What Cost? The Environmental Forum 46 (March–April 2007). © Environmental Law Institute, Washington, D.C. Reprinted with permission.
- Thomas O. McGarity, Sidney A. Shapiro, Rena I. Steinzor, Joanna Goger and Margaret Clune, Truth and Science Betrayed: The Case Against the Information Quality Act, Center for Progressive Regulation Publication # 502 (March 2005). © 2005 Center for Progressive Reform. Reprinted with permission.
- Michael E. Kraft, Environmental Policy in Congress: From Consensus to Gridlock in Norman J. Vig and Michael E. Kraft, Environmental Policy: New Directions for the Twenty-first Century (4th ed. 2000). © 2000 CQ Press, Washington, D.C. Reprinted with permission.
- A. Denny Ellerman, Paul. Joskow, and David Harrison, Jr., Emissions Trading in the U.S.: Experience, Lessons, and Considerations for Greenhouse Gases. © 2003 Pew Center on Global Climate Change. Reprinted with permission.
- Arnold W. Reitze, Jr., State and Federal Command-and-Control Regulation of Emissions from Fossil-Fuel Electric Power Generating Plants, 32 Environmental Law 369 (2002). Reprinted with permission of the publisher and author.
- Debra Jezouit, The Acid Rain Program, in Robert J. Martineau, Jr. and David P. Novello, eds., The Clear Air Act Handbook (2d ed. 2004). © American Bar Association. Reprinted with permission.
- Robert Cameron Mitchell, Angela G. Mertig, Riley E. Dunlap, Twenty Years of Environmental Mobilization: Trends Among National Environmental Organizations, in Riley E. Dunlap and Angela Mertig, eds., American Environmentalism: The U.S. Environmental Movement 1970–1990. © 1992 Taylor & Francis Group LLC. Reprinted with permission.
- Michael McCloskey, Twenty Years of Change in the Environmental Movement: An Insider's View, in Riley E. Dunlap and Angela Mertig, eds., American Environmentalism: The U.S. Environmental Movement 1970–1990. © 1992 Taylor & Francis Group LLC. Reprinted with permission.
- Commission for Racial Justice (United Church of Christ). Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites xi–xv, 13. © 1987 United Church of Christ. All rights reserved. Used by permission.
- Vicki Been, Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?, 103 Yale Law Journal 1383 (1994). © 1993–94 Yale Law Journal. Reprinted with permission.
- Bill Devall, Deep Ecology and Radical Environmentalism, in Riley E. Dunlap and Angela Mertig, eds., American Environmentalism: The U.S. Environmental Movement, 1970–1990. © 1992 Taylor & Francis Group LLC. Reprinted with permission.
- Michael Shellenberger and Ted Nordhaus, The Death of Environmentalism. © 2004 Michael Shellenberger and Ted Nordhaus. Reprinted with permission.
- Norman Myers, A Wealth of Wild Species, Storehouse for Human Welfare. © 1983 Norman Myers. Reprinted by permission.

- Edward O. Wilson, Biophilia and the Conservation Ethic, in Stephen R. Kellert and Edward O. Wilson, The Biophilia Hypothesis. © 1993 by Island Press. Reproduced by permission of Island Press, Washington, DC.
- Jeffrey P. Cohn, How the Endangered Species Act Was Born, 73 Defenders (Winter 1997–98). © Defenders of Wildlife, Inc. Reprinted with permission.
- Cass R. Sunstein, Interpreting Statutes in the Regulatory State, 103 Harv. L. Rev. 405 (1989). © 1989–1990 Harvard Law Review. Reprinted with permission.
- Zygmunt J.B. Plater, Robert H. Abrams, William Goldfarb, Robert L. Graham, Environmental Law and Policy: Nature, Law, and Society (2nd ed.). © 1998 West Group. Reprinted with permission of the West Group.
- Laura C. Hood, Frayed Safety Nets, Conservation Planning Under the Endangered Species Act. © 1998 Defenders of Wildlife, Inc. Reprinted with permission.
- Elizabeth Ann Rieke, The Bay-Delta Accord: A Stride Toward Sustainability, 67 U. Colo. L. Rev. 341 (1996). Reprinted with permission.
- Aldo Leopold, A Sand County Almanac and Sketches Here and There. © 1949 Oxford University Press. Reprinted with permission.
- Gretchen C. Daily, Introduction: What are Ecosystem Services?, in Gretchen C. Daily, ed., Nature's Services: Societal Dependence on Natural Ecosystems. © 1997 by Island Press. Reproduced with permission of Island Press, Washington, DC.
- George Cameron Coggins, Charles F. Wilkinson & John Leshy, Federal Public Lands and Resources Law (5th ed.). © 1981–2002 by Foundation Press. Reprinted with permission of Thomson Reuters.
- Richard J. Fink, The National Wildlife Refuges: Theory, Practice and Prospect, 18 Harvard Envt'l L. Rev. 1 (1994). © Harvard Environmental Law Review. Reprinted with permission.
- William S. Alverson, Walter Kuhlman, and Donald M. Waller, Wild Forests: Conservation Biology and Public Policy. © 1994 by Island Press. Reproduced with permission of Island Press, Washington, DC.
- Victor M. Sher, Travels with Strix, 14 Public Land Law Review 41 (1993). Reprinted with permission of the author.
- Steven Lewis Yaffee, The Wisdom of the Spotted Owl: Policy Lessons for a New Century (1994). © 1994 by Steven Yaffee. Reprinted with permission of Island Press, Washington, D.C. and the author.
- Lauren M. Rule, Enforcing Ecosystem Management Under the Northwest Forest Plan: The Judicial Role, 12 Fordham Envtl L. J. 211 (2000). Reprinted with permission of the author.
- Robert B. Keiter, Keeping Faith with Nature: Ecosystems, Democracy & America's Public Lands. © 1999 by Robert B. Keiter. Reprinted with permission of Yale University Press and the author.
- Rebecca W. Watson, Ecosystem Management in the Northwest: "Is Everybody Happy?", 14 Natural Resources & Environment., No. 3, 173 (Winter 2000). © American Bar Association. Reprinted with permission.
- Jesse B. Davis, The Healthy Forests Initiative: Unhealthy Policy Choices in Forest and Fire Management, 34 Environmental Law 1209, 1214–1240 (2004). Reprinted with permission of the publisher.

- Sandra Postel and Stephen Carpenter, Freshwater Ecosystem Services in Gretchen C. Daily, Nature's Services, Societal Dependence on Natural Ecosystems. © 2000 by Island Press. Reproduced with permission of Island Press, Washington, DC.
- Joseph L. Sax, Robert H. Abrams and Barton H. Thompson, Jr., Legal Control of Water Resources (2d ed.). © 1991 West Group. Reprinted with permission of the West Group.
- Joseph W. Dellapenna, Eastern Water Law: Regulated Riparianism Replaces Riparian Rights in Richard J. Fink, ed., The Natural Resources Law Manual. © 1995 American Bar Association. Reprinted with permission.
- Scott B. McElroy, The Arizona Adjudications—99 Years after the Winters Decision Will its Promises Be Fulfilled?, in American Bar Association, Section of Environment, Energy, and Resources, Changing Values—Changing Conflicts. © 2007 American Bar Association. Reprinted with permission.
- Mark P. Reisner, CADILLAC DESERT, REVISED AND UPDATED. © 1986, 1993 by Marc P. Reisner. Used by permission of Viking Penguin, a division of Penguin Group (USA) Inc.
- John Hart, Storm Over Mono, The Mono Lake Battle and the California Water Future (1996). © 1996 by John Hart. Reprinted with the permission of the University of California Press and the author.
- Cynthia L. Koehler, Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy, 22 Ecology L. Q. 541 (No. 3, 1995). © 1995 the Ecology Law Quarterly. Reprinted with permission of the author and the University of California, Berkeley.
- Stephen N. Arakawa, PE and Mark J. Graham, PE, Changing Values—Recognizing the Value of Conservation, in American Bar Association Section of Environment, Energy, and Resources, Changing Values—Changing Conflicts. © 2007 American Bar Association. Reprinted with permission.
- David E. Filippi, The Conflict Between the Prior Appropriation Doctrineand Efforts to Conserve Water, in American Bar Association, Section of Environment, Energy, and Resources, Changing Values—Changing Conflicts. © 2007 American Bar Association. Reprinted with permission.
- Douglas S. Kenney and William B. Lord, Analysis of Institutional Innovation in the Natural Resources and Environmental Realm: The Emergence of Alternative Problem-Solving Strategies in the American West, Natural Resources Law Center Research Report (RR-21) (1999). © 1999 University of Colorado School of Law. Reprinted by permission on the Natural Resources Law Center, University of Colorado School of Law.
- An Interview with Robert Pelcyger, University of Colorado School of Law, Resource Law Notes, 28 (April 1993). © 1993 University of Colorado School of Law. Reprinted by permission on the Natural Resources Law Center, University of Colorado School of Law.
- Edith Brown Weiss, In Fairness to Future Generations International Law, Common Patrimony, and Intergenerational Equity. © 1989 United Nations University Press. Reprinted with permission.
- Fred Bosselman, Jim Rossi, and Jacqueline Lang Weaver, Energy, Economics, and the Environment. © 2000 by Foundation Press. Reprinted with permission of Thomson Reuters.
- Hank Schilling, Energy Efficiency, in Celia Campbell-Mohn, Barry Breen, & J. William Futrell, Environmental Law: From Resources to Recovery. © 1993 by West Publishing Co. Reprinted with permission of Thomson Reuters.
- National Research Council, Committee on the Effectiveness and Impact of Corporate Average Fuel Economy Standards, Effectiveness and Impact of Corporate Average Fuel Economy

- omy (CAFÉ) Standards. © 2002, National Academy of Sciences. Reprinted with permission from the National Academies Press.
- Richard Wolfson and Stephen H. Schneider, Understanding Climate Science, in Stephen H. Schneider, Armin Rosencranz, and John O. Niles, eds., Climate Change Policy: A Survey. © 2002 by Island Press. Reproduced with permission of Island Press, Washington, DC.
- Intergovernmental Panel on Climate Change, Fourth Assessment Report (AR4), Climate Change 2007: Synthesis Report Summary for Policymakers 1–2, 4–8, 11, 13, 18–23 (November 2007). © 2007 by the Intergovernmental Panel on Climate Change. Reproduced with permission of the Intergovernmental Panel on Climate Change, IPCC Secretariat, Geneva.
- HM Treasury, Government of the United Kingdom, The Stern Review (2006). Reprinted with permission of the Office of Public Sector Information, Government of the United Kingdom.
- Climate Change Secretariat (UNFCC), Caring for Climate: A Guide to the Climate Change Convention and the Kyoto Protocol (2003). Reprinted with permission of the United Nations Climate Change Secretariat, UNFCCC, Bonn, Germany.
- Armin Rosencranz, U.S. Climate Change Policy, in Stephen H. Schneider, Armin Rosencranz, and John O. Niles, eds., Climate Change Policy: A Survey. © 2002 by Island Press. Reproduced with permission of Island Press, Washington, DC.
- John C. Derbach, Current U.S. Law and Policy, in Michael B. Gerrard, ed., Global Climate Change and U.S. Law. © 2007 American Bar Association. Reprinted with permission.
- United Nations Environment Programme, Global Environment Outlook 4 (GEO-4). © 2007 by United Nations Environment Programme. Reprinted with permission.
- Symposium, The Road from Johannesburg, 15 Georgetown Int'l. Envt'l. L. Rev. 809 (2003). Reprinted with permission of the publisher, Georgetown International Environmental Law Review 2003.
- John C. Dernbach, Synthesis, excerpted from STUMBLING TOWARD SUSTAINABIL-ITY (John C. Dernbach, ed., Environmental Law Institute 2002). © 2002 Environmental Law Institute.® Reprinted with permission.
- Robert Costanza, John H. Cumberland, Herman Daly, Robert Goodland, Richard Norgaard, An Introduction to Ecological Economics. © 1997 St. Lucie Press, Boca Raton, Florida. Reprinted with permission.
- William D. Nordhaus and Edward C. Kokkelenberg, eds, Panel on Integrated Environmental and Economic Accounting, National Research Council, Nature's Numbers: Expanding the National Economic Accounts to Include the Environment. © 1999 National Academy of Sciences. Reprinted with permission from the National Academies Press.
- United Nations Environment Programme, Global Environment Outlook 3 (GEO-3). © 2002 by United Nations Environment Programme. Reprinted with permission.
- Philip Allott, International Law and International Revolution: Reconceiving the World. © 1989 Hull University Press, England. Reprinted with permission.

Understanding Environmental Law: An Introduction

Just now we seem to be expecting some wonderworld to be attained through an ever-greater dedication to our sciences, technologies, and commercial projects. In the process, however, we are causing immense ruin in the world around us.

We might begin to think about our present life-situation by reflecting for a moment on the wonder of Earth, how it came to be the garden planet of the universe and what might be our human role in this context. To appreciate our immediate situation we might also develop a new intimacy with the North American countries. For we need the guidance and support of this continent as we find our way into the future.

The most basic and most disturbing commitment of the original European settlers was to conquer the continent and reduce it to human use. Because the exaltation of the human and the subjugation of the natural have been so excessive, we need to understand how the human community and the living forms of Earth might now become a life-giving presence to each other. We have already shaped the critical understanding and the appropriate technologies that can assist in establishing a beneficial human presence with the other components of this continent and also with the one great Earth community. We need only see that our human technologies are coherent with the ever-renewing technologies of the planet itself.

Of the institutions that should be guiding us into a viable future, the university has a special place because it teaches all those professions that control the human endeavor. In recent centuries the universities have supported an exploitation of the Earth by their teaching in the various professions, in the sciences, in engineering, law, education, and economics. Only in literature, poetry, music art and occasionally in religion and the biological sciences, has the natural world received the care that it deserves.

Our educational institutions need to see their purpose not as training personnel for exploiting the Earth but as guiding students toward an intimate relationship with the Earth. For it is the planet itself that brings us into being, sustains us in life, and delights us with its wonders. In this context we might consider the intellectual, political, and economic orientations that will enable us to fulfill the historical assignment before us—to establish a more viable way into the future.

THOMAS BERRY, THE GREAT WORK: OUR WAY INTO THE FUTURE ix-x (1999).

Four Challenges

The first fact that confronts students and professors of environmental law is the subject's tremendous scope and complexity. The authors of current environmental law casebooks describe the field as "a vast system," "an immense and fiercely complex web of regulations," "highly complex," "a hodgepodge," and in general bemoan the "numbing mass and complexity of environmental law."

Second, environment law teachers must deal with the fact that the field undergoes constant change. Even without major legislative action by Congress, significant new developments continually emanate from governmental agencies and, of course, the courts. Naturally, professors must present their students with the most current law. But equally important is the fact that throughout their professional careers students will regularly need to assimilate *and understand* new and sometimes sweeping changes in the law. In planning these materials, I have asked myself how law teachers can enable our students to do this successfully after graduation.

A third difficulty in studying and teaching environmental law is that its parts often do not seem in any way connected. There are separate statutes—and separate complex regulatory schemes—for air pollution, water pollution, and soil pollution (or contamination), and still different laws, for example, governing surface water pollution by one substance (oil), pollution of groundwater, and so on. Referring to the pollution control parts of environmental law, Professor John Leshy has stated, "... I [have] found it difficult to identify, must less organize a course around, some overarching themes in the regulatory patterns. They seem to me to be quite ad hoc…"

A fourth challenge was expressed by Professor David Getches as follows: "Lawyers in great numbers are finding jobs 'doing environmental law,' but the law, lawyers, law schools, and law students seem to have so little to do with *the environment...*" With dismay, I must agree that many of us—and often even the law itself—are disconnected from the environment.

Addressing the Challenges

Because environmental law is vast, no professor can cover all of it in one course (and no casebook can cover it in one volume). Donald Elliott has written, "Today there is no serious question that environmental law is the most complicated and detailed body of law the world has ever known.... The field has simply gotten too large and complex for anyone to master it all." E. Donald Elliot, *The Last Great Clean Air Act Book?*, 5 Environmental Lawyer 321, 322 (1998). Therefore, we must be selective. To that end, this casebook³ emphasizes the "natural resources portion" of environmental law—in my opinion, the more dynamic and the more interesting part of the field.

Current students can better assimilate future changes in environmental law is they have a context in which to place new legal developments. In my view, one very useful context is the history of environmental law and policy. An understanding of the evolution of the field can provide a way to connect new laws and programs to the existing legal structure (and there always is such a connection) and to be able to place new developments in the "big picture" (which law students seek and lawyers need to remain aware of).

^{1.} Joseph L. Sax, Environmental Law in the Law Schools: What We Teach and How We Feel About It, 19 Envtl. L. Rptr. 10251 (1989).

^{2.} Sax, *supra* (emphasis in the original).

^{3.} Actually, these materials contain relatively few judicial opinions when compared to other books in the field, but I have bowed to tradition (and inertia in legal education) and refer to this as a "case"book.

Other environmental law professors also have emphasized the critical importance of a historical perspective. "One cannot understand current conflicts over allocation of our nation's natural resources ... without some grasp of the changing values of those resources over the course of our nation's history. Nor do the approaches taken in our pollution statutes make sense unless understood in their historical context." James Salzman and Barton H. Thompson, Jr., Environmental Law and Policy 3 (2d ed. 2007). For environmental law, a "sense of the history of it gives you a more sophisticated understanding of the case law and public law of the past, present, and future." Zygmunt J.B. Plater, et al., Environmental Law and Policy: Nature, Law, and Society 42 (3rd ed. 2004).

Accordingly, the first part of this casebook traces the historical evolution of environmental law. Importantly, however, the law presented throughout the book is modern environmental law. For example, the National Environmental Policy Act of 1969 is examined at the appropriate point in the chronology, but the law which is presented is the current law of NEPA. Even in the first chapter, developments in the nineteenth century are presented through statutes which are still in force today and modern cases applying those statutes.

A powerful catalyst for the development of environmental law was the emergence of conservation and later environmentalism as social and political movements, and the rise of organized environmentalism. Environmental groups have been the primary moving force behind legislation, litigation, and administrative proceedings to improve and protect the environment. Therefore, this casebook devotes more attention than most others to the movement and its organizations. In my view, some familiarity with these topics is part of basic literacy for environmental lawyers.

Third, approaching environmental law on a statute-by-statute or resource-by-resource basis serves to reinforce the fragmentation of the field. Accordingly, the primary organization of this casebook is not the approach of most casebooks on this subject. The chronological organization of the first part of the casebook allows students to see the disparate parts within the broader evolution of environmental policy, and thereby to connect what seems at first glance unconnected. Moreover, environmental law is becoming somewhat more integrated in areas such as water allocation, endangered species protection, and ecosystem management. That these examples of integration are found in the "natural resources portion" of modern environmental law is another reason for emphasizing topics in that area.

Thus, Part I of this book presents *modern* environmental law in context; each of its five chapters explores one era in its evolution; the five chapters in Part II examine several major current environmental challenges. Because history does not unfold in neat installments, the eras presented in Part I, and the periods set forth within Chapter 1 in particular, do overlap with one another. For example, I include the early 1970s in Chapters 3 (1965–1978) and 4 (1970–1980). Eras are merely periods of time imposed on history by humans seeking understanding and meaning. With regard to our subject, public policies reflected in one part of environmental law may continue even though another part of the law changes and its new policies signal the beginning of another era. And so on. Rest assured, however, that *every* beginning and ending year denotes an important environmental *legal* event.

^{4.} A word to readers who are also historians: the chronology presented in the first five chapters is intended to be descriptive, not analytical. Undoubtedly, some will find it simplified and incomplete. Those readers will wish to consult the more comprehensive histories upon which I have relied and the sources cited in those works.

About the Values of Nature

Part of the casebook's title warrants explanation. The environment itself—nature, if you will—is the reason we have environmental law in the first place. Many students want to learn environmental law not because it is law but because of the environment. Of course the law is very important, but that is because it determines the quality and integrity of the real world environment. In fact, nature is central to our subject; it should not be an after-thought.

When referring to the natural in our world, "value" is used here in the sense of a desirable quality, a characteristic which is of worth, economic or otherwise. Our environment has many such qualities and, from one perspective, environmental law can be considered society's decision regarding when and to what extent certain values should be recognized and protected.

Modern environmental law is sometimes presented as an accommodation between private rights and the public interest, or the result of competition among political philosophies and special interests, or scrutinized using economic analysis. The analytical frameworks of other disciplines are legitimate and instructive.

Another—and I believe equally legitimate—perspective views environmental law as a process of incorporating the values of nature into the legal system. The values of nature tell us about the objectives of the law, its development over time, and its shortcomings. Awareness of these values helps us *understand* environmental law, which is as important as *knowing* some environmental law.

The following passage helps to clarify the role of "values" as it is frequently incorporated throughout this casebook.

... [T]he terms value and values are used in two distinct but related ways. The first of the two meanings of value includes the motives, preferences, and underlying belief system that a person has in undertaking an activity, investigating a matter, or protecting an object. It is most commonly raised as an academic issue in a question such as "Is science free of values?" which means "Is science truly objective, or is it influenced by the motivations, perspectives, attitudes, or goals of the scientist?" Medicine, for example, is a science that is explicitly based on values because its goals and procedures grow from the desires of patients and the patients' subjective definitions of health. So, too, is conservation biology a science based on values; its practitioners look to the values of the communities they are trying to serve and to their own values in order to determine goals and methods necessary to achieve those goals. When commentators refer to this meaning, they typically write of values, in the plural.

The second meaning of *value*, the one more commonly found in the literature of economics and biodiversity studies, concerns the worth of a particular object or activity. "What is the value of biodiversity?" is an often-asked question, and many have tried to answer it by presenting lists of the different types of value (or worth) that humans find in various elements of biodiversity. These types of value carry names such as *use value*, *option value*, and *existence value* in this sense generally employ the singular form rather than the plural.

Values, [in the first sense]..., are entirely internal to human being, although the process of their development is molded by external events and other hu-

mans. In contrast, an individual assigns or attaches *worth* [value in the second sense] to objects and activities that are external to himself or herself. *Worth* is assigned when an object satisfies or in some way matches one of the individual's *values*. Since different people have different values, it is no surprise that they find worth in different objects and activities.

Therefore, the answer to the question, "What is the value of biodiversity?" (or ... "What is the worth of biodiversity?"), is "It depends upon the values that are important to you." An object, whether a work of art or an element of biodiversity, is not attributed great worth unless we can find a person for whom it satisfies important values.

Dan L. Perlman & Glenn Adelson, Biodiversity: Exploring Values and Priorities in Conservation, 39–40 (1997).

Although the two senses of "value" are related, this casebook uses the term—whether in the singular or plural—to refer to "worth," the merit and importance humans attach to specific aspects of the environment. It is important to keep in mind that the values of nature are *not* only those deemed worthy by most environmentalists, but include values derived from using, modifying, and consuming our environment.

Much of what is presented in this casebook is traditionally described as "natural resources law." But that term is not used in the title of the book; it is used only infrequently in the text. Certainly forests, water, wildlife, and so on are "natural," but only in one sense are they "resources" as that word is generally defined. Resources (plural) means the "available means (as of a country or business): computable wealth (as in money, property, products): immediate and possible sources of revenue < rich natural ~s >. Webster's Third New International Dictionary of the English Language Unabridged 1934 (1981). As this casebook demonstrates, economic value is but one value of nature.

The environmental law that exists at a given point in time reflects those environmental values recognized as sufficiently important at that time—and those not so recognized. The path of environmental law has been to expand the values recognized and protected. For example, the values of solitude and landscapes unspoiled by man are now preserved by statute in many places. The services provided by ecosystems, such as water purification and flood control are now seen as providing economic value. Even intrinsic values, arguably, are protected by the Endangered Species Act and other statutes. An appreciation of nature's values can tell us what environmental law should become.

Finally, being reminded of the values of nature—and even discovering some for the first time—may reconnect us at least a little to the environment itself. It also may help to solve the very real problem noted by Professor Getches: that "the law, lawyers, [and] law schools ... have so little to do with *the environment*."

I close with a piece of advice for my readers, both law students and others: Go outdoors, be in nature. In my view, this is essential to knowing why environmental law is so important—and also to our sanity in this challenging modern world. Similar counsel was given by the writer Edward Abbey speaking to a group of environmental activists in the late 1970s:

One final paragraph of advice: do not burn yourself out. Be as I am—... a part-time crusader, a half-hearted fanatic. Save the other half of yourselves and your lives for pleasure and adventure. It is not enough to fight for the land; it is even more important to enjoy it. While you can. While it is still there. So get out there and hunt and fish and mess around with your friends, ramble out yon-

der and explore the forest, encounter the grizz, climb the mountains, bag the peaks, run the rivers, breathe deep of that yet sweet and lucid air, sit quietly for a while and contemplate the precious stillness, the lovely, mysterious and awesome space.

Steve Van Matre and Bill Weiler, eds., The Earth Speaks 57 (1983) (quoting Edward Abbey).