

School of Public Affairs  
University of Maryland at College Park

PUAF 740 -- Public Policy and the Environment

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About 25 years ago, the quality of the environment became a leading concern of national policy makers in the United States. The National Environmental Policy Act, requiring the writing of environmental impact statements for major federal actions, was signed into law on New Years day, 1970. Congress subsequently enacted a series of major laws designed to protect and improve the quality of the air, water and other features of the environment. These laws included the Clean Air Act of 1970, the Federal Water Pollution Control Act of 1972, the Toxic Substances Control Act of 1976, the Resource Conservation and Recovery Act of 1976, and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (better known as Superfund).

Other areas of United States environmental policy were subject to equally sweeping changes. The National Forest Management Act of 1976 and the Federal Lands Policy and Management Act of 1976 rewrote the foundations for the management of federal lands, representing 30 percent of the United States land area and containing much of the nation's wilderness and biodiversity. The Endangered Species Act of 1973 and the wetlands provisions of the Clean Water Act imposed new limits on the use of many private lands. Ecological management became a guiding objective for many government agencies.

The environmental legislation of the past 25 years has had major impacts on American society. It has yielded significant improvements in the quality of the environment. Complying with environment regulation has become a leading concern of businesses in many industries. The direct costs of meeting environmental requirements exceed \$100 billion per year and the indirect costs may be just as great. The rules and regulations of the Environmental Protection Agency arguably have more impact on the American economy than those of any other federal agency.

Given its wide impacts, it should be no surprise that U.S. environmental policy has been controversial. There are debates about whether the gains to the environment are large enough to justify the costs. Have environmental laws encouraged government agencies and the private sector to find the least expensive way to achieve environmental goals? Have levels of risk to human health

and to ecological systems been accurately understood before devising means to limit them? Have the costs of environmental improvement been distributed among workers, businesses, taxpayers, property owners, and others in American society in a fair and equitable way?

This course will examine these and other issues in U.S. environmental policy. It will cover the history of how the major environmental laws came to be enacted and the specific requirements of each law. Scientific, economic, legal and ethical issues relating to the development and implementation of environmental legislation over the past 25 years will be taken up. The course will explore a number of case studies in environmental policy, as well as the general policy problems and concerns that have emerged. Because a number of key environmental laws will be up for reauthorization in the current session of Congress, it will be possible to relate these discussions to an ongoing public debate concerning the possible provisions of the new laws.

A term paper (about 15-20 pages) will be required of each student, analyzing a specific area of environmental controversy (e.g., the regulation of a particular chemical, the recovery plan for a particular species). A one-page proposal for a topic will be due on February 4.

If class size permits, students will be expected to present briefly their findings and conclusions at one of the scheduled classes. Topics and time frames for completion of drafts of the papers should be worked out with the instructor, in order to coordinate topic areas with the schedule of classes. Comments will be provided by the instructor on each paper to assist in rewriting it. Final papers will be due May 11.

The instructor will work with the students scheduled for each class session to organize the discussion. Each student should complete her or her draft of the paper one week prior to the class discussion for which the student is scheduled.

The class will be a mixture of lecture and discussion. It is important that readings be done prior to each class. Students should come prepared to discuss the relevant materials.

Themes and issues that will run throughout the course will include:

1. Have environmental laws worked effectively to improve the quality of the environment?
2. How can society go about establishing environmental policies when there are large scientific uncertainties?

3. How useful are concepts and methods such as risk analysis, benefit-cost analysis, cost effectiveness, and others in addressing environmental policy problems?

4. To what degree is the making of environmental policy an exercise in deciding social values, perhaps even dependent on beliefs of a cultural or quasi-religious character?

There will be a mid term and a final exam. Grading will be based on the following considerations and weights:

Mid-term Exam -- 25%  
Term Paper -- 25%  
Final Exam -- 35%  
Class Discussion -- 15%

### Readings

The readings will come from five books available for purchase at the book store and a diverse set of articles, government reports, newspaper columns and other materials that will be made available to students.

The books to be purchased are:

Stephen Breyer, Breaking the Vicious Circle: Toward Effective Risk Regulation (Cambridge, Mass.: Harvard University Press, 1993).

Gary C. Byner, Blue Skies, Green Politics (Washington, D.C.: Congressional Quarterly Press, 1995).

Daniel J. Fiorino, Making Environmental Policy (Berkeley: University of California Press, 1995).

Marc K. Landy, Marc J. Roberts, and Stephen R. Thomas, The Environmental Protection Agency: Asking the Wrong Questions from Nixon to Clinton (New York: Oxford University Press, 1994).

Charles C. Mann and Mark L. Plummer, Noah's Choice: The Future of Endangered Species (New York: Alfred A. Knopf, 1995).

## **SCHEDULE OF CLASSES AND READINGS**

### **Background to Environmental Policy**

#### **January 28 -- What are the Goals of Environmental Policy?**

Lynn White, "Historical Roots of our Ecologic Crisis," Science (March 10, 1967), pp. 1203-1207.

John McPhee, Encounters with the Archdruid (Farrar, Straus, and Giroux, 1971), pp. 79-87.

Donald Worster, "John Muir and the Roots of American Environmentalism," in The Wealth of Nature (Oxford University Press, 1993), pp. 184-202.

Bruce Babbitt, "Our Covenant: To Protect the Whole of Creation," speech delivered to League of Conservation Voters, December 1995, pp. 1-8.

Kenneth J. Arrow, et. al., Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles (Washington, D.C.: American Enterprise Institute, The Annapolis Center, and Resources for the Future, 1996), pp. 1-14.

John L. Moore, "Cost-Benefit Analysis: Issues in its Use in Regulation," Congressional Research Service Report for Congress, Library of Congress, June 28, 1995, pp. 1-21.

#### **February 4-- Players and Issues**

Fiorino, pp. 1-99.

Rogelio Garcia, "Federal Regulatory Reform: An Overview," Congressional Research Service Issue Brief, Library of Congress, December 22, 1997, pp. 1-11.

John E. Blodgett, "Environmental Protection: How Much It Costs and Who Pays," Congressional Research Service Report for Congress, Library of Congress, April 16, 1997, pp. 1-6.

"The G.O.P.'s War on Nature," New York Times, May 31, 1995, editorial, p. A20.

Robert Hahn, "The EPA's True Cost," Wall Street Journal, June 27, 1996, p. A18.

David B. Rivkin, Jr. and Turner T. Smith, Jr., "Reform the Debate on Environmental Policy," Washington Times, October 1, 1996, p. A17.

Bonner T. Cohen, "Greens Fail in Bid to `Take Back' Congress," The Earth Times, November 16-30, 1996, p. 20.

John McCain, "Nature is Not a Liberal Plot," New York Times, November 22, 1996, p. A31.

National Academy of Public Administration, Setting Priorities, Getting Results: A New Direction for EPA, April 1995, pp. 1-12.

William D. Ruckelshaus, "Stopping the Pendulum," Environmental Forum (November/December 1995), internet version, pp. 1-6.

Green Scissors: Cutting Wasteful and Environmentally Harmful Spending and Subsidies, organized by Friends of the Earth with other environmental and taxpayer groups, Washington, D.C., February, 1996, pp. 1-8.

## Regulating Air and Water Quality

### **February 11 -- The Clean Air Act of 1970**

Byner, pp. 51-113.

R. Shep Melnick, Regulation and the Courts: The Case of the Clean Air Act (Brookings Institution, 1983), pp. 299-244.

Landy, pp. 49-82, 204-233.

### **February 18 -- The 1990 Clean Air Act Amendments**

Byner, pp. 114-226.

Daniel Dudek, et. al., More Clean Air for the Buck: Lessons from the U.S. Acid Rain Emissions Trading Program, Environmental Defense Fund, New York, N. Y., November 1997, pp. i-iii, 1-20.

Michael J. Sandel, "It's Immoral to Buy the Right to Pollute," New York Times, December 15, 1997, p. A29.

Letters to the Editor (Response to Sandel piece), New York Times, December 17, 1997, p. A34.

Winston Harrington and Margaret Walls, "Shifting Gears: New Directions for Cars and Clean Air," Resources (Spring 1994), pp. 2-6.

Anna Alberini, David Edelstein and Virginia McConnell, "Will Speeding the Retirement of Old Cars Improve Air Quality?," Resources (Spring 1994), pp. 7-10, 15.

Keith Bradsher, "Light Trucks Increase Profits But Foul More Air Than Cars," New York Times, November 30, 1997, P. 1.

James E. McCarthy, "Clean Air Act Issues," Congressional Research Service Issue Brief, Library of Congress, December 17, 1997, pp. 1-10.

## **February 25 -- The Clean Water Act of 1972**

Peter Caulkins and Stuart Sessions, "Water Pollution and the Organic Chemicals Industry," in Richard D. Morgenstern, ed., Economic Analyses at EPA: Assessing Regulatory Impact (Washington, D.C.: Resources for the Future, 1997), pp. 87-118.

Environmental Protection Agency, President Clinton's Clean Water Initiative: Analysis of Benefits and Costs, March 1994, executive summary.

Angus Phillips, "Alexandria's Potomac a Secret That Mustn't Be Kept," Washington Post, November 5, 1995, p. D4.

Robert Adler, Jessica C. Landman, and Diane M. Cameron, The Clean Water Act: 20 Years Later (Island Press, 1993), pp. 137-170.

Debra S. Knopman and Richard A. Smith, "20 Years of the Clean Water Act," Environment, January/February 1993, pp. 17-20, 34-40.

G. Brown, Jr. and R. Johnson, "Pollution Control by Effluent Charges: It Works in the Federal Republic of German, Why not in the U.S.," Natural Resources Journal (October 1984), pp. 929-938, 959-966.

"Roundtable on Swedish Environmental Policy with Mans Lonnroth," Enterprise for the Environment, August 12, 1996, pp. 1-3.

#### **March 4 -- Rethinking Clean Water Strategy**

John G. Mitchell, "Our Polluted Runoff," National Geographic, February 1996, pp. 108, 113-125.

"Rays of Hope in the Watershed," The New York Times, August 26, 1995, editorial, p. 18.

"At Last, A Watershed Agreement," New York Times, November 3, 1995, editorial, p. A28.

David W. Riggs, "Market Incentives for Water Quality: A Case Study of the Tar-Pimlico River Basin, North Carolina," Center for Policy Studies Discussion Paper, Clemson University (December 1993), pp. 1-26.

President Bill Clinton and Vice President Al Gore, Reinventing Environmental Regulation, March 16, 1995, p. 19.

Elizabeth Brubaker, "The Common Law and the Environment: The Canadian Experience," Prepared for the Political Economy Research Center, Bozeman, Montana, June 1997, pp. 1-43.

Richard Revesz, "Rehabilitating Interstate Competition: Rethinking the 'Race-to-the-Bottom' Rational for Federal Environmental Regulation," New York University Law Review (December 1992), pp. 1210-1247.

#### **March 11 -- Mid Term Exam**

##### **Disposal of Hazardous and Solid Wastes**

**March 11 (second half of class) -- The Resources Conservation and Recovery Act of 1976 (RCRA)**

Landy, pp. 89-126.

Sara Rasmussen, "Municipal Landfill Management," in Morgenstern, Economics Analysis at EPA, pp. 233-261.

#### **March 18 -- RCRA (Continued) and Superfund**

Paul Portney, "The Price is Right: Making Use of Life Cycle Analysis," Issues in Science and Technology (Winter 1993-94), pp. 69-75.

Chris Hendrickson, Lester Lave and Francis McMichael, "Time To Dump Recycling?," Issues in Science and Technology (Spring 1995), pp. 79-84.

John Tierney, "Recycling is Garbage," New York Times Magazine June 30, 1996), pp. 24-29, 44, 48, 51, 53.

W. Kip Viscusi and James T. Hamilton, "Cleaning Up Superfund," The Public Interest , Summer 1996, pp. 52-60.

General Accounting Office, Superfund Management Program (February 1997), pp. 6-40.

General Accounting Office, Superfund: Proposals to Remove Barriers to Brownfield Redevelopment (March 4, 1997), pp. 1-5.

Tammy O. Tengs, et. al., "Five Hundred Life-Saving Interventions and their Cost-Effectiveness," Risk Analysis, No. 3 (1995), pp. 369-384.

W. Kip Viscusi, "A Survey of Values of Risks to Life and Health," Chapter 4 of Viscusi, Fatal Attractions: Public and Private Responsibilities for Risk (New York: Oxford University Press, 1992), pp. 51-74.

#### **April 1 -- Issues in Risk Analysis and Management**

Breyer, pp. 3-81.

"Testing for Carcinogens with Rodents," editorial in Science (Summer 1990).

Bruce N. Ames and Lois Gold, "Environmental Pollution and Cancer: Some Misconceptions," in Kenneth R. Foster, David E. Bernstein, and Peter W. Huber, eds., Phantom Risk (MIT Press, 1993), pp. 153-180.

Committee on Comparative Toxicity of Naturally Occurring Carcinogens, National Research Council, National Academy of Sciences, Carcinogens and Anticarcinogens in the Human Diet (National Academy Press), 1996, pp. 1-18.

Richard Stone, "A Molecular Approach to Cancer Risk," Science, April 21, 1995, pp. 356-357.

Gary Taubes, "Epidemiology Faces its Limits," Science, July 14, 1995, pp. 164-169.

John D. Graham, "Edging Toward Sanity on Regulatory Reform of Risk," Issues in Science and Technology, Summer 1995, pp. 61-66.

Ellen K. Silbergeld, "Risk Assessment: The Perspective and Experience of U.S. Environmentalists," Environmental Health Perspectives (June 1993), pp. 100-103.

### **Managing U.S. Land and Natural Resources**

#### **April 8 -- From Progressive Conservationism to Contemporary Environmentalism**

Samuel Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920 (Harvard University Press, 1959), pp. 261-276.

Stephen Fox, The American Conservation Movement: John Muir and his Legacy (University of Wisconsin Press, 1985), pp. 138-147.

Mark Reissner, Cadillac Desert (Viking, 1986), pp. 151-176.

Roderick Nash, Wilderness and the American Mind (Yale University Press, 1973), pp. 220-236.

William Cronon, "Getting Back to the Wrong Nature," Utne Reader, May-June 1996, pp. 76-79.

Donald Worster, "The Ecology of Order and Chaos," in Worster, ed., The Wealth of Nature (Oxford University Press, 1993), pp. 156-170.

The View from Airlie: Community Based Conservation in Perspective, Summary of Proceedings of a Conference, October 17, 1993, Airlie House, Virginia, pp. 2-26.

#### **April 15 -- Endangered Species**

James D. Williams and Ronald M. Nowak, "Vanishing Species in Our Own Backyard: Extinct Fish and Wildlife of the United States and Canada," in Les Kaufman and Kenneth Mallory, eds., The Last Extinction (MIT Press, 1993), pp. 115-148.

Mann and Plummer, pp. 3-146.

#### **April 22 -- Endangered Species**

Mann and Plummer, pp. 147-247.

Barton H. Thompson, Jr., "The Endangered Species Act: A Case Study in Takings and Incentives," Stanford Law Review (January 1997), pp. 305-376.

#### **April 29 -- Forest Management**

Roger Sedjo, "Forest Resources: Resilient and Serviceable," in Kenneth D. Frederick and Roger A. Sedjo, America's Renewable Resources: Historic Trends and Current Challenges (Washington, D.C.: Resources for the Future, 1991), pp. 81-115.

Dennis C. Le Master, Decade of Change: The Remaking of Forest Service Statutory Authority During the 1970s (Westport, Conn.: Greenwood Press, 1984), pp. 55-80.

Stephen Pyne, World Fire: The Culture of Fire on Earth (New York: Henry Holt and Company, 1995), pp. 183-217.

Douglas MacCleery and Dennis C. Le Master, Producing and Consuming Natural Resources Within an Ecosystem Management Framework: What is the Proper Context, unpublished paper, January 2, 1996, pp. 1-10, 15-24, 34-56.

Ed Marston, "It's Time to Clearcut the Forest Service," High Country News (September 20, 1993).

#### **May 6 --Rangeland Management**

Charles F. Wilkinson, Crossing the Next Meridian: Land, Water and the Future of the West (Island Press, 1992), pp. 75-113.

"Cowboy Socialism," in Different Drummer (Spring 1994), pp. 48-50.

Edward Abbey, "Even the Bad Guys Wear White Hats: Cowboys, Ranchers and the Ruin of the West," Harpers (January 1986), pp. 51-55.

The Wise Use Agenda: The Citizen's Policy Guide to Environmental Resource issues (1989), pp. 5-18.

Karl Hess, "The West at War with Itself," Reason (June 1995), pp. 18-25.

Robert H. Nelson, "How to Reform Grazing Policy: Creating Forage Rights on Federal Rangelands," Fordham Environmental Law Review (forthcoming 1998), pp. 1-58.

Donald Snow, "New Governance (Or Return to Old Apathy?)," Northern Lights (Spring 1995), pp. 9-11.