

School of Public Affairs
University of Maryland at College Park
PUAF 740 -- Public Policy and the Environment

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Spring 2004

About 35 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 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 in the service of broader environmental goals. "Ecological management" became a guiding objective for many government agencies.

The environmental legislation of the past 35 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 an important 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 adequately limited? Have such risks 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 35 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 under review in the current session of Congress, it will be possible to relate these discussions to an ongoing public debate concerning the possible provisions of new laws.

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 ethical 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 -- 20%

Term Paper -- 25%

Final Exam -- 35%

Class Discussion -- 20%

Term Paper

A term paper (about 15-20 pages double spaced) 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. Final papers will be due May 5. A first draft of the paper should be turned in by March 31. Based on these drafts, and depending on class size and time available, some papers may be selected for presentation to the class. The instructor will respond with comments on the submitted draft and meetings to discuss the draft papers may be scheduled.

Readings

The readings will come from four books available for purchase at the book store and a diverse set of articles, government reports, newspaper columns and other materials. Many of these materials are available on the web. Materials not available on the web will be provided in a set of copies available in three locations: the School of Public Affairs offices; the conservation biology offices; and the EPA. Materials on the web can be obtained by using cross links set up at a Puaf 740 web site (www.puaf.umd.edu/puaf740) or at the syllabus for Puaf 740

contained under “faculty papers” and “Nelson” at the School of Public Affairs web site (www.puaf.umd.edu).

The books to be purchased are:

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

Paul R. Portney and Robert N. Stavins, eds., *Public Policies for Environmental Protection* (Washington, D.C.: Resources for the Future, 2000).

James Salzman and Barton H. Thompson, *Environmental Law and Policy* (New York: Foundation Press, 2003).

Cass R. Sunstein, *Risk and Reason: Safety, Law, and the Environment* (New York: Cambridge University Press, 2002).

You might also want to consider buying Charles C. Mann and Mark L. Plummer, *Noah's Choice: The Future of Endangered Species* (Knopf, 1995). This book is no longer in print but can often be purchased on the web as a used book from Amazon or other used-book web sites.

Class Discussion

Class discussion will be an important part of the course. The readings identified by a “*” below will be the initial focus of class discussion each week. Other readings provide needed background and will normally come up for discussion as well.

Contacting Me

I can be reached by telephone at my office at 301-405-6345 or at home at 301-656-3339 (I often work at home, so feel free to call there). My email address is nelsonr@umd.edu. Each student is encouraged to set up an appointment in my office (Van Munching, 3131) to discuss their paper topic or any other matters of concern.

SCHEDULE OF CLASSES AND READINGS

Background to Environmental Policy

January 28 -- The Setting for Environmental Policy Making

*Eric T. Freyfogle, “Five Paths of Environmental Scholarship,” *University of Illinois Law Review* (No. 1, 2000), pp. 115-134. Available on web from Lexis.

Salzman and Thompson, pp. 1-75.

Fiorino, pp. 22-60.

February 4 -- Players and Issues

Fiorino, pp. 61-99, 116-133, 159-225.

*William D. Ruckelshaus, "Stopping the Pendulum," *Environmental Forum* (November/December 1995). Available on web ([Ruckelshaus -- www.csis.org/e4e/pendulum.html](http://www.csis.org/e4e/pendulum.html)).

*National Academy of Public Administration, "Executive Summary" and "Chapter 1: Innovate for the Environment" of *Environment.gov: Transforming Environmental Protection for the 21st Century* (November 2000), pp. 10-29. Available on web (NAPA -- <http://www.p2pays.org/ref/18/17718.pdf>) .

Regulating Air and Water Quality

February 11 -- The Clean Air Act

Salzman and Thompson, pp. 77-102

Paul R. Portney, "Air Pollution Policy," in Portney and Stavins, pp. 77-99.

Gary C. Byner, *Blue Skies, Green Politics: The Clean Air Act of 1990 and Its Implementation* (Washington, D.C.: Congressional Quarterly Press, 1995), pp. 96-152.

*R. Shep Melnick, *Regulation and the Courts: The Case of the Clean Air Act* (Washington, D.C.: Brookings Institution, 1983), pp. 299-342.

February 18 – Rethinking Air Pollution Policy – Towards More Efficient Regulation

Paul R. Portney, "Air Pollution Policy," in Portney and Stavins, pp. 100-121.

Environmental Defense, *From Obstacle to Opportunity: How Acid Rain Emissions Trading is Delivering Cleaner Air*, New York, N. Y., September 2000, pp. 1-38. Available on web (Cleaner Air -- http://www.environmentaldefense.org/documents/645_SO2.pdf).

National Academy of Public Administration, "Transforming Regulation," and "Using the Market," Chapters 2 and 3 of *Environment.gov: Transforming Environmental Protection for the 21st Century* (November 2000), pp. 32-91. Available on web (NAPA -- <http://www.p2pays.org/ref/18/17718.pdf>).

*Eric Pianin, "Administration Effort to Press Curbs May Lead to a Clash With Senate Leaders," *Washington Post* (January 10, 2003), p. A4.

*U. S. Environmental Protection Agency, *Clear Skies, Basic Information* (2002), pp. 1-4. Available on web (Clear Skies -- <http://www.epa.gov/air/clearskies/basic.html#mechanism>).

*David G. Hawkins, Director, Climate Center, Natural Resources Defense Counsel, "Testimony at Hearings on S. 385, 'Clear Skies Act of 2003,'" U. S. Senate, April 8, 2003, pp. 1-15. Available on web at (Hawkins -- http://epw.senate.gov/108th/Hawkins_040803.htm).

* Jeffery Holmstead, Assistant Administrator for Air and Radiation, U. S. Environmental Protection Agency, "Testimony at Hearings on The Clear Skies Initiative," U.S. House of Representatives, July 8, 2003, pp. 1-9. Available at (Holmstead -- <http://energycommerce.house.gov/108/Hearings/07082003hearing1009/Holmstead1566print.htm>

February 25 – Climate Change

Salzman and Thompson, pp. 102-122

Jason F. Shogren and Michael A. Toman, "Climate Change Policy," in Portney and Stavins, pp. 125-158.

*Thomas C. Schelling, "What Makes Greenhouse Sense?," *Foreign Affairs* (May/June 2002), pp. 2-9.

March 3 – The Clean Water Act

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

Robert McClure, Lisa Stiffler, and Lise Olsen, "Area's Defining Waterway is a Cesspool of Pollution," *Seattle Post-Intelligencer* (November 18, 2002), pp. 1-10.

Salzman and Thompson, pp. 123-147.

*Myrick Freeman, "Water Pollution Policy," in Portney and Stavins, pp. 169-209.

*David E. Ervin, et. al., "Agriculture and the Environment: A New Strategic Vision," *Environment* (July/August 1998), pp. 9-15, 35-39.

*Howard R. Ernst, *Chesapeake Bay Blues: Science, Politics, and the Struggle to Save the Bay* (Rowman & Littlefield, 2003), pp. 69-86.

March 10 -- Rethinking Clean Water Policy – TMDLs and Watershed Management

John Cushman, "Courts Expanding Effort to Battle Water Pollution," *New York Times* (March 1, 1998).

Jim Boyd, "Unleashing the Clean Water Act: The Promise and Challenge of the TMDL Approach to Water Quality," *Resources* (Resources for the Future, Spring 2000), pp. 7-10. Available on web (Boyd -- <http://www.rff.org/Documents/RFF-Resources-139-unleashing.pdf>

National Academy of Public Administration, "Protecting Watershed's: A New Confluence," Chapter 4 of *Environment.gov: Transforming Environmental Protection for the 21st Century* (November 2000), pp. 93-133. Available on web (NAPA -- <http://www.p2pays.org/ref/18/17718.pdf>).

*Paul Faeth, *Fertile Ground: Nutrient Trading's Potential to Cost-Effectively Improve Water Quality* (Washington, D.C.: World Resources Institute, 2000), pp. 1-44. Available on web (Faeth -- http://www.wri.org/wri/pdf/fertile_ground.pdf).

U.S. Environmental Protection Agency, Office of Water, *Water Quality Trading Policy*, January 13, 2003. Available on web (EPA Water -- <http://www.epa.gov/owow/watershed/trading/finalpolicy2003.html>).

Eric Schiller, "The Oregon Water Trust," Center for Private Conservation, Competitive Enterprise Institute (Washington, D.C., November 1998), pp. 1-12. Available on web (Schiller -- <http://www.cei.org/utills/printer.cfm?AID=1354>).

March 17 -- Mid Term Exam (first half of class)

Management of Hazardous Substances

March 17 (second half of class) – RCRA and TSCA

Salzman and Thompson, pp. 148-190.

*Hillary Sigman, "Hazardous Waste and Toxic Substance Policies," in Portney and Stavins, pp. 215-251.

Josh White and Maria Glod, "Cost of Replacing Underground Tanks Sinks Some Gas Stations," *Washington Post* (January 4, 1999), p. B1.

March 31 – Superfund and Solid Wastes

Salzman and Thompson, pp. 197-212.

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

*Allan Mazur, *A Hazardous Inquiry: The Rashomon Effect at Love Canal* (Harvard University Press, 1998), pp. 194-212.

Molly K. Macauley and Margaret A. Walls, "Solid Waste Policy," in Portney and Stavins, pp. 261-281.

Eric Lipton, "As Imported Garbage Piles Up, So Do Worries," *Washington Post* (November 12, 1998), p. A1.

Sebastian Mallaby, "Saving Statistical Lives," *The Washington Post* (March 5, 2001), p. A19.).

Sunstein, pp. 10-52.

April 7 -- Issues in Risk Analysis and Management

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

Sharon Begley, "Poisons Aren't Toxic to Everyone Equally, Creating a Dilemma," *Wall Street Journal*, January 24, 2003.

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.

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

*Sunstein, pp. 99-190.

Managing U.S. Land and Natural Resources

April 14 – Changing Social Values: From Progressive Conservationism to Modern Environmentalism

Robert H. Nelson, "Ineffective Laws and Unexpected Consequences: A Brief Review of Public Land History," in Robert H. Nelson, *Public Lands and Private Rights: The Failure of Scientific Management* (Lanham, MD: Rowman & Littlefield, 1995), pp. 5-35.

*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.

*T.H. Watkins, "One Man's Recreation is Another's Desecration," *Washington Post* (December 13, 1998), Outlook Section, p. C1.

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

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

April 21 – The Endangered Species Act of 1973

H. Josef Hebert, "Endangered Species Act: Praised, Despised as Conflicts Go On," *The Washington Post* (December 28, 1998), p. A14.

Salzman and Thompson, pp. 254-273.

*Charles C. Mann and Mark L. Plummer, *Noah's Choice: The Future of Endangered Species* (New York: Knopf, 1995), pp. 3-146.

April 28 -- Endangered Species – Conservation of Private Habitat

Donald Ludwig, Marc Mangel, and Brent M. Haddad, "Ecology, Conservation, and Public Policy," *Annual Review of Ecology and Systematics* (2001), pp. 481-506.

Holly Doremus, "Adaptive Management, the Endangered Species Act, and the Institutional Challenges of 'New Age' Environmental Protection," *Washburn Law Journal* (Fall 2001), pp. 50-89. Available on web at Lexis.

*David S. Wilcome, Michael J. Bean, Robert Bonnie, and Margaret McMillan, "Rebuilding the Ark: Toward a More Effective Endangered Species Act for Private Land," Environmental Defense Fund, December 5, 1996, pp. 1-13. Available on web (Wilcome -- http://www.environmentaldefense.org/documents/483_Rebuilding%20the%20Ark%2Ehtm).

*Karin P. Sheldon, "Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act," *New York University Environmental Law Journal* (1998), pp. 279-340. Available on web at Lexis.

*Charles C. Mann and Mark L. Plummer, *Noah's Choice: The Future of Endangered Species* (New York: Knopf, 1995), pp. 212-238.

May 5 -- 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.

*Jeffrey D. Brawn, Scott K. Robinson, and Frank R. Thompson, III, "The Role of Disturbance in the Ecology and Conservation of Birds," *Annual Review of Ecology and Systematics* (2001), pp. 251-269.

*General Accounting Office, *Western National Forests – Catastrophic Wildfire Threaten Resources and Communities* Statement of Barry T. Hill, Associate Director, Energy, Resources and Science Issues, September 28, 1998, pp. 1-12. Available on web (GAO -- <http://www.gao.gov/>). .

*Douglas W. MacCleery and Dennis C. Le Master, *Producing and Consuming Natural Resources with an Ecosystem Management Framework: What is the Proper Context?* (January 2, 1996), pp. 1-8, 46-56.

Second Century: Options for the Forest Service, A Report to the American People by the Forest Options Group, January 1999, pp. 1-22. Available on web (Second Century -- <http://www.ti.org/2c.html>).