

**PA 481 – Environmental Policy  
Fall 2008**

Anne Browning-Aiken, Ph.D.  
Udall Center for Studies in Public Policy  
943 N. Tyndall (behind/west of Park Ave Chase Bank)  
Phone: 626-1735  
E-mail: [browning@u.arizona.edu](mailto:browning@u.arizona.edu)  
Course Time: 2:00-3:15pm, TTH, Harvill 101  
Office Hours: 3:30-4:30pm, TTH; or by appointment

**Course Description**

This course provides a broad survey of the most commonly used policy approaches for addressing environmental problems. Prior to the 1990s, two types of policy approaches predominated in the U.S. – centralized planning within public agencies and command and control regulation. Beginning in the 1990s, a variety of alternative policy approaches gained legitimacy. Some emerged from the bottom up, such as collaborative processes; others from the top down, such as permit trading and transparency processes.

After a brief introduction to concepts that will be used throughout the course, we will begin in-depth examinations of different policy approaches. First, we will explore command and control or a government centered approach. Property rights are vested in the state, and the state, through means of coercion and control attempts to realize society's environmental values.

Strong forms of command and control regulation have generally been discredited. Instead, governments are experimenting with alternative approaches such as co-management. Partnerships are created among regional or national governments and local communities. This is no small task. Regional or national governments often find it inconvenient, politically unpopular, or threatening to their authority to attempt to work with and be supportive of local-level communities' attempts to manage their natural resources. Nevertheless, without the support, cooperation and involvement of locals and communities, regional or national governments fail in their attempts to resolve environmental problems. We will examine conflicts between local and national governments and means of addressing those conflicts so that different levels of governments may better work together.

Third, we will consider community-based approaches whereby communities take environmental governance in their own hands. This may take a variety of forms. Collaboratives promote the active participation of citizens in planning processes, from identifying the environmental problems to be addressed, to the types of solutions that appear most workable. In other instances, resource users form local level governments that define and enforce regulations and that are directly accountable to the resource users.

Finally, we will examine market-based approaches. Private property rights and markets are viewed as efficient and non-coercive mechanisms for achieving resource sustainability, and for reducing environmental pollution. Market-based approaches include everything from

governments defining private property rights in natural resources and in pollution, to the use of fees and taxes to reduce environmentally destructive behavior, to disclosure requirements so that consumers may make more environmentally friendly choices or interest groups may more readily hold corporations accountable for their environmental actions.

These approaches are not mutually exclusive. Often multiple approaches are used to address particular environmental problems. Also, governments play critical roles in each approach, even the market based ones. The goal of the class is for students to develop the critical capacity to identify appropriate approaches for solving specific environmental problems.

### **Course Requirements**

Attendance and Participation (10% of course grade): You are expected to attend every class session. Even though this is primarily a lecture course, due to the size of the class, you are expected to join in class discussion, and class participation is part of the final grade. You can expect me to call randomly on people to present a brief analysis of a case study or reading using the Classic Policy Analytic Format as a means of initiating discussion and debate. We will also do simulated negotiation exercises where you will role-play a particular interest group.

Exams (75% of course grade): You must take three short-essay exams. Each exam is worth 25% of the course grade. I use the exams as a means of testing your understanding of course readings. I do not give makeup exams; however, if you know well in advance that you have another commitment on the date of an exam I will allow you to take the exam early.

Group Project (15% of course grade): Building and creating sustainable communities is gaining considerable attention. Sustainability encompasses a wide variety of issues and activities, such as green building, biodiversity conservation, water recycling/reuse, public transportation, alternative energies (waste energy, solar, wind), residential waste (which is the major source of hazardous materials in landfills), smart growth, etc. I will divide you into groups and assign each group a sustainability topic. Each group will develop a 4 page double-spaced analysis of its topic and make a 20 minute power point in-class presentation. The class will synthesize the groups' analyses into a set of recommendations for local public officials. I will provide additional details and instructions in class.

In summary, attendance and participation constitute 10% of the course grade; exams constitute 75% of the course grade; and the group project constitutes 15%. I use a standard grading scale: A=90-100; B=80-89; C=70-79; D=60-69; and an E=grade<60.

### Basic Class Rules

I will hold you accountable for abiding by the University's Student Code of Conduct (<http://dos.web.arizona.edu/uapolicies/scc5308f.html>). Bottom line – I do not tolerate cheating or academic misconduct.

As a matter of courtesy to everyone and to lessen distractions, cell phones, BlackBerries and other forms of electronic communication must be shut off during class. Laptops are permitted for TAKING NOTES ONLY.

To do well in the class, you must attend. I will take attendance several times during the course of the semester and use that to determine the 5% of your final course grade. When possible, please let me know when you will miss class.

### **Important Dates**

Last day to drop with deletion of course enrollment from record	September 19th
Last day to drop with a W	October 12th
Exam One	September 23
Exam Two	October 21
Exam Three	December 2
Group presentations	Dec. 4, 9 and 17

### **Required Readings**

Syllabus, readings, discussion board, and collaborative sessions are available through <https://blackboard.eller.arizona.edu> (your password is your Student ID#. If your Student ID begins with "S" be sure to use upper case "S." You may change this when you log in).

### **Course Schedule**

#### **August 26 – First Day of Class**

Review syllabus and discuss class themes  
Classic Policy Analytic Format

### **PART I – BASIC CONCEPTS**

#### **August 28, Sept. 2– Commons Tragedies and the Nature of “Goods”**

Thomas Dietz, et al (2002) “The Drama of the Commons” in *The Drama of the Commons*, edited by Elinor Ostrom, et al. Washington DC: National Academy Press, pp. 3-35.

Elinor Ostrom, Roy Gardner, and James Walker. *Rules, Games and Common-Pool Resources*, Chapter 1, “Rules, Games, and Common Pool Resource Problems”

#### **September 4, – Decisions and Values**

Arthur Markman and Douglas Medin. 2002. “Decision Making” In H. Pashler, Ed. *Steven's Handbook*. J. Wiley and Sons. New York: New York.

<http://www.psych.northwestern.edu/psych/people/faculty/medin/medin.html>

YOU ARE ONLY RESPONSIBLE FOR PP.1-25.

Debra Stone. 1988. “Equity” in *Policy Paradox and Political Reason*. Harper Collins.

### **September 9 – Policy Analysis and Property Rights and Rules**

Bardach, Eugene. 1996. Policy analysis: A Handbook for Practice. Public Service Curriculum Exchange (**Students will use this for their group projects**)

Schlager, Edella. “Getting the Relationship Right in Water Property Rights.” In *Water, Science, and Management: Challenges and Opportunities*, 27-54, eds Richard Lawford et al. Washington, D.C.: American Geophysical Union

### **September 11, 16 – Science, Knowledge, and Uncertainty**

Lane, Neal F., et al. 2003. Science and Water Policy for the United States. In *Water: Science, Policy and Management*, pp. 207-222. eds Richard Lawford et al. Washington, D.C.: American Geophysical Union

Browning-Aiken, Anne et al.” Integrating Science and Policy for Water Management: A Case Study of the Upper San Pedro River Basin,” 24-59. In *Hydrology and Water Law—Bridging the Gap*, ed J. Wallace and P. Wouters. London: IWA.

Timothy Tear, et al. (October 2005) “How Much is Enough? The Recurrent Problem of Setting Measurable Objectives in Conservation” *Bioscience* 55(10):835-849.

Ronald Brunner and Toddi Steelman (2005). “Beyond Scientific Management” in *Adaptive Governance: Integrating Science Policy and Decision Making*. Edited by Ronald Brunner and Toddi Steelman. New York: Columbia Press.

#### **OPTIONAL:**

“Stalking the American Lobster” *The Atlantic Monthly* (April 2002), pp. 62-81.

Robert Service. 2003. “Combat Biology on the Klamath” *Science* (April 4), Vol. 300, pp. 36-39.

### **September 23 –EXAM #1 Part I Next class remember to bring your group topic as well as do the readings**

## **PART II – POLICY APPROACHES**

### **September 25, 30 – Bureaucratic Planning Processes: Water**

**Bring in paper with your 1st and 2<sup>nd</sup> choice topics and name 5 people you would like to work with in your group.**

Rosenbaum, Walter A. 1995. “The Bureaucracy and Environmental Policy” In *Environmental Politics and Society: Theories and Evidence*, pp. 206-241, ed. James P. Lester. Durham, N.C.: Duke University Press.

Kenney, Douglas S. "Prior Appropriation and Water Rights Reform in the Western United States." 2005. In *Water Rights Reform: Lessons for Institutional Design*, pp. 167-182, eds Bryan Randolph Runs, et al. Washington, D.C.: International Food Policy Research Institute.

Fort, Denise D. "Water Policy for the West: Who Makes It? What Is It? Will It Lead Us to a Sustainable Future?" In *Water Science, Policy, and Management*, pp. 123-141. . eds Richard Lawford et al. Washington, D.C.: American Geophysical Union

OPTIONAL:

Richard N.L. Andrews (2006) "Environment and Governance" in *Managing the Environment, Managing Ourselves*. New Haven: Yale University Press, pp.1-13.

### **September 30, October 2– Regulatory Processes: EPA and Groundlevel Ozone**

Background Information: Marc Landy, et al., 1994. "Asking the Wrong Questions from Nixon to Clinton" and "Revising the Ozone Standard" in *The Environmental Protection Agency*, pp.49-67, 68-88. Oxford University Press.

Mark Powell (1999) "Introduction" and "Appendix D: The 1993 Decision Not to Revise the National Ambient Air Quality Standard for Ozone" from *Science at EPA: Information in the Regulatory Process*. Washington, DC: Resources for the Future, pp. 1-19, 267-283.

Bernstein and Whitman. 2005. "Smog Alert: The Challenges of Battling Ozone Pollution" *Environment* 47(8): 28-30.

Michael Kraft. 2004. "Environmental Protection Policy: Controlling Pollution," Chapt. 5 in *Environmental Policy and Politics*, pp. 1-24. 3<sup>rd</sup> edition, Pearson Education Inc.

SUGGESTED/OPTIONAL:

EPA's website for ozone pollution:

<http://www.epa.gov/air/ozonepollution/index.html>

"The Plain English Guide to the Clean Air Act", Read sections "Features of the 1990 Clean Air Act", "Cleaning Up Air Pollution", and Mobile Sources"

[www.epa.gov/oar/oaqps/peg\\_caa/pegcaain.html](http://www.epa.gov/oar/oaqps/peg_caa/pegcaain.html)

### **October 7, 9, and 14 (Guest Lecturer) – Top-Down Co-Management and Local Government Initiated Co-Management**

The U.S. Fish & Wildlife Service web page on the Endangered Species Act  
[endangered.fws.gov/whatwedo.html](http://endangered.fws.gov/whatwedo.html)

USFWS "Habitat Conservation Plans" [endangered.fws.gov/hcp/index.html](http://endangered.fws.gov/hcp/index.html), particularly  
<http://www.fws.gov/endangered/pubs/HCPBrochure/HCPsWorkingTogether5-2005web%20.pdf>

Pima County's Sonoran Desert Conservation Plan  
<http://www.pima.gov/CMO/SDCP/index.html> especially pp. 1-40:  
<http://www.pima.gov/CMO/SDCP/reports/d51/multi.species.conservation.plan.8.08.pdf> and  
<http://www.pima.gov/cmo/sdcp/Monitoring/index.html> and  
[http://www.pima.gov/CMO/SDCP/PDF/SDCP\\_WhereWeAreToday.pdf](http://www.pima.gov/CMO/SDCP/PDF/SDCP_WhereWeAreToday.pdf)

Taylor, et al (2005) "The Effectiveness of the Endangered Species Act" *Bioscience* 55(4):360-367

**October 16 – Ecosystem Services and Environmental Policy: Readings TBA (Guest lecturer)**

**October 21 EXAM#2 Part II Policy Approaches (Bureaucratic planning through and including Ecosystem Services)**

**October 23, 28 -- Community Based Management**

Schlager, Edella "Local Governance of Common Pool Resources" in *Environmental Governance Reconsidered: Challenges, Choices, and Opportunities*. Edited by Robert Durant, Dan Fiorino and Rosemary O'Leary. MIT Press. 2004.

James Acheson and Jennifer Brewer. (2003) "Changes in the Territorial System of the Maine Lobster Industry" in *The Commons in the New Millennium*. Edited by Nives Dolsak and Elinor Ostrom. Cambridge MA: The MIT Press, pp.37-60 (

Coward, E. Walter. 1979. "Principles of Social Organization in an Indigenous Irrigation System" *Human Organization* 38(1):28-36.

**November 4, 6 – Collaboratives and Beyond**

Tomas Koontz, et al. 2004. "Nonprofit Facilitation: The Darby Partnership" in *Collaborative Environmental Management*. Washington DC: Resources for the Future, pp. 126-144.

Richard Margerum. 2007. "Overcoming Locally Based Collaboration Constraints" *Society and Natural Resources* 20:135-152.

Browning-Aiken, Anne, Terry Sprouse, Matt Iles, and George Saliba. 2008. *Collaborative Resource Management: Lessons from Three Arizona Watershed Organizations*. Under review.

Lemos, Maria Carmen and Arun Agrawal 2006. "Environmental Governance," *Annual Review of Environmental Resources* 31:297-325

**November 11 – No Class**

## **November 13 -- Group Power Point Policy Assignments and Planning**

### **November 18 Markets and the Market Place**

Geoffrey Heal. 2000. "Basic Economics" in Nature and the Marketplace, Island Press.  
(Ecosystem Services)

### **November 20 and 25 – Information Disclosure Policies**

Stephan (March 2002) "Environmental Information Disclosure Programs: They Work, But Why?" *Social Science Quarterly* 83(1):191-205 Mahdu Khanna 2007 "The US 33/50 Voluntary Program" in *Reality Check: the nature and performance of voluntary environmental programs*, edited by William A. Pizer. Washington, DC RFF Press, pp.15-42.

CHECK OUT:Scorecard, [www.scorecard.org](http://www.scorecard.org)

Carbon Footprint [www.carbonfootprint.com](http://www.carbonfootprint.com)

Transparency Policies [www.transparency policy.net/pages/casestudies.html](http://www.transparency.policy.net/pages/casestudies.html)

### **November 27 -- Tradeable Permits**

Tom Teitenburg "Tradeable Permit Approaches to Protecting the Commons: What Have We Learned?" " [www.colby.edu/personal/thtieten](http://www.colby.edu/personal/thtieten) (downloadable working papers), 33pp.

EPA Acid Rain Program.

Acid Rain Program Fact Sheet

<http://www.epa.gov/airmarkets/progsregs/arp/basic.html>

Acid Rain Program Allowances Fact Sheet

<http://www.epa.gov/airmarkets/trading/factsheet.html>

### **December 2 EXAM #3 Part II Policy Approaches: Community Based Management through and including Tradeable Permits**

**December 4, 9 and 17 2pm-4pm Group Power Point Presentations, 10 groups, 20 minute presentations with 5 minute Q & A for each. Dec. 17 will include time for evaluations of members in your groups and for the groups to synthesize their analyses into a set of recommendations for local public officials.**