

SYLLABUS

ENVR/PLCY/PLAN/ENEC 585: AMERICAN ENVIRONMENTAL POLICY

Fall 2014 MW 3:30-4:45 p.m. 328 Phillips Hall
Instructor: Professor Richard Andrews
202A Abernethy, 919-843-5011
Office hours: MW 2:00-3:00 or by appointment (ask after class, or email me)
Email: pete.andrews@unc.edu

This course has two principal objectives. The first is to provide an intensive introduction to the historical development and current issues of environmental policy in the United States, including basic perspectives, processes and institutions, major developments in the history of American environmental policy, environmental regulation and recent innovations, and implications of emerging global issues and institutions. The second objective is to develop each student's skills in critical thinking and reasoning about environmental policy issues, both historical and current, and about the arguments of advocates on all sides of environmental issues; and in writing a concise assessment of a policy issue and options for dealing with it. The course is intended for graduate students and upper-level undergraduates who already have at least a basic understanding of environmental issues (e.g. ENVR 100 or 600, or ENEC 201 or 202, or equivalent).

Readings

The principal texts for the course are (1) *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*, 2nd edition, by Richard Andrews (Yale, 2006); and (2) *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by Michael E. Kraft and Norman J. Vig (Washington, DC: CQ Press, 2012). All other readings are available either on the class site on Sakai, or on the Internet (URLs listed on reading list).

There is also a recommended (not required) book available for purchase which you may find useful in the course's writing assignments, and in writing about public policy issues more generally: *Writing Public Policy: A Practical Guide to Communicating in the Policy Making Process*, by Catherine F. Smith (NY: Oxford, 3rd ed. 2012).

Additional course materials and announcements will be posted on UNC's Sakai course support site (<http://sakai.unc.edu>). Please start by going to this site and downloading an electronic copy of the **full course syllabus as soon as possible. This will allow you to access many readings directly from hotlinks in the syllabus.**

Format

The course will meet for two sessions per week. The format will be a mixture of lecture and discussion, with emphasis on critical analysis of readings and discussion of issues. Normally we will begin each class with a few minutes of open opportunity for questions, announcements, or observations on relevant current events. The remainder of each class will include a combination of additional material presented by the instructor, highlighting of key issues in the readings, and the remainder in active discussion and debate on one or more of the issue question(s) posed in the reading list for each session.

With each session's readings, you will find a series of questions to begin to guide your thoughts on the readings. These questions are intended to stimulate your own thinking about the subject, not to

limit you. If you think of other questions or issues that seem important to you about the readings as well, that's great; please bring them up in class discussion.

Participation

Class discussion is a key part of the learning process in this course. Each student is responsible for participating actively in all aspects of the course, including reading and thinking about the readings and discussion questions in advance of the class at which they will be discussed, being present and participating in discussions, and offering constructive criticism and creative thoughts on the policy issues under discussion.

- **All electronics should be turned off during class except when assigned for a specific class activity.** For the sake of your own learning as well as avoiding distraction to others, I expect, on your honor, **no texting, tweeting, emailing, web-surfing, or multi-tasking for other purposes at any time during class.** If you have a special need that requires use of electronic media for note-taking, please see me individually for accommodation.

Written Assignments and Grading

Written assignments will include a midterm and final exam, and an environmental policy issue paper (approximately 15 pages) written in three installments (with advisory grades and suggestions for improvement on each element) including a revised final paper. Thirty percent (30%) of the course grade will be based on the issue paper, 25% on the midterm, 30% on the final exam, and 15% on class participation. **See the handout on the Sakai site under "Assignments" for more details on issue papers and candidate topics. All papers must be submitted in both electronic form (to Sakai Dropbox) and paper copies in class to the instructor.**

Documenting source materials and avoiding plagiarism

It is very important that you develop good habits of documenting the sources of both factual statements and the ideas and arguments of other people that you use in any paper you write. One basic reason for this is to be able to support the statements you make and the facts you use, both for your own future use and if anyone else should question or disagree with them. A second is to distinguish clearly between someone else's ideas and arguments and your own, and not confuse the two. And a third is to protect your own integrity against either deliberate or accidental representation of someone else's ideas or work as your own, which if intentional is known as plagiarism and is a serious violation of the UNC Honor Code and of the standards of ethical writing.

Please read the handouts on the Sakai site for more detailed suggestions on this subject. For additional detail on proper citation, plagiarism, and proper use of other authors' materials, see <http://writingcenter.unc.edu/handouts/plagiarism/> . For an excellent discussion of criteria for evaluating source materials on Internet web sites, see <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html>. For handouts on other good writing practices, <http://www.unc.edu/depts/wcweb/handouts/>.

COURSE OUTLINE

I. INTRODUCTION: PERSPECTIVES ON ENVIRONMENTAL POLICY

- August 20 Course overview
August 25 *ASSIGNMENT: UNC Library On-line Library Research Tutorial*
August 25 Why government (1): Why public policies for the environment?
August 27 Why government (2): Who makes U.S. environmental policy, and how?
September 1 *No class (Labor Day holiday)*

II. HISTORICAL FOUNDATIONS

- September 3 The first global economy
September 8 ONE-PAGE SUMMARY OF PROPOSED ISSUE PAPER TOPIC DUE
September 8 Property rights: colonial precedents
September 10 Environmental governance: Constitutional principles
September 15 Environmental development
September 17 Public health and environmental sanitation
September 22 Natural resource mgt. by federal agencies: conservation and Progressivism
September 24 The New Deal and federal environmental management
September 29 FIRST ELEMENT OF ISSUE PAPER DUE
September 29 Superpower & supermarket: post-war context of modern environmentalism
October 1 The rise of the modern environmental movement

III. THE ERA OF ENVIRONMENTAL REGULATION

- October 6 FILM: *An Act of Congress*
October 8 FILM: *The Regulators*
October 13 Environmental policy-making by the Congress and agencies
October 15 MID-TERM EXAM
[Fall Break begins at 5:00 p.m. on October 15]
October 20 A federal regulatory system for pollution control: air & water quality
October 22 Regulating waste management: RCRA and CERCLA
October 27 Risk-based regulation
October 29 “Market-oriented” policy instruments

IV. BEYOND REGULATION: ENVIRONMENTAL IMPACTS OF PUBLIC POLICIES

- November 3 SECOND ELEMENT OF ISSUE PAPER DUE
November 3 Presidential environmental policies: From Nixon to Obama, and Obama vs. Romney
November 5 National environmental policy
November 10 Environmental policies for public lands, species, and ecosystems
November 12 State and local environmental policies: opportunities, innovations, limitations

V. THE GLOBALIZATION OF ENVIRONMENTAL POLICY

- November 17 U.S. energy policy and global climate change
November 19 U.S. policies and international environmental agreements
November 24 U.S. international trade policies and the environment
November 26 No class (Thanksgiving holiday)
December 1 Global change and sustainable development: U.S. priorities?
December 3 FINAL ISSUE PAPER DUE
December 3 American environmental policy: priorities and strategies for the 21st century
December 9 FINAL EXAM: Tuesday, December 9, 4:00-7:00 p.m.

NOTE: Attendance at the final exam is mandatory, and the date and time cannot be changed by the instructor: the final exam dates are set by the Registrar. I am not allowed to make exceptions for students who wish to change this except with a dean's approval.

DETAILED SCHEDULE: TOPICS AND READINGS

I. INTRODUCTION: PERSPECTIVES ON ENVIRONMENTAL POLICY

August 20 Course overview

ISSUES: What is “environmental policy?” How would you define it, what does it include, and what are its boundaries (what does it not include?)?

August 25 **ASSIGNMENT:** By August 26, please complete the UNC Library on-line Library Research Tutorial at <http://www.lib.unc.edu/instruct/tutorial/> and turn in a copy of the certificate documenting your successful completion of the quiz at the end of it.

August 25 Why government (1): Why public policies for the environment?

ISSUES: Read the readings listed below.

Why should the powers of governments sometimes be used to solve environmental problems, rather than markets or voluntary choices by individuals? For what kinds of problems, and in what kinds of situations? Examples?

What are “externalities” and “tragedies of the commons?” Do these economic concepts and principles provide a good basis for justifying environmental policy decisions? Can you think of any environmental problems that in your mind do not fit these categories but that you still think government should address? What would Sagoff say, and would you agree with him or not?

What are the consequences of assuming one or another of these perspectives as a basis for justifying environmental policies?

Ruff, Larry. 1970. The Economic Common Sense of Pollution. *The Public Interest* 19 (Spring 1970): 37-53.

Hardin, Garrett. 1968. The Tragedy of the Commons. *Science* 162:1243-48.
<http://www.flsuspop.org/docs/TheTragedyoftheCommons.htm> (accessed July 18, 2012)

Feeny, D.; Berkes, F.; McCay, B.; and J. Acheson. 1990. The Tragedy of the Commons: Twenty-Two Years Later. *Human Ecology* 18(1):1-19.

Sagoff, Mark. 1981. At the Shrine of Our Lady of Fatima, or Why Political Questions Are Not All Economic. *Arizona Law Review* 23:1283-98 (1981).

(Optional) Olmstead, Sheila. 2012. Applying Market Principles to Environmental Policy. Chapter 9 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 206-229.

August 27 Why government (2): Who makes U.S. environmental policy, and how?

ISSUES:

Read ME/MO Chapter 1. In addition to market failures such as externalities and “tragedies of the commons,” why else should the powers of governments sometimes be used to solve environmental problems, rather than markets or voluntary choices by individuals? What are the problems or failures that may occur in government actions? How should one deal with these potential problems in proposing government actions to solve environmental

problems? In what respects is environmental policy similar to, and in what respects different from, other kinds of policies?

Read Vig/Kraft Chapter 1. What are the distinctive institutions and features of U.S. government processes for environmental policymaking? What organizations actually make U.S. environmental policy, to what ends, and what consequences do they have for the environmental outcomes? What effects does federalism – the relationship between national, state, and local policymaking – and the existence and legitimacy of these multiple levels of policymaking, have on environmental policymaking in the United States?

Andrews, *Managing the Environment, Managing Ourselves (ME/MO)*, Chapter 1: Environment and Governance, pp. 1-13.

Kraft, Michael E., and Norman J. Vig. 2012. Environmental Policy over Four Decades: Achievements and New Directions. Chapter 1 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by N. Vig and M. Kraft. Washington, DC: CQ Press. Read pp. 2-11; remainder optional, as an introductory overview of topics we will discuss later in more detail.

II. HISTORICAL FOUNDATIONS

September 1 No class (Labor Day holiday)

September 3 The first global economy

ISSUES: Read ME/MO Chapter 2.

The rise of worldwide European exploration, trade, and colonization that began in the 15th century was arguably the real origin of a “global economy,” not merely the past several decades’ worth of more intensive globalization of manufacturing, finance, and transnational corporate commerce.

How do trends, events, and decisions in the 15th-16th century matter to environmental policy issues today, and what consequences did they have? What effects did the European “great transformation” and subsequent exploration, colonization, and mercantile trade practices have on the environment in America and elsewhere?

What are the similarities and differences between the globalization of economic activity that began in the 15th century and the globalization of the past several decades? What similarities and differences in government policies influenced each, and in what sense was (or was not) each of these an “environmental” policy?

Andrews, *ME/MO* Chapter 2: Historical Context: Global Colonization and Trade

September 8 **ASSIGNMENT: 1-PAGE SUMMARY OF ISSUE PAPER TOPIC DUE**

NOTE: See separate instructions for issue paper and initial suggestions of possible topics on Sakai site.

September 8 Property rights: colonial precedents

ISSUE: Read ME/MO Chapter 3.

What do property rights mean, and what are their limits? What were the main differences between English and American property rights that emerged during the colonial period, and how did these differences affect the environment? What were the main differences

between “rights” to land and to other environmental resources, such as minerals, water, fish and wildlife?

What does it mean to “own” some aspect of the environment? Does a property right in the U.S. today mean you can do anything you want with the property? If not, what are the limits, and why? If you own a piece of land in North Carolina, for instance (or your own state, if different), can you:

- . Cut the trees on it?
- . Grow whatever plants you want on it?
- . Dig minerals out of it?
- . Divert a stream that runs across it?
- . Discharge waste liquids into the stream?
- . Fill in a swampy area and build a house on it?
- . Shoot a deer or raccoon that wanders across it?
- . Put up a fence and keep people off it?
- . Subdivide and sell part of it to someone else?
- . Restrict future owners’ use of it?

Andrews, *ME/MO* Chapter 3: Colonial Precedents: Environment as Property
Andrews, *Environmental Policy Tools (1700s-present)*, pp. 141-143 (excerpt from
Chap. 10, *CQ Guide to U.S. Environmental Policy*, ed. E. Russell and S. Fairfax,
CQ Books, in press)

September 10 Environmental governance: Constitutional principles

ISSUES: Read ME/MO Chapter 4 and the Kayden reading below.

What are the most important Constitutional foundations for American environmental policy, and why?

What was the Commerce clause intended to accomplish, and how is it important to environmental policy today? Under what circumstances does it justify federal interventions and restrictions in state and local environmental policy issues, such as protection of wetlands or regulation of waste disposal? (Optional: Is the new Supreme Court decision on health care mandates and the Commerce Clause likely to change this?)

What is “federal preemption,” and how does it affect environmental policy? Under what circumstances would you argue for or against invoking it? Air and water pollution control? Regulation of pesticides? Food purity? Transportation of hazardous wastes? Siting of a nuclear power plant, or a disposal facility for highly radioactive wastes (for instance the current proposal for a facility at Yucca Mountain, Nevada)? Should the federal government create a single national legal framework for climate change (e.g. a national carbon tax or cap-and-trade system) that would preempt the many state statutes that have recently emerged), or not?

What restrictions may government properly impose on the use of property without purchasing it or compensating the owner? What are the appropriate limits of such restrictions, beyond which they should be compensated as “takings?”

Andrews, *ME/MO* Chapter 4: The Constitutional Framework.
Kayden, Jerold S. 1996. Private Property Rights, Government Regulation, and the Constitution: Searching for Balance. In *Land Use in America*, edited by H. Diamond and P. Noonan (Washington, DC: Island Press), pp. 295-307. On Sakai.

September 15 Environmental development

ISSUES: Read ME/MO Chapter 5 and Polk and Lincoln's readings below.

What were the key elements of 19th century land policy, and how and why did they evolve over time? How did these land policies also leverage land to promote the construction of transportation infrastructure for economic development? How did these 19th century land and infrastructure development policies shape our environment, our economy, and subsequent policies?

What were the differences between Polk's and Lincoln's positions on federal funding of environmental infrastructures (water-resource "improvements")? What might have been some of the reasons for those differences? How are their arguments relevant to environmental issues today, and what do you think should be the federal government's role (and limitations?) in funding of infrastructures (and other services?)?

Andrews, *ME/MO* Chapter 5: Land and Transport: Commercial Development as Environmental Policy
President James K. Polk, Veto Message of August 3, 1846
Rep. Abraham Lincoln, Speech on Internal Improvements, June 20, 1848

September 17 Public health and environmental sanitation

ISSUES: Read ME/MO Chapter 7.

When and why did government get involved in regulating people's behavior to protect public health? What scientific beliefs and other principles were used to justify these restrictions, and what arguments were used to support and oppose it at that time?

Why did U.S. governments then shift to policies promoting environmental cleanup and sanitation? How did new evidence, values, and political forces lead to more active government management of urban environmental problems and conditions? In what ways were government policies themselves a cause of urban environmental problems, and in what ways did they help to solve such problems?

What further events led to the scientific professionalization of public health and its subsequent change of emphasis away from environmental sanitation and toward vaccination, health-care services, and health education instead?

What lessons can we learn from these 19th-century policy developments that are relevant to 21st-century issues? In what ways was the 19th century movement for environmental health and urban environmental management different or separate from the movements for conservation and preservation of natural resources? Why did they emerge so separately, and what intrinsic similarities and differences do they have? What arguments have been used both then and now to justify (and to oppose) government restriction of individual behavior in the name of public health? Government regulation of businesses for this purpose? Government investments and expenditures to provide better environmental conditions to improve human health? Or simply government services to provide public health education to the indigent, and otherwise leave it up to individual choices and behavior?

Andrews, *ME/MO* Chapter 7: Public Health and Urban Sanitation.

September 22 Natural resource management by federal agencies: conservation and Progressivism

ISSUES: Read ME/MO Chapters 6 and 8, and Pinchot as listed below.

After more than a century of very limited oversight, how did the U.S. government at the beginning of the 20th century suddenly come to play a major role in the management of natural resources?

Andrews argues that a series of changes in policy during the latter half of the 19th century, each of them incremental and perhaps almost imperceptible in itself, led ultimately to a far more fundamental reversal of policy at the turn of the 20th century, from wholesale privatization of land and resources for private economic benefit to primary federal management of large land areas (national forests) and multi-purpose water reservoirs. What were these changes? Did the very creation of federal management responsibility for multi-purpose resources, such as national forests and reservoirs, inevitably lead to environmental governance issues such as the uses of administrative discretion and the politicization of “scientific” management? What counter-arguments could be raised to this somewhat deterministic view of history?

What was “Progressivism,” and why was it important as a political movement? What were the primary principles and values that affected its environmental policy, and how did it differ from other reform movements and political philosophies, especially “social Darwinism” and “laissez-faire capitalism?” What were the most important environmental policy changes of this era, and what was its legacy?

What did Pinchot assert to be the fundamental principles of “conservation”? What connotations do these principles carry, along with other key concepts in Pinchot’s statement? How was it different from “preservation,” and at the same time different from previous natural resource use practices? How was Pinchot’s philosophy of conservation similar to, and different from, modern views of environmental protection and ecological management (and also from the modern “wise use” movement and “conservative conservationists”)? What elements of it would you still consider appropriate and desirable today, and which would you disagree with? Why?

Andrews, *ME/MO* Chapters 6 and 8: Agencies and Experts: The Beginnings of Public Management, and Progressivism: Environmental Management in the Public Interest.

Pinchot, Gifford. 1967 [1910]. Principles of Conservation. Chapter 4 in his *The Fight for Conservation* (Seattle: University of Washington Press), pp. 40-52.

September 24 The New Deal and federal environmental management

ISSUE: Read ME/MO Chapter 9.

What new elements and accomplishments did Franklin Roosevelt’s New Deal add to U.S. environmental policy? What was its philosophy of government, and how was that philosophy similar to or different from Progressivism?

What were the New Deal’s most significant initiatives in environmental policy? Can you identify the legacies of those initiatives in policies today?

In what ways did some New Deal policy solutions, such as for water resource management and agricultural stabilization, lay the roots for some of today’s environmental policy problems? Does the New Deal offer a model, even if imperfect, for “sustainable development?”

How did the Progressive State become the “broker state,” and with what consequences? What was the key significance of the “brokering” as opposed to the “planning” model of governance that emerged as dominant from the New Deal era? How did the New Deal contribute to the development of “interest-group pluralism” and “iron triangles” as models for modern U.S. environmental politics?

Andrews, *ME/MO* Chapter 9: Administering the Environment: Sub-Governments and Stakeholders

Andrews, R. N. L. 2005. Recovering FDR's Environmental Legacy. Chapter 10 in *FDR and the Environment*, ed. by Henry L. Henderson and David B. Woolner. New York: St. Martin's Press, pp. 221-43. On Sakai.

(Optional): Three great films about this era: *The Plow That Broke the Plains* about the Dust Bowl; *The River* about the floods; and *The Electric Valley* about TVA: all well worth seeing! *The Plow That Broke The Plains*: <http://www.youtube.com/watch?v=fQCwhjWNcH8>
The River: <http://www.youtube.com/watch?v=9MRCltkSZbw&feature=relmfu>
Electric Valley: UNC Media Center, videocassette, Call No. 65-V4039

September 29 FIRST ELEMENT OF ISSUE PAPER DUE

September 29 Superpower & supermarket: post-war context of modern environmentalism

ISSUE: Read ME/MO Chapter 10, and other readings below.

What were the most important consequences of World War II and its aftermath for American environmental policy? What were its most important positive effects? its most important negative consequences? What lessons can the consequences of wartime and postwar policies teach us about the ways in which some policies set in motion powerful new forces that permanently change both environmental impacts and the economic, technological, and social and political forces that cause them? Can you think of ways in which these changes might have been handled better to have set a course toward a more environmentally sustainable society?

What changes and trends of the 1950s and '60s laid the foundations for the emergence of the modern environmental movement? Why did Americans, after 20 years of economic depression and war and just beginning to experience the unprecedented benefits of widespread middle-class affluence, suddenly find themselves in fundamental conflict between the benefits of material production and new demands for outdoor recreation and natural amenities which conflicted with the very production which generated the affluence to enjoy and demand these amenities?

Andrews, *ME/MO* Chapter 10: Superpower and Supermarket

October 1 The rise of the modern environmental movement

ISSUES: Read ME/MO Chapter 11 and Sax reading below.

What were the defining characteristics of the "environmental movement?" How was it different from previous movements such as the 19th century sanitation movement and the conservation movement of the Progressive era? What changes in American values, culture, politics or other factors contributed to such a relatively sudden, powerful and widespread public demand for aggressive national environmental protection policies?

What was the role of cities, suburbs, and municipal governments in the environmental policy initiatives of the 1950s and '60s? Why were they such an important force, even years before Earth Day? What happened to their support for environmental policy in the 1980s and 1990s, and why? What would you expect to be the implications of this shift for environmental policy today and in the future?

How did government professionals come to be perceived as enemies of citizen environmentalists? How would you account for this public distrust of scientific management by existing federal agencies (for instance, by the Army Corps of Engineers, Forest Service,

and Atomic Energy Commission), this discrediting of Progressivism, at the same time the public was giving overwhelming support for new federal laws, regulations, and agencies (such as EPA) to protect the environment?

Joseph Sax's *Defending the Environment* articulated a new approach to environmental politics activism grounded in the idea of expanding citizens' access to the courts to challenge proposed actions of administrative agencies: "citizen attorneys general" should be allowed to enforce the "public trust" of government responsibility for the environment. What were the key elements and implications of his approach, and how was it different from the Progressive and New Deal traditions of environmental governance? How was it embedded in environmental policy, and what have been its consequences? Can you envision a further solution for environmental politics today?

Andrews, *ME/MO* Chapter 11: The Rise of Modern Environmentalism.

Sax, Joseph L. 1971. A Strategy for Citizen Action. From his *Defending the Environment* (NY: Knopf), pp. 300-305. On Sakai.

(Optional) Leopold, Aldo. 1949. The Land Ethic. From his *A Sand County Almanac* (Oxford U. Press, 1949). On line (accessed 8-17-2014) at <http://home.btconnect.com/tipiglen/landethic.html> (Note: Leopold's "Land Ethic," and Rachel Carson's *Silent Spring* – a portion of which is excerpted in the next optional reading below – were two of the statements that most directly inspired many in the environmental movement. Both are worth reading for a sense of the core values, perspectives, and rhetorical power they convey.)

(Optional) Carson, Rachel. 1962. "A Fable for Tomorrow" and "The Obligation to Endure." From her *Silent Spring* (Boston: Houghton Mifflin). On line at <http://core.ecu.edu/soci/juskaa/SOCI3222/carson.html> (accessed 8-17-2014)

(Optional) Sax, Joseph L. (1970). The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention. *Mich. L. Rev.* 68:471-566. <http://www.uvm.edu/~gflomenh/PA395-CMN-ASSTS/articles/sax.pdf> (accessed 8-17-2014). Read introduction and conclusion; skim more as interested. A related commentary is also available (accessed 8-17-2014) at <http://www.uvm.edu/~gflomenh/PA395-CMN-ASSTS/articles/sax.pdf>

III. THE ERA OF ENVIRONMENTAL REGULATION

October 6 FILM: *An Act of Congress* (CLASS MEETING IN 205 UNDERGRADUATE LIBRARY)

ISSUE: Read Kingdon chapter below.

The film "An Act of Congress" shows the Congressional legislative process in action, using as its subject the automotive air pollution standards section of the Clean Air Act amendments of 1977. In addition to the readings on Congressional policymaking, the following background and questions may provide useful context as you view the film.

The Clean Air Act of 1970 established primary federal control of major air pollution sources, including specific statutory standards and deadlines for auto emission controls. Over the following 7 years, these deadlines were eased three times (twice by EPA, once by Congress); and in 1977 the auto industry requested yet another delay in the tough emission standards required for their 1978 model year, which included a commitment to 90% reduction of automotive air pollution. The film shows highlights of the House of Representatives' consideration of this proposed legislation.

What was the outcome of the Clean Air Act legislative process? Who "won?"

What characteristics of the lawmaking process, and of the participants in it, shaped the outcome?

What role did claims of science and facts play, as compared with arguments about effects on organized interests and identifiable kinds of people?

How does Kingdon's characterization of the policymaking process help us (or not help) to understand this process? (post-film discussion)

Kingdon, John W. 1984. Wrapping Things Up. Chapter 8 in his *Agendas, Alternatives, and Public Policies* (Boston: Little, Brown), pp. 205-218. On Sakai.

October 8 FILM: *The Regulators*

ISSUE: Read the O'Leary article below.

The film The Regulators shows the process by which EPA develops a regulation; by coincidence, its case study is a regulation implementing another section of the Clean Air Act amendments of 1977 (in this case, regulations for "prevention of significant deterioration" to air quality affecting visibility around national parks).

What were the pros and cons of the compromise regulations ultimately adopted by EPA in the film? Was the public interest well served by the result, or was the compromise a worse or less logical outcome than the positions advocated by either of the interest groups?

How do administrative rulemaking procedures themselves affect regulatory outcomes? What is the "burden of proof," how does it apply to regulatory proposals, and how does it protect or frustrate public values and policy goals?

What is "administrative discretion," and why is it an issue? (Recall the question asked previously, about whether environmental policy would be better if Congress wrote more specific statutory mandates for the agencies to implement, or if it gave them greater administrative discretion about priorities and other details of implementation). How does it affect regulatory policy-making for the environment?

Courts make policies in at least four ways. First, they resolve disputes among private individuals, using principles of "common law" such as negligence, nuisance, and contractual obligation, rather than statutes or constitutional provisions. Second, they determine whether or not defendants have broken the laws, and assign punishments for those who have – in each case, interpreting the laws in ways which may either broaden or narrow their meaning and effects. Third, they review legislative or administrative actions, interpreting whether or not these actions are in accord with the Constitution (and for administrative actions, in accord with statutory authority). Finally, they establish rules for running the judicial process itself: who has "standing" to sue, whether an issue is "justiciable" and "ripe" for judicial interpretation, what court system has "jurisdiction" and which specific court is the appropriate "venue," etc. – and of course, what remedies may be granted.

How do the courts make environmental policy? In what ways are they similar to administrative agencies in this role, and in what ways are they different? What are their distinctive characteristics, strengths, and weaknesses?

Some authors, such as Sax, defend the courts as an important complementary arena to the agencies for environmental policymaking, and an important recourse against political behavior of both legislators and bureaucrats. Others are far more critical, arguing that judges cannot understand the scientific and technical complexities of environmental issues, that they are not adequately accountable to the will of the public, and that they therefore should not "substitute their judgment" for those of the administrative agencies – even if the agencies are wrong – except to correct truly outrageous actions. Such authors argue, therefore, that the courts should intervene only sparingly, and with deference to the agencies. Which would you agree with, and why (review Sax reading also)? What are the most

important limitations of courts as arenas for environmental policy-making, and of laws and legal penalties as policy instruments?

What are the strengths and weaknesses of regulatory environmental decision-making, and of the interactions between regulatory agencies and courts?

O’Leary, Rosemary. 2012. Environmental Policy in the Courts. Chapter 6 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 135-156

October 13 Environmental policy-making by the Congress and agencies

ISSUE: How does Congress make environmental policy, and what are the strengths and weaknesses of this process? How is Congressional environmental policymaking today similar to and different from the way it operated at the time of the film (1977)?

What problems are created by the processes by which the Congress deals with environmental issues? Do these problems suggest any important insights for proposals to reform environmental regulation? What are the basic strengths and weaknesses of a legislature such as the U.S. Congress in dealing with environmental problems?

A very important question: Would better environmental policies be more likely to result if agencies like the EPA were more explicitly directed by the Congress, as has been the trend in many recent environmental statutes (deadlines, “hammer” clauses, statutory approaches and standards, etc.), or if they were given greater administrative discretion to set priorities and manage environmental problems based on their own expertise and judgment? Why? Think through both sides of this argument carefully.

How is Congressional environmental policymaking today similar to and different from the way it operated at the time of the film (1977)? How does this affect policy-making for an issue like air pollution reduction?

Kraft, Michael E. 2009. Environmental Policy in Congress. Chapter 5 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by N. Vig and M. Kraft. Washington, DC: CQ Press, pp. 99-124

October 15 MID-TERM EXAM
[Fall Break begins at 5:00 p.m. on October 15]

October 20 A federal regulatory system for pollution control: air & water quality

ISSUES: Read the readings assigned below.

What were the key characteristics of the EPA, and how might it have developed differently if it had been created as a “Department of the Environment”?

What are the main elements of U.S. air pollution control policy, and what aspects of the problem of air pollution do they and do they not control effectively? What were the main elements of U.S. water pollution control policy, and in what respects (and why) were they similar to and different from air pollution policy? For both air pollution and water pollution, why did the U.S. adopt a single national regulatory system, and what roles do state and local governments play in these systems?

What is “command and control” regulation, and what forms does it take? Why do you suppose legislators in the 1960s and ’70s chose technology-based permit requirements for air pollutant emissions and water pollutant discharges as the primary approach to

solving these pollution problems? What have been the greatest successes and failures of this approach?

- Andrews, *ME/MO* Chapter 12: Nationalizing Pollution Control, pp. 227-42.
- Andrews (in press), The Environmental Protection Agency. Draft Chap. 7 for publication in *Environmental Policy: New Directions for the 21st Century*, 9th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press. Read introduction and first case example (Air Pollution from Electric Power Plants), pp. 1-10. On Sakai.
- U.S. Environmental Protection Agency. 2013. *The Clean Air Act in a Nutshell: How It Works*. On line at http://www.epa.gov/air/caa/pdfs/CAA_Nutshell.pdf (accessed 8-17-2017). Skim for overall understanding of the various elements of the law; read specific sections in more detail as interested.
- Copeland, Claudia. (2010). *Clean Water Act: A Summary of the Law*. Congressional Research Service Report RL 30030. On line (accessed 8-17-2014) at http://www.in.gov/idem/files/rules_erb_20130213_cwa_summary.pdf.
- (Optional) For a more detailed evaluation of the American pollution-control regulatory system, its results, and recommendations for reform, see J. C. Davies and J. Mazurek, *Pollution Control in the United States: Evaluating the System* (Washington, DC: Resources for the Future, 1998), esp. Chapter 5 (“Reducing Pollution Levels”) and Chapter 11 (“Conclusions”). [In Davis Library]

October 22 Regulating waste management: RCRA and CERCLA

ISSUES: Read the readings assigned below.

What are “hazardous wastes,” and what are the key elements of U.S. policies for managing them? What are the strengths and weaknesses of these policies?

How should EPA set priorities among which contaminated sites to clean up, and how thoroughly to clean up each one? Who should bear the cost of such clean-ups? What are “brownfields,” and how do EPA policies affect their cleanup and redevelopment for new uses?

What are the main U.S. policies for managing non-hazardous solid wastes, and what are their strengths and limitations? What would be the strongest arguments for and against a national policy on recycling, or a national deposit-return policy for some key products?

What effects have national waste management policies had on U.S. waste management practices generally? Is this a “success story” for federal regulation?

- Andrews, *ME/MO* Chapter 12, pp. 245-49.
- McCarthy, James E., and Mary Tiemann (1999). Solid Waste Disposal Act/Resource Conservation and Recovery Act. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022 (redistributed by the National Library for the Environment). On line at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/h.cfm> (accessed July 18, 2012).
- Reisch, Mark (1999). Superfund. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022. On line at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/j.cfm> (accessed 8-17-2014).

(Optional) Bearden, David (2012). *Comprehensive Environmental Response, Compensation, and Liability Act: A Summary of Superfund Cleanup Authorities and Related Provisions of the Act*. Congressional Research Service Report R 41039. On line (accessed 8-17-2014) at <http://fas.org/sgp/crs/misc/R41039.pdf> .

October 27 Risk-based regulation

ISSUE: Read the readings assigned below.

What is “risk-based” regulation, and how is it different from the “technology-based” regulations used as primary tools of air and water pollution control?

What are the main elements of each of the principal U.S. laws regulating toxic chemicals (FIFRA, SDWA, TSCA, and toxic air and water pollutants)? What are the main similarities and differences among these laws, and their strengths and weaknesses? What might be more effective ways of minimizing pesticide exposure than the substance-by-substance approach?

What is an environmental “risk,” and what is the process for developing and implementing a “risk-based” regulation? Is risk assessment a scientific process, or is it too dependent on the assumptions and subjective judgments of its practitioners – or even inherently political (e.g. see the optional Rosenbaum reading)? What kinds of proof, and how much of it, should a government agency such as EPA have to present before regulating a chemical as an environmental or health hazard? Should it consider other criteria in addition to statistical risk estimates? What are the consequences of requiring a high scientific burden of proof to justify environmental policies?

Should the U.S. adopt the “precautionary principle” as a better basis for environmental policy decisions? Or has it already done so, at least in some of its regulatory frameworks? What would this mean, and how would it be different (or not) from current U.S. environmental policies?

Andrews, *ME/MO* Chapter 12: Nationalizing Pollution Control, pp. 242-45; Chapter 13: Reform or Reaction?, pp. 266-70 and 277-80.

Andrews (in press). The Environmental Protection Agency. Read 2nd case example (Toxic Chemicals: Arsenic in Drinking Water), pp. 10-17. Draft Chap. 7 for publication in *Environmental Policy: New Directions for the 21st Century*, 9th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press. On Sakai.

Andrews, Richard N. L. 2005. Risk-Based Decision Making: Policy, Science, and Politics. Chapter 10 in *Environmental Policy: New Directions for the 21st Century*, 6th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 215-38. On Sakai.

Science and Environmental Health Network. 1998. Wingspread Statement and Frequently Asked Questions About the Precautionary Principle. On line at <http://www.sehn.org/wing.html> and <http://www.sehn.org/ppfaqs.html> (accessed 8-17-2014).

(Optional) Schierow, Linda. (1999). Federal Insecticide, Fungicide, and Rodenticide Act. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022. On line (accessed 8-17-2014) at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/l.cfm>.

(Optional) Tiemann, Mary. (1999). Safe Drinking Water Act. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022. On line (accessed 8-17-2014) at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/g.cfm>.

- (Optional) Schierow, Linda. (1999). Toxic Substances Control Act. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022. On line (accessed 8-17-2014) at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/k.cfm>.
- (Optional) Russell, Milton, and Michael Gruber. 1987. Risk Assessment in Environmental Policy-Making. *Science* 236:286-290. On Sakai. (This reading provides an argument in favor of risk-based decision-making in the words of an EPA Assistant Administrator for Policy).

October 29 “Market-oriented” policy instruments

ISSUES: For much of its history, EPA’s primary policy instruments have been uniform national regulatory programs, plus subsidies for public wastewater treatment facilities and cleanup of contaminated sites. EPA and others have often advocated use of a broader range of policy “tools” to achieve more cost-effective pollution prevention and waste and risk reduction, however, including proposals for “market-based incentives” in place of “command-and-control regulations.”

Read the readings assigned below. What kinds of policy “tools” other than regulation does government have available, in principle, to promote environmental protection?

What are “market-based incentives,” and how do they differ from “command and control regulations?” Is “command-and-control” versus “market-based incentives” a useful distinction, or not?

What actual experience do we have in the U.S. with “market-based incentives” for environmental protection? In other countries? What lessons can we draw from experience with “cap and trade” policies such as EPA’s “bubble policy,” its emission allowance trading and banking programs, and the Clean Air Amendments of 1990? With information disclosure requirements such as the 1986 Toxics Release Inventory? With other “market-based” initiatives (bring your own examples).

What are the strengths and limitations of “market-based incentives” as an alternative to (or implementation strategy for) environmental regulations? What are the important differences among such incentives (e.g. emissions taxes vs. charges vs. marketable permits, reporting vs. labeling vs. other disclosure requirements, liability, and others)?

How might EPA be different if it were given more flexible discretionary authority to set priorities, to use different mixtures of policy “tools” (for instance, authority to impose economic incentives) rather than just authority to regulate, and allowed to give states, local governments and industries more flexibility in how they set priorities and comply with federal environmental requirements? If it were given an “organic act” (that is, a single integrated statute codifying its mission, authority, decision criteria, program responsibilities, etc.)?

Andrews, *ME/MO* Chapter 13: Reform or Reaction: The Politics of the Pendulum
Andrews (in press), *Environmental Policy Tools (1700s-present)*. Read pp. 153-156 (excerpt from Chap. 10, *CQ Guide to U.S. Environmental Policy*, ed. E. Russell and S. Fairfax, CQ Books)

U.S. Environmental Protection Agency. 2001. Executive Summary. From its *The United States Experience With Economic Incentives for Protecting the Environment*, Report No. EPA-240-R-01-00. Read pp. i-xi. Full report (optional, for more detail on examples) is on line at [http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-13.pdf/\\$file/EE-0216B-13.pdf](http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-13.pdf/$file/EE-0216B-13.pdf) (accessed 8-17-2014).

U.S. Environmental Protection Agency. (n.d.). Cap and Trade: Acid Rain Program Results. On line (accessed 8-17-2014) at

www.epa.gov/capandtrade/documents/ctresults.pdf

Press, Daniel, and Daniel Mazmanian. 2012. Toward Sustainable Production: Finding Workable Strategies for Government and Industry. Chapter 10 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 230-254

(Optional) Swift, Byron. 2000. *How Environmental Laws Can Discourage Pollution Prevention*. Policy Report, Progressive Policy Institute, August 1, 2000. Read introductory sections; skim case studies as interested. On line (accessed July 18, 2012) at

http://www.dlc.org/ndol_ci831c.html?kaid=116&subid=150&contentid=1159

(Optional) Schierow, Linda. 1999. Emergency Planning and Community Right-to-Know Act. From *Summaries of Environmental Laws Administered by the EPA*, Congressional Research Service Report RL 30022. On line (accessed 8-17-2014) at <http://www.cnie.org/nle/crsreports/briefingbooks/laws/m.cfm>.

(Optional) Stavins, Robert N. 2003. Market-Based Environmental Policies: What Can We Learn From U.S. Experience (and Related Research)? Kennedy School of Government, Harvard University, Working Paper No. RPP-2003-07. On line (accessed 8-17-2014) at

http://ksghome.harvard.edu/~rstavins/Papers/Santa_Barbara_Paper_on_MBIs.pdf

(Optional) Olmstead, Sheila. 2012. Applying Market Principles to Environmental Policy. Chapter 9 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 206-229

(Optional) Burtraw, Dallas, and Karen Palmer. 2003. *The Paparazzi Take a Look at a Living Legend: The SO₂ Cap-and-Trade Program for Power Plants in the United States*. Resources for the Future, Discussion Paper 03-15. On line (accessed 8-17-2014) at <http://www.rff.org/RFF/Documents/RFF-DP-03-15.pdf>

IV. BEYOND REGULATION: ENVIRONMENTAL IMPACTS OF PUBLIC POLICIES

November 3 SECOND ELEMENT OF ISSUE PAPER DUE

November 3 Presidential environmental policies: From Nixon to Obama

ISSUES: A key factor in the development of American environmental policy since 1970 (and of course in previous periods as well) has been the changing priorities governing philosophies, and attitudes toward the environment held by successive presidents and their administrations.

Read the readings assigned below. What were the most important environmental policy principles and initiatives during each of the various presidential administrations from Nixon to Obama? In what respects was each (or wasn't he) an "environmental president," and why? Think of examples pro and con, accomplishments but also missed opportunities, consistency versus change over time, Presidential as well as Congressional actions during each time period. What factors most influenced the environmental policies of each period, and what lessons does each offer about American environmental policy and policymaking?

How would you assess the pros and cons of President Obama's record on environmental policy so far? What have been his most positive and more problematic actions? How would you "grade" his performance so far, and why?

Vig, Norman J. 2012. Presidential Powers and Environmental Policy. Chapter 4 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 84-108.

Andrews, *ME/MO* Chapter 13: Reform or Reaction?, pp. 255-262, and Chapter 16: "The Era of Base Politics," pp. 350-95

Eilperin, Juliet. 2013. On Earth Day, where does Obama's environmental record stand? *Washington Post*, April 22, 2013. On line (accessed 8-17-2014) at <http://www.washingtonpost.com/blogs/the-fix/wp/2013/04/22/on-earth-day-where-does-obamas-environmental-record-stand/> .

(Optional) McKibben, Bill. 2013. Obama and Climate Change: The Real Story. *Rolling Stone*, December 17, 2013. On line (accessed 8-17-2014) at <http://www.rollingstone.com/politics/news/obama-and-climate-change-the-real-story-20131217?page=3>

(Optional) Chait, Jonathan. 2013. Obama Might Actually Be the Environmental President. *New York Magazine*, May 5, 2013. On line (accessed 8-17-2014) at <http://nymag.com/news/features/obama-climate-change-2013-5/>

(Optional) Obama Administration's energy and environment web site (*their own self-assessment*): On line (accessed 8-17-2014) at <http://www.whitehouse.gov/issues/energy-and-environment>

November 5 National environmental policy

ISSUE: Read the readings assigned below.

The National Environmental Policy Act was one of the great landmarks of American environmental policy, and has been imitated by more than half the states and by many other countries. Unlike regulation of pollution, it addressed a far broader and more pervasive problem: the fact that government agencies and their actions are themselves often the causes of environmental damage. Often this is because they have been charged with missions that are in conflict with environmental protection; often it is because powerful political constituencies benefit from those missions; often too it is because such missions are radically fragmented across separate agencies, each populated only by experts in their own mission and working at cross purposes with others (recall the earlier discussion of the evolution of federal agencies from Progressivism through the New Deal and the "broker state" to the environmental conflicts of the 1950s and '60s).

What agencies' programs and actions other than EPA's have important impacts on the environment, and are thus implicitly elements of American environmental policy? What environmental problems are caused not by market failures but by government policies themselves, including the fragmentation of mission-oriented policies and programs? Bring your own examples.

The National Environmental Policy Act of 1969 set an overall U.S. policy for the environment, and created several "action-forcing procedures" as well as an oversight institution (the Council on Environmental Quality) to assure its implementation throughout the government. How well is it working, and why isn't it working better?

What was the significance of the "environmental impact statement" requirement? How did it "force action," and how much action did it force? What lessons does this teach

about the use of bureaucratic accountability requirements to change policy outcomes and the political dynamics of the decision-making process?

What would it take to deal more effectively with these kinds of issues? For instance, to develop a more environmentally sustainable national policy for ecosystem protection, for energy, for agriculture, and for transportation? Should the U.S. develop a detailed “national environmental strategy” or policy plan like the Netherlands, in which each agency and economic sector is assigned specific negotiated goals and timetables for reducing environmental problems and achieving more sustainable outcomes of its activities? What would it take to implement such a plan in the United States?

Andrews, *ME/MO* Chapter 14: The Unfinished Business of National Environmental Policy, pp. 284-316.

National Environmental Policy Act of 1969. On line (accessed November 4, 2014) at <http://www.epw.senate.gov/nepa69.pdf>

(Optional) Rosenbaum, Walter A. 2005. Environmental Impact Statements: Gift Box or Black Box? Chapter 9 in *Environmental Policymaking: Assessing the Use of Alternative Instruments*, edited by Michael T. Hatch. Albany, NY: State University of New York Press, pp. 195-223. On Sakai.

(Optional) Liefferink, Duncan. 1999. The Dutch National Plan for Sustainable Society. Chapter 12 in *The Global Environment: Institutions, Law, and Policy*, edited by Norman J. Vig and Regina Axelrod (Washington, DC: CQ Press), pp. 256-78. On Sakai.

November 10 Environmental policies for public lands, species, and ecosystems

ISSUES: Read the readings assigned below.

What have been the most important changes in environmental policy for management of the public lands – including the national forests, national parks, Interior Department public lands, Defense Department lands, and others – since the 1970s? What have these changes accomplished, and why have they been controversial?

What are the core elements of U.S. policies for the protection of endangered species, and what are their strengths and limitations? Why are they controversial? How might they be made both more effective and more acceptable to those affected by them?

Does the United States have any policies for the sustainable management of ecosystems per se? Can you think of examples? How well do they work, and why are they controversial? What would be the essential elements and management institutions for a more systematic approach to such a policy?

Andrews, *ME/MO* Chapter 14, pp. 290-95, 308-14; and Chapter 16, pp. 355-56 and 362-71.

Lubell, Mark, and Brian Segee. 2012. Conflict and Cooperation in Natural Resource Management. Chapter 8 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 185-205

Solomon, Christopher. 2014. Rethinking the Wild: The Wilderness Act Is Facing a Midlife Crisis. *New York Times*, July 5, 2014. On Sakai.

November 12 State and local environmental policies: opportunities, innovations, limitations

ISSUE: An important aspect of American environmental policymaking is the existence of policymaking authority at at least three levels of government: national but also state and local, and sometimes cooperative and regional initiatives combining these. The general label for this topic is environmental federalism. Similar issues arise in other countries under other labels: in the European Union, for instance, similar issues are addressed under the label of “subsidiarity.”

Read the reading assigned below. What elements of environmental policy are primarily or exclusively the responsibility of state and local governments, vs. what elements are shared with the federal government, and what elements are exclusively controlled by the federal government? How has this allocation of authority and responsibility (e.g. nationalization/preemption or partial preemption vs. devolution) changed over time, why, and with what effects? How is the relationship of local to state policymaking similar to and different from the relationship of state to national policymaking?

Think of examples where states have been ahead of the federal government in environmental policy innovations, and examples where they have been behind. What lessons do these examples suggest for effective environmental policymaking?

What are the most important limitations on state environmental policies?

In light of the answers to the previous questions, under what circumstances are environmental policies best developed by state and local governments, vs. which ones are best developed at the national level? Give examples.

Rabe, Barry G. 2012. Racing to the Top, the Bottom, or the Middle of the Pack? The Evolving State Government Role in Environmental Protection. Chapter 2 in *Environmental Policy: New Directions for the 21st Century*, edited by Michael E. Kraft and Norman J. Vig, 8th edition. Washington, DC: CQ Press, pp. 30-53.

Smith, Robin W. 2014. Status of Regulatory Reform Legislation. On line (accessed 8-17-2014) at <http://www.smithenvironment.com/status-of-regulatory-reform-legislation/> (see also other informative posts on NC envr policy on this site).

(Optional) Percival, Robert V. 1995. Environmental Federalism: Historical Roots and Contemporary Models. *Maryland Law Review* 54:1141-82, esp. pp. 1171-82. On Sakai.

V. THE GLOBALIZATION OF ENVIRONMENTAL POLICY

November 17 U.S. energy policy and global climate change

ISSUES: By far the most significant environmental policy issue currently facing the U.S. government is the accelerated rate of global warming caused by human activities, and particularly by combustion of fossil fuels; and related issues concerning U.S. energy sources, reliability and security. The issues include what policies to adopt to try to mitigate (reduce) this rate of warming, and how to meet or reduce U.S. energy demand while maintaining a healthy economy; how to adapt to the consequences of global warming that cannot be prevented or mitigated; and how to accomplish these outcomes both within the United States (e.g. through domestic energy and transportation policies) and globally (e.g. in other rapidly industrializing countries such as China and India, and through international agreements such as a successor agreement to the Kyoto Protocol). Many U.S. states have already enacted policy initiatives related to climate change, President Obama has announced his support for significant federal action, and major bills were seriously debated, though ultimately never passed, by the Congress; in the absence of Congressional action, the EPA is moving ahead to regulate greenhouse gas emissions as pollutants under the Clean Air Act.

Read the readings assigned below, and the optional ones for which you have time and interest. What are the main elements of a national energy and climate change policies, and what are the main issues still unresolved about their expected consequences and effectiveness? Overall, what do you think is likely to be an effective policy for solving the problem of global warming, or at least of the U.S.'s part of the problem? What are its strengths and its limitations? What other aspects of the problem are not yet addressed, if any, and what additional policies would be needed to address these concerns?

Andrews, *ME/MO* Chapter 14, pp. 295-301; and Chapter 16, pp. 362-65.

Andrews (in press), The Environmental Protection Agency. Draft Chap. 7 for publication in *Environmental Policy: New Directions for the 21st Century*, 9th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press. Read 3rd case example (Greenhouse Gas Emissions and Climate Change), pp. 17-24. On Sakai. Selin, Henrik, and Stacy D. VanDeveer. 2012. Global Climate Change: Kyoto and Beyond. Chapter 12 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 278-298.

Obama Administration. 2011. *Blueprint for a Secure Energy Future*. Skim. On line (accessed July 18, 2012) at http://www.whitehouse.gov/sites/default/files/blueprint_secure_energy_future.pdf

(Optional) Bamberger, Robert. 2003. *Energy Policy: Historical Overview, Conceptual Framework, and Continuing Issues*. Congressional Research Service, Report no. RL31720. On line (accessed 8-17-2014) at

<http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL31720.pdf>

(Optional) National Commission on Energy Policy. 2004, 2007. *Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges*. Read Summary of Recommendations (2007), on line (accessed 8-17-2014) at

<http://bipartisanpolicy.org/library/report/energy-policy-recommendations-president-and-110th-congress>. Full report (2004) also available at <http://bipartisanpolicy.org/sites/default/files/Ending%20the%20Energy%20Stalemate.pdf>

(Optional) Center for Climate and Energy Solutions. 2011. *Climate Change 101: Overview*. On line (accessed 8-17-2014) at

<http://www.c2es.org/docUploads/climate101-overview.pdf>

(Optional) Union of Concerned Scientists USA. 2005. Summary of 2005 Energy Policy Act. On line (accessed 8-17-2014) at

http://www.ucsusa.org/assets/documents/clean_energy/summaryoftheenergybill.pdf

(Optional) One useful web site for current information: Center for Climate and Energy Solutions: <http://www.c2es.org/federal>

November 19 U.S. policies and international environmental agreements

ISSUES: Beyond the largely domestic U.S. policies we have discussed so far lie the many serious problems of the global environment, and in less developed countries, of both poverty and in some cases – China, India, Brazil, and others – rapid urban and industrial development. These worldwide issues, and the role of U.S. policies in improving or worsening them, must arguably be high priorities for U.S. policy for the future as well.

Many important environmental problems are now the subject of international treaty negotiation. Examples include truly global problems, such as global warming, depletion of ocean fisheries, and the environmental impacts of international trade; negotiations over regional trans-boundary problems, such as acid rain, international rivers and seas, and international trade in hazardous wastes; and negotiations over localized or bilateral problems that happen to involve more than one nation, such as the Rio Grande River or the Great Lakes. The most visible model so far for addressing such problems is the Vienna Convention and Montreal Protocol on Protection of the Ozone Layer. But it is not yet clear how widely that model can be replicated for many other international environmental issues.

Read the readings assigned below. How is international environmental policymaking different from domestic U.S. policymaking? What are the most important differences between national or sub-national and international institutions for environmental policymaking?

What kinds of environmental policies are used at the international level, and how are these different from national and sub-national policies (for instance treaties, conventions, "soft law")? How do these differences affect the availability and potential effectiveness of policy options, and the likely outcomes of attempts to solve international environmental problems?

What roles has the United States taken in international environmental policy-making, and why? What factors might explain its leadership on some issues and in some time periods, versus its lack of leadership (or even obstruction) on others?

What roles do international environmental agreements play in the domestic policy initiatives and priorities of the United States itself? Can you think of examples of international agreements or United Nations initiatives that the United States has strongly implemented? That it has not paid attention to?

Is the Montreal Protocol a good prototype for other international environmental policy agreements, such as the Kyoto Protocol on global climate change? Why or why not, and in what respects? What lessons does it offer as a model for solving other global environmental problems, such as global warming?

What are the main provisions of the UN Framework Convention on Climate Change and the Kyoto Protocol, and what lessons do they offer for solving the problem of global climate change? What elements would have to be included in a successful post-Kyoto (2012-2050) solution, and what would be necessary to achieve U.S. commitment to such an agreement?

Andrews, *ME/MO* Chapter 15: Environmental Policy in a Global Economy, pp. 317-33, 356-57, 385-90.

Benedick, Richard E. (Lead Author); Cutler J. Cleveland (Topic Editor). 2007. "Lessons from the Montreal Protocol." In: *Encyclopedia of Earth*, ed. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment). On line (accessed 8-17-2014), at http://www.eoearth.org/article/Lessons_from_the_Montreal_Protocol

Speth, James G. 2004. First Attempt at Global Environmental Governance, and Anatomy of Failure. Chapters 4 and 5 from his *Red Sky at Morning: America and the Crisis of the Global Environment*. New Haven, CT: Yale University Press, pp. 77-116. On Sakai.

Anderson, John W. 2002. U.S. Has No Role in U.N. Treaty Process; Senate Reluctant to Ratify. *Resources for the Future, Resources*, Issue 148 (Summer 2002): 12-17. On line (accessed 8-17-2014) at <http://rff.org/rff/Documents/RFF-Resources-148-treatyprocess.pdf>

(Optional) Paarlberg, Robert L. 1999. Lapsed Leadership: U.S. International Environmental Policy Since Rio. Chapter 11 in *The Global Environment: Institutions, Law, and Policy*, edited by Norman J. Vig and Regina Axelrod (Washington, DC: CQ Press), pp. 236-55. On Sakai.

November 24 U.S. international trade policies and the environment

ISSUES: Read the readings assigned below.

“Free trade” is a central and powerful ideal of most American economists and many others, based both on deeply rooted theoretical ideals and on historical beliefs about the dangers of trade wars. It also is strongly supported by spokespersons for many poor countries, who argue that the U.S.’s actual record on free trade is far from its own ideals (as are the records of many of the other wealthier countries, who have often protected their own industries at the expense of those of developing countries), and who therefore attack U.S. environmentalists, often bitterly, for promoting the environmental preservation values of affluent U.S. elites at the expense of poor countries, while simultaneously playing into the hands of trade protectionist interests such as privileged U.S. business interests and some labor unions.

What are the main elements of U.S. trade policy, and what effects have they had on the environment? Which of its pro-free-trade policies have been beneficial, and which harmful, to the environment? Which of its protectionist policies have been beneficial, and which harmful? Try to think of examples of each.

What are the key elements of major trade agreements such as the World Trade Organization and NAFTA that have important environmental implications? What are the main arguments against these agreements as a cause of environmental damage, and in favor of them as an environmental benefit? How would such trade agreements need to be modified (if at all) to assure that they improve rather than endanger environmental protection, occupational health and safety, and sustainable development?

Should individual countries be allowed to set environmental requirements for the production processes (as well as the products themselves) of products they import (for instance, methods for tuna and shrimp harvesting to protect other species impose sanctions on others in the name of environmental protection? Other products produced with worse environmental impacts than are allowed in the importing country?)? How could such actions be distinguished from covert attempts by importing countries to protect privileged domestic industries – or from attempts by exporting countries to use low environmental protection standards as a competitive advantage? How else could these problems be solved?

Does the new global mobility of capital invalidate the concept of comparative advantage, as Daly argues, and with it the basic economic argument for free trade? What are the implications of a global trade system based not on comparative but on pure competitive advantage? Would the United States be better off with a policy of subtle protectionism combined with aggressive export development – or reducing export and import dependence more generally, in favor of more self-reliant patterns of internal markets? Would the people of poor countries be better served by such alternative policies?

What would be the most positive steps the United States could take – both itself, and in its leadership of the international community – to make international trade more environmentally sustainable? Is there a risk that a new Democratic Congress and administration (if elected) might be just as unilateralist on trade issues as the Bush administration has been on war, terrorism, and climate change issues? What would be the consequence, and how might the U.S. avoid negative consequences for itself and others?

Andrews, *ME/MO* Chapter 15, pp. 333-49.

Vogel, David. 2005. International Trade and Environmental Regulation. Chapter 16 in *Environmental Policy: New Directions for the 21st Century*, 6th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 354-73. On Sakai.

Daly, Herman E. 1993. The Perils of Free Trade. *Scientific American*, November 1993, pp. 50-57.

(Optional) Nordström, Håkan, and Scott Vaughan. 1999. Executive Summary. From their *Trade and Environment*. Special Studies Series. Geneva, Switzerland: World Trade Organization, pp. 1-7 [5-14]. On line at http://www.wto.org/english/tratop_e/envir_e/environment.pdf (accessed 8-17-2014). (*WTO's own assessment of the relationship between trade and the environment*)

November 26 No class (Thanksgiving holiday)

December 1 Global change and sustainable development: U.S. priorities?

ISSUES: In 1987 a distinguished United Nations commission proposed "sustainable development" as the central policy goal for the nations of the world, both individually and acting together. More recently, the Millennium Ecosystem Assessment reported the findings of a distinguished network of scientists on the ways in which ecosystems support human communities and their economies, and on the serious threats to many of these systems reflected in their current status and trends. The MEA also lists a series of proposed policy principles for addressing these unsustainable trends.

Read the readings assigned below. What is "sustainable development," and by what criteria could one define and recognize it? What are the strengths and limitations of the WCED proposals (and the subsequent UN "Agenda 21" approved at the 1992 Rio "Earth Summit") for achieving it?

From the information in the Millennium Ecosystem Assessment and other reports on the condition and trends in the world's ecosystems, what are the highest priorities for action to maintain an ecologically sustainable world?

How would ecologically sustainable development be different from the present in a rapidly developing country such as China, India, Mexico or Brazil? In a still-poor country such as Bangla Desh, Nepal, or most of sub-Saharan Africa? In an oil-rich but otherwise poor country such as Nigeria or Ecuador? In an already affluent country such as the United States?

What roles do U.S. policies play in helping or hindering achievement of sustainable development at a global scale, and what changes in U.S. policies could most help to achieve it? Do you agree with the policy principles recommended by the authors of the MEA reading? Are there any others you would add or substitute? What would be needed to put them into effect, both domestically in the U.S. and globally?

Recently some conservative politicians have attacked sustainable development as a UN scheme to overturn local decision-making autonomy and property rights: do you see any merit in these criticisms?

Andrews, *ME/MO* Chapter 15, pp. 328-29.

World Commission on Environment and Development. 1987. Towards Sustainable Development. Chapter 2 in its *Our Common Future* (New York: Oxford University Press), pp. 43-66. On Sakai.

- Millennium Ecosystem Assessment. 2006. Living Beyond Our Means: Natural Assets and Human Well-Being. On line (accessed 8-17-2014) at <http://www.millenniumassessment.org/documents/document.429.aspx.pdf>
- United Nations Department of Economic and Social Affairs. 2013. Executive Summary. *Global Sustainable Development Report: Building the Common Future We Want*. On line (accessed 8-17-2014) at <http://sustainabledevelopment.un.org/content/documents/975GSDR%20Executive%20Summary.pdf>
- (Optional) The Rio Declaration on Environment and Development (1992): <http://www.unep.org/Documents.Multilingual/Default.asp?documentID=78&articleID=1163>, accessed July 18, 2012.
- (Optional) Tobin, Richard J. 2012. Environment, Population, and the Developing World. Chapter 13 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 299-320.
- (Optional) Gallagher, Kelly Sims, and Joanna I. Lewis. 2012. China's Quest for a Green Economy. Chapter 14 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 321-343.
- (Optional) Paehlke, Robert. 2012. Sustainable Development and Urban Life in North America. Chapter 11 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 255-276.
- (Optional) United Nations. General Assembly. 1992. Rio Declaration on Environment and Development. Annex I to its *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992*. On line (accessed 8-17-2014) at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>
- (Optional) United Nations, *Agenda 21* (full report from Rio Earth Summit), on line (accessed 8-17-2014) at <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>
- (Optional) Millennium Ecosystem Assessment. 2006. *Ecosystems and Human Well-Being: Opportunities and Challenges for Business and Industry*. On line (accessed July 18, 2012) at <http://www.millenniumassessment.org/documents/document.353.aspx.pdf>. See also business perspectives on this report on line at <http://www.millenniumassessment.org/documents/document.706.aspx.pdf>
- (Optional) Millennium Ecosystem Assessment. 2007. *A Toolkit for Understanding and Action*. On line (accessed 8-17-2014) at <http://www.unpei.org/sites/default/files/PDF/ecosystems-economicanalysis/MEA-A-Toolkit.pdf>

December 3 FINAL ISSUE PAPER DUE

December 3 American environmental policy: priorities and strategies for the 21st century
ISSUES: Read the readings assigned below.

Reflecting on what you have heard, read and discussed this semester, what would you consider the most fundamentally important environmental policy issues for the U.S. to deal with in the coming four years? Do you agree with Vig and Kraft's list, or would you add or substitute others?

How will U.S. environmental politics have to change and evolve in order to achieve effective solutions to these problems? What strategies might be most promising for achieving these changes?

Should environmentalists frame environmental issues as matters for fear or for optimism?

U.S. National Intelligence Council. 2008. *Global Trends 2025: A Transformed World*. On line (accessed 12-3-2012) at http://www.dni.gov/files/documents/Global%20Trends_2025%20Report.pdf

Hamilton, Clive. 2014. The New Environmentalism Will Lead Us to Disaster. *Scientific American*, Jun 19, 2014. On line (accessed 8-17-2014) at <http://www.scientificamerican.com/article/the-new-environmentalism-will-lead-us-to-disaster/>

Vig, Norman, and Michael Kraft. 2012. Conclusion: Toward Sustainable Development? Chapter 16 in their *Environmental Policy: New Directions for the 21st Century*, 8th edition. Washington, DC: CQ Press, pp. 370-394.

Andrews, *ME/MO* Chapter 17: Managing the Environment, Managing Ourselves, pp. 396-410.

(Optional) Speth, James Gustave. 2010. A New American Environmentalism and the New Economy. 10th Annual John H. Chafee Memorial Lecture, pp. 6-22. National Council for Science and the Environment, Washington, D.C. On line (accessed July 18, 2012) at <http://ncseonline.org/sites/default/files/Chafee%20Report%202010-Speth.pdf>

(Optional) Guber, Deborah Lynn, and Christopher J. Bosso. 2012. High Hopes and Bitter Disappointment?: Public Discourse and the Limits of the Environmental Movement in Climate Change Politics. Chapter 3 in *Environmental Policy: New Directions for the 21st Century*, 8th edition, edited by M. Kraft and N. Vig. Washington, DC: CQ Press, pp. 54-82.

December 9 FINAL EXAM: Tuesday, December 9, 4:00-7:00 p.m.

NOTE: Attendance at the final exam is mandatory, and the date and time cannot be changed by the instructor: the final exam dates are set by the Registrar. I am not allowed to make exceptions for students who wish to change this except with a dean's approval.