#### **CP 251/LA C231**

# **Environmental Policy & Regulation Associate Professor Jason Corburn**

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Tuesday 9:00 - 12:00 Wurster Hall 106

Office Hours: Tuesday 2-3:30, 410c Wurster Hall

This course will introduce students to the concepts, methods and practice of environmental policy and regulation. The course will focus on urban environments, and students will grapple with political questions of urban environmental governance, such as the appropriate sources of science and environmental knowledge, the scale at which to protect urban ecosystems, the role of social movements, and the place of environmental policy making in the broader spectrum of American and global environment and development politics. This course is designed for students with an interest in professional careers in environmental planning and management, regulation and activism. We focus on how environmental policies and regulations are designed, implemented, and evaluated using case studies of environmental policies and regulatory decisions. Case studies include such environmental issues as urban air and water quality, toxic chemicals, food access, sanitation and solid waste management, energy efficiency, and the connections between land use decisions and environmental health. Some specific concepts and tools of policy and regulation that the course will review include risk analysis, environmental impact assessment, the precautionary principle, environmental justice and life-cycle analysis.

At the conclusion of the course, students will:

- have a comprehensive understanding of the range of environmental problems in cities and metropolitan regions;
- be able to analyze the different tradeoffs and decisions in environmental policy making, assessment and implementation;
- engage will persistent ethical and social justice questions surrounding environmental regulatory decisions;
- understand the current and potential role of local, state and national governmental institutions, community-based organizations, and international agencies in addressing urban environmental issues, and;
- be able to identify key stakeholders in environmental politics and be familiar with processes for making democratic environmental policy and planning decisions.

## Assignments& Grading: (for additional assignment details see handout and bspace)

In class participation & exercises	20%
Policy Memo - due October 18th	25%
2 blog entries per student related to group topic	20%
Group presentation	35%

For more details on individual assignments, see the assignment handout and refer to the bspace assignments tab.

## **Schedule and Readings**

All readings, except where noted, are available on bspace or on reserve in the Environmental Design Library. The only book not available on bspace (but available as an e-book and on reserve through the UC library) is: Corburn, J. 2005. *Street Science: Community Knowledge and Environmental Health Justice.* Cambridge: The MIT Press.

## 8/30 Introduction to Environmental Policy & Regulation

- What are the goals and values of environmental policy and regulation?
- What models help explain environmental policy & regulation in the US?
- What roles have experts, the courts and the public play in setting environmental policy goals?
- How is environmental policy and regulation changing what roles are there for planners?

## Required Readings:

Fiorino, D. 2006. "How did we Get Here? Explaining Environmental Regulation," In, The New Environmental Regulation. Cambridge: The MIT Press, pp.27-42, 71-86.

Reich, R. 1988. "Policy Making in a Democracy," in R. Reich, ed. The Power of Public Ideas, Cambridge: Ballinger. Pp. 123-156.

White House place-based policy initiative memo. 2009.

## Recommended:

Rosenbaum, W. 1995. The Politics of Environmental Policy, In, Environmental Politics and Policy. Washington: CQ Press, pp. 82-127.

Stone, D. 1988. Policy Pardox and Political Reason. Ch. 1, The market and the polis.

Dryzek, J. 1997. Leave it to the Experts: Administrative Rationalism," In, The Politics of the Earth. London: Oxford. Pp.63-83.

## 9/6 The Light Brown Apple Moth: An Urban Environmental Policy Controversy Come to class prepared to discuss the controversy over the LBAM spraying.

#### Required Readings:

Kay, J. 2008. State Plans Bay Area Spraying, SF Chronicle, February 15.

Lynberg, M. 2008. Should the state spray urban areas? – Con. SF Chronicle. April 16.

Kawamura, A.G. 2008. Should the state spray urban areas? – Pro. SF Chronicle, April 16.

CDFA. 2008. Supportive Comments, May 1.

Altieri, M. 2008. Commentary: Apple Moth Pleads Not Guilty. Berkeley Daily Planet, May 1.

Kay, J. State vows to ensure moth spraying is safe, SF Chronicle, June 12.

Kay, J. 2008. Officials call of aerial spray for apple moth, SF Chronicle, Friday, June 20.

Kay, J. 2009. EPA pulls 2 moth pesticides; more in pipeline, SF Chronicle, Tuesday, May 12

Cronon, W. 1995. "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," In, Uncommon Ground. New York: Norton. Pp.67-113.

## Recommended Readings:

Bok, Derek. 2001. "Why Legislation is Often Badly Designed" Chapter 5 in, The Trouble with Government. Cambridge, MA: Harvard University Press, pp. 123-146.

## 9/13 History of American Environmentalism & Cities

- What are the roots of American Environmentalism?
- What is the difference between the preservation and conservation movements?
- How are notions of wilderness and land ownership related to the history of inequality in America?
- How has the urban environment been characterized in American history and what have been the implications for policy and regulation?
- How did the pollution/toxics environmental movement differ from those promoting preservation and conservation?
- What role did non-governmental organizations play in the crafting of American environmental policy?

## Required Readings:

- Gottlieb, R. Forcing the Spring: The Transformation of the American Environmental Movement. Island Press. Pp.47-80.
- Merchant, C. 2003. Shades of Darkness: Race and Environmental History, Environmental History\_vol. 8, no. 3: 380-394.
- Schultz, S.K. and McShane, C. 1978. To Engineer the Metropolis: Sewers, Sanitation and City Planning in late Nineteenth Century America. The Journal of American History, Vol. 65, No. 2, pp. 389-411.

## Recommended Readings:

- Jacobs, J. 1961. Death and Life of Great American Cities. New York: Random House. Chapter 5 ("The Uses of Neighborhood Parks"), pp. 89-111.
- Carson, R. 1962. *Silent Spring*. Boston: Houghton Mifflin. Chapter 3 ("Elixirs of Death"), pp. 15-37.
- Walker, R. A. 2007. "Toxic Landscapes: Beyond Open Space," In, The Country in the City: The Greening of the San Francisco Bay Area. Seattle: University of Washington Press, pp.205-228.

## 9/20 Regulating the Environment: The Clean Air Act & Climate change

- What significant events contributed to the 1970 Clean Air Act?
- What roles do technology, economic costs/benefits, the courts and public health concerns play in the shaping and implementing the CAA?
- What are the NAAQS and why do they matter?
- What were the issues in the Supreme Court case deciding that CO2 is a pollutant under the Clean Air Act?

#### Required Readings:

McCarthy, J. E.; Parker, L. B.; Schierow, L.; and C. Copeland. (no date). Clean Air Act. From Summaries of Environmental Laws Administered by the EPA, Congressional Research Service Report RL 30022 (redistributed by the National Library for the Environment). http://www.ncseonline.org/nle/crsreports/briefingbooks/laws/d.cfm

- Layzer, J. 2002. The Nation Tackles Pollution: The Environmental Protection Agency and the Clean Air and Water Acts, in, The Environmental Case. Congressional Quarterly Press, pp.25-51.
- Greenhouse, L. 2006. Justices first brush with global warming. New York Times. November, 30. Dean, C. 2006. When questions of science come to court room, truth has many faces. New York Times, Dec. 5.
- Massachusetts vs EPA, 549, 2007 US Supreme Court Ruling, (pdf document) http://www.law.cornell.edu/supct/pdf/05-1120P.ZS
- Broder, J.M and F. Barringer. 2007. E.P.A. Says 17 States Can't Set Emission Rules. NY Times. December 20<sup>th</sup>. http://www.nytimes.com/2007/12/20/washington/20epa.html
- Tankersley, J. 2009. EPA gives California emissions waiver. LA Times, June 30. http://www.latimes.com/news/nationworld/nation/la-na-california-waiver30-2009jun30,0,1077405.story

## **Group discussion leaders: Climate Change**

This group will explain the MA v. EPA supreme court ruling and it's implications for climate change policy in the US. The group will also provide a brief overview of California's policy position on climate change, name AB 32 and SB 375. The group will also explain what is the UN Framework Convention on Climate Change and what it aims to accomplish.

## Recommended Readings:

Jasanoff, S. 1990. The Fifth Branch: Science Advisers as Policymakers (Cambridge, MA: Harvard University Press), Chapter 6 ("The Science and Policy of Clean Air"), 101-122

Cole & Grossman 2005, Institutional and Technological Constraints on Environmental Instrument Choice: A Case Study of the U.S. Clean Air Act. Chapter 10 in *Environmental Policymaking: Assessing the Use of Alternative Policy Instruments*, edited by Michael T. Hatch (Albany, NY: SUNY Press), pp.225-44.

#### 9/27 Water Policy & Regulation: Federalism & California

- What is environmental federalism?
- Are states in a better position to design environmental policies and regulation than the Federal Government? Why or why not?
- What is the California state water plan and why is this an environmental policy issue?

## Required Reading:

Gerlak, A. K. 2006. "Federalism and US Water Policy: Lessons for the 21st Century." Publius: The Journal of Federalism

California Water Plan: Overview of California Water Management

Baker, D. 2011. Frack' oil wells draw California into debate. SF Chronicle, August 15.

## Recommended Reading:

Deason, Jonathan P., Theodore M. Schad and George William Sherk. 2001. "Water Policy in the United States: A Perspective." Water Policy 3: 175-192

http://www.waterplan.water.ca.gov/docs/cwpu2005/Vol\_4/01-Background/V4PRD6-waterallocation.pdf

## **Group Discussion leaders: CA Water Policy**

This group is expected to provide a very brief overview of the different state water policies, with a focus on the Bay Delta Plan. The group should explain the key environmental issues associated with state water management and the different interest groups that have a stake in water policy issues. The group should conclude with a brief overview of the current policy controversies/issues, including but not limited to the 2010 ballot initiative.

## 10/4 The National Environmental Policy Act & California Environmental Review

- How does the NEPA differ from the CAA and why is this relevant for urban planners?
- What is required in an environmental impact assessment? Why do you think public involvement was required in this environmental policy?
- What are some of the strengths and weaknesses of NEPA reviews (and similar state requirements)?

## **Required Readings**:

National Environmental Policy Act of 1969. http://ceq.eh.doe.gov/nepa/regs/nepa/nepaeqia.htm Andrews, R. 1999. "The Unfinished Business of National Environmental Policy," In, Managing the Environment, Managing Ourselves: A history of American Environmental Policy. Yale University Press. pp. 284-290 ONLY.

Greenberg, M. 2007. Policy Measurement and Assessment Tools. In, Environmental Policy Analysis and Practice. Rutgers University Press. Pp. 187-192 ONLY.

CA High Speed Rail EIR. SKIM Executive Summary

Urbina, I. 2010. Regulation Lax as Gas Wells' Tainted Water Hits Rivers. NY Times.

#### Recommended Readings:

Karkanian, B. 2004. Whither NEPA? New York University Environmental Law Journal, 12:333-363.

Stringer, S. 2009. Planning for Healthy Neighborhoods: Include Food Infrastructure in the City's Environmental Review. http://mbpo.org/uploads/Food%20CEQR.pdf

#### **Group discussion leaders: Fracking**

This group should review the materials for the film Gas Land and be prepared to answer some of the key questions and controversies that arise in this film. You should also provide the class with an overview of the current policy controversy at the federal level involving the EPA and other agencies over Fracking.

#### 10/11 Land use, property rights and environmental protection

- What is a "taking" and how does it relate to environmental protection?
- How ought environmental policy and planning decisions weigh the rights of private land owners and goals of clean air, water, etc?
- What was the main argument in Dolan and how did the courts rule?
- How did the courts rule in the Kelo decision over the use of eminent domain and what are the implications for environmental planning and regulation?

• Can controls on property rights, which often occur at the local level, have as much an impact on the environment as direct regulation?

## Required readings:

Village of Euclid v Ambler,

http://www.law.cornell.edu/supct/html/historics/USSC CR 0272 0365 ZS.html

Dolan v. City of Tigard, 512 US 687 (1994). http://supct.law.cornell.edu/supct/html/93-518.ZS.html Read the 'syllabus' and court opinion; skim dissents by Stevens and Souter.

Kelo v New London, http://www.law.cornell.edu/supct/html/04-108.ZS.html, Read Syllabus only.

US EPA. 2011. Comment letter on Project XL Pipeline Environmental Review, June 6.

Austin, I. 2001. Oil Sands Project in Canada Will Go On if Pipeline Is Blocked, NY Times, June 06, http://www.nytimes.com/2011/06/07/business /energy-environment/07pipeline.html?scp=2&sq=keystone%20xl&st=cse

## Recommended Readings:

Tahoe-Sierra Preservation Council, Inc., et al. v. Tahoe Regional Planning Agency et al., 535 U.S. \_\_ (2002), http://news.findlaw.com/hdocs/docs/environment/tahoe42302uscopn.pdf Maantay, J. 2002. Zoning Law, Health and Environmental Justice: What's the Connection? Journal of Law, Medicine & Ethics, 30(4):572-593.

Keystone Pipeline: http://www.transcanada.com/keystone.html

http://www.keystonepipeline-xl.state.gov/clientsite/keystonexl.nsf?Open

## **Group Discussion leaders: KeyStone XL Pipeline**

This group should provide an overview of the proposed Keystone XL pipeline, including who is behind the project, what it aims to accomplish and an overview of the policy controversy, including the scheduled Presidential ruling on the environmental impact studies. Please discuss whether this project will have to 'take' land and the land use issues raised in this project. The group should also put this pipeline project in the context of other recent pipeline/oil spill events, such as the Yellowstone pipeline and Gulf Oil spills.

## 10/18 Environmental Racism & Justice

#### **Policy Memos DUE TODAY**

- What is environmental racism and justice?
- What evidence is generally used to support claims of environmental injustice?
- What are the difference between *distributive*, *procedural* and *corrective* environmental justice claims?

## Guest Speaker: Nile Mallory, Communities for a Better Environment

#### **Required Readings**:

Di Chiro, G. Nature as Community. "Nature as Community: The Convergence of Environment and Social Justice," in W. Cronon (ed). Uncommon Ground, pp. 298-320

Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994, available at: <a href="http://www.epa.gov/compliance/resources/policies/ej/exec\_order\_12898.pdf">http://www.epa.gov/compliance/resources/policies/ej/exec\_order\_12898.pdf</a>

US EPA. Memorandum Of Understanding On Environmental Justice And Executive Order 12898. August 2011.

http://www.smartgrowthamerica.org/2011/07/11/white-house-announces-strong-cities-strong-communities-initiative/

UNCED 2012, http://www.uncsd2012.org/rio20/

#### Recommended:

Pastor, M. J. Saad, R. Morello-Frosh. 2007. Still Toxic After All These Years: Air Quality and Environmental Justice in the San Francisco Bay Area. Center for Justice, Tolerance & Community, University of California, Santa Cruz. <a href="http://cjtc.ucsc.edu">http://cjtc.ucsc.edu</a>

National Cooperative Highway Research Program. 2004. Effective Methods for Environmental Justice Assessment. Transportation Research Board. Chapter 1. pp. 1-18.

Pellow, D.N. and Brulle, R.J. (eds). 2005. Power, Justice and the Environment, Cambridge; MIT Press, pp.1-19.

## **Group discussion leaders: Rio + 20**

The group presentation will give an overview of the 1992 UNCED conference outcomes and the plans for the 2012 conference. The group must also provide an overview of the US sustainable communities strategy, www.epa.gov/greenkit/sustain.htm, which for some is the US implementation of Agenda 21. Please give some examples of the Sustainable Communities strategy in the US. http://www.smartgrowthamerica.org/2011/07/11/white-house-announces-strong-cities-strong-communities-initiative/

## 10/25 Urban Agriculture and Food Justice

- Why is urban agriculture and food justice an environmental issue?
- What are the policy issues and social movements behind urban agriculture and food justice in the San Francisco Bay Area?
- What role should planners have in urban agriculture and food justice decision making?

## **Required Readings**:

Gottlieb, R and A. Joshi. 2010. Food Justice. Cambridge: The MIT Press. Introduction. http://wdn.ipublishcentral.net/mit/viewinside/202241260764684 Alkon, A. and K. M. Norgaard. 2009. Breaking the Food Chains: An Investigation of Food Justice Activism. Sociological Inquiry., Vol. 79, No. 3: 289–305.

#### **Group discussion leaders: Food Justice**

The group should provide an over of the key environmental and policy issues surrounding urban agriculture and food justice. Please be sure to focus locally on Oakland and nationally, such as on the Farm Bill. Give the class a summary of at least 2 current policy controversies related to your topic and the strengths and weaknesses of these policies. Since you are the last group to lead discussion, you will be expected to have more detailed knowledge of your subject than previous group discussion leaders.

## 11/1 Practicing environmental planning

You must come to class prepared to participate in the Madrona role play. Please read the general and your confidential instructions. Do not share your confidential instructions with anyone in the class! You are allowed to meet with others in your group before class to discuss issues, form alliances, etc. You will have the entire class period to reach a group agreement. Please assign 2 people in the group to record what happens in group discussions and the specifics of any agreement. You should use provided poster paper to record what happens in the meeting. If you do not reach an agreement, that is fine but be sure to record what happened. The 2 group members will report back to the entire group on 11/8.

#### 11/8 Science, Risk and Environmental Policy

- What role does science and expertise play in shaping environmental policy and regulation?
- What is 'risk' and why is it such a powerful paradigm in environmental policy and regulation?
- What are the steps in risk assessment and some of the key assumptions and controversies involved in these steps?
- What role might urban planners have in opening-up environmental decisions to a wider group of 'experts?'

## Required Readings:

Lougheed, T. 2009. "Outside Looking In: Understanding the Role of Science in Regulation," Environmental Health Perspectives 117;3 (2009): A105-A110. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2661928/

Corburn, J. 2005. Street Science; Community Knowledge and Environmental Health Justice. The MIT Press. Introduction, Chapters 1-3 & 7.

Jasanoff, S. 2007. Technologies of Humility. Nature. 450, 33. 1 November. http://www.nature.com/nature/journal/v450/n7166/full/450033a.html Life Cycle Analysis (LCA) -http://www.epa.gov/NRMRL/std/sab/lca/

## 11/15 Economics & Environmental Regulation

## In-Class Debate: Carbon Tax vs Cap & Trade (US v Canada?)

The class will be divided into three groups: supporters of cap & trade (and opponents of a carbon tax) and supporters of a carbon tax (and opponents of cap & trade). The third group will be the Climate Change group, who will act as debate judges. Each group should complete the readings and do additional research if necessary. Groups will each be given 20 minutes for opening statements. After opening statements, the judges will be allowed to ask 3 clarifying questions to each group. Each group will respond to the judges' questions. Te debate will proceed with each group asking one question or challenging the other on a particular point. Will have a 20 minute recess. Each group will have a 10 minute closing statement. The judges will present the strengthens and weaknesses of each group and decide the winner. Winners receive a special prize.

- What are the market-based critiques of traditional or command and control environmental policy?
- What are the origins of cost-benefit analysis and what are some of the key subjective judgments in this process?
- What does Sagoff mean when he says all individuals have both consumer and citizen preferences and what are the implications for market-based environmental regulations?
- What are the similarities and differences between a carbon tax and Cap and Trade? How do these regulatory mechanisms work? What are the pros and cons of a carbon tax and cap and trade as key components of a climate change policy?

## Required Readings:

Ostrom, E. et.al., 1999. Revisiting the Commons: Local Lessons, Global Challenges, Science 284: 278-282.

Sagoff, M. The Economy of the Earth (Cambridge: Cambridge University Press, 1988), Chapter 4, "Fragile Prices and Shadow Values," 74-98.

The story of Cap and trade: http://www.storyofstuff.com/capandtrade/

Hansen, J. 2009. Cap and Fade. New York Times. December 6.

http://www.nytimes.com/2009/12/07/opinion/07hansen.html? r=2

## <u>California Cap and Trade (Carbon emissions trading):</u>

California Air Resources Board, Climate Change Policy and Implementation strategy, http://www.arb.ca.gov/cc/cc.htm

Congressional Budget Office. 2008. Policy Solutions for reducing CO2 Emissions. February. http://www.precaution.org/lib/cbo\_carbon\_tax\_study.080213.pdf

The story of Cap and trade: http://www.storyofstuff.com/capandtrade/

#### British Columbia Carbon Tax:

http://www.fin.gov.bc.ca/tbs/tp/climate/A4.htm

http://www.gov.bc.ca/yourbc/carbon tax/ct taxpayers.html

#### Recommended Readings:

Porter, T. 1995. Trust in Numbers: The Pursuit of Objectivity in Science and Public Life (Princeton: Princeton University Press). Ch. 7, "U.S. Army Engineers and the Rise of Cost-Benefit Analysis," pp. 148-189.

M. Sagoff, "Do We Consume Too Much?" The Atlantic Monthly (June 1997), 80-96.

#### 11/22 The Present & Future of Environmental Planning on an Urban Planet

- What future should we expect for environmental policy? More or less regulation? Why or why not?
- Ought environmental policy be more placed-based, like the sustainable communities strategy, or continue to be focused on specific pollutants, polluters and natural resources?
- What skills might environmental planners require to be more effective as 21<sup>st</sup> century practitioners?

## **Suggested Readings**:

- Fung and Sable. 1999. Beyond backyard environmentalism. Boston Review. (with commentaries). http://bostonreview.net/BR24.5/sabel.html
- Alternative Dispute Resolution at EPA: <a href="http://www.epa.gov/adr/cprc">http://www.epa.gov/adr/cprc</a> adratepa.html
- Rio +20, <a href="http://www.uncsd2012.org/rio20/">http://www.uncsd2012.org/rio20/</a>
- Earth Summit 2012, http://www.earthsummit2012.org/

Group presentations: Rio + 20, CA climate Change Policy & Project XL Pipeline

11/29 Group Presentations: state water policy, food justice and fracking