Syllabus

Class 1 – January 10

Lecturer: Daniel Farber, Sho Sato Professor of Law, Director of Environmental Law Program (Boalt School of Law, University of California, Berkeley)

Introduction

Class 2 – January 24

Lecturer: Peter S. Menell, Professor of Law (Boalt School of Law, University of California, Berkeley); Executive Director, Berkeley Center for Law & Technology

Abstract: “An Economic Assessment of Market-Based Approaches to Regulating the Municipal Solid Waste Stream”

In the late 1980s and early 1990s, it was widely reported that the United States faced a solid waste crisis. Existing landfills were reaching capacity or being shut down because of more stringent regulations while waste volumes were continuing to rise. At the time, several market-oriented policy analysts advocated the adoption of variable rate charges for mixed refuse in conjunction with curbside pick-up of recyclables (without charge) as a means of reducing waste volumes and diverting recyclable material to more valuable uses. During the course of the past decade, such policies have been adopted widely throughout the United States – approximately 20 percent of the U.S. population now face variable rate charges for mixed refuse collection. Even more have curbside collection of recyclable materials.

This article collects and reviews empirical studies evaluating the effects of variable rate pricing. It finds that these policies have been quite effective as a means of boosting diversion rates beyond the levels that can be achieved through curbside collection of recyclables alone. The overall cost-benefit analysis of such programs is modestly favorable. Since many states and communities have committed to achieving specified waste diversion targets, variable rate policies have been a cost effective policy tool. The experience with variable rate policies represents a promising example of non-coercive, information-oriented government intervention. With a relatively small budget and no authority to impose household solid waste policy on local governments, EPA has been remarkably successful at developing and diffusing effective solid waste management policies. The economic theory underlying variable rate pricing has proven, after some tinkering at the implementation stage, to be quite workable in practice. In fact, the practical realities of implementing charges have shown that theoretical perfection in terms of getting the prices right is less important in the grand scheme than keeping the transaction costs manageable. Looking forward, variable rate pricing can be expected to become even more economically advantageous as recycling markets continue to mature, landfill tipping fees rise, and improved technologies for curbside collection, monitoring, billing, and measuring waste develop.

After graduating from law school, Peter Menell clerked for Judge Jon O. Newman of the U.S. Court of Appeals for the 2nd Circuit. He joined the Boalt faculty in 1990 and has visited at the Georgetown University Law Center, Harvard Law School and Stanford Law School. Menell co-founded the Berkeley Center for Law & Technology in 1995, where he serves as executive director.

Class 3 – January 31

Lecturer: Amy Wildermuth, Associate Professor of Law (University of Utah)


I begin with what is well-known: The biggest threat to our nation’s waters is nonpoint source pollution, but the current Clean Water Act does not provide an adequate mechanism for directly regulating those sources. Given this problem, many scholars have focused their efforts on what is available under the Act to get at these nonpoint sources of pollution. For example, some have argued for what I call “stretching” the language of the Act—transforming what might be nonpoint sources into point sources. Others have suggested vigorous enforcement of TMDLs. I argue, however, that these alternatives are not up to the task. I also note that the recent Supreme Court interest in the Act is perhaps indicative of its concern that the Act might be “stretched” too far.

I then explore the basics of nonpoint source pollution, including its sources and ways to reduce it. At bottom, nonpoint source pollution is a land use problem. Accordingly, my solution is to revise the Clean Water Act in a fairly straightforward way: require the States to restrict uses of lands that affect the “waters of the United States” such that the integrity of the “waters of the United States” will be maintained. The key to this legislation is providing the States with flexibility to develop and implement their own plans and only allowing EPA to step in when a State refuses to devise a plan or when a plan is so clearly inadequate to meet the goals that it must be revised. I also make several suggestions as to what these state land use plans might look like and discuss some of the possible concerns that might be presented by them. Finally, I conclude by suggesting that many of the environmental laws would benefit from rethinking in terms of land use and that this is the next evolution in environmental law.

Professor Amy Wildermuth is an associate professor at the University of Utah S.J. Quinney College of Law. She clerked for Justice John Paul Stevens of the U.S. Supreme Court, for Judge Guido Calabresi of the U.S. Court of Appeals for the Second Circuit, and for Judge Harry T. Edwards of the U.S. Court of Appeals for the D.C. Circuit. In addition to a one-year visiting professorship at Utah, Amy has taught law at her alma mater, the University of Illinois. She teaches and writes in the areas of environmental law, administrative law, and civil procedure.

Class 4 – February 14

Lecturer: Sally Fairfax, Henry J. Vaux Distinguished Professor of Forest Policy, Division of Resource Institutions, Policy, and Management (University of California, Berkeley)

Lecturer: Mary Ann King, Graduate Researcher, M.S. Student, Environmental Science, Policy & Management (University of California, Berkeley)

Abstract: “Conservation Easements and Water.”

The purpose of this paper is to explore what happens to water when less-than-fee tools are used to acquire land for conservation. The protection of water resources (both quality and quantity) has a
long history as a goal and a justification of land acquisition. Improving conditions of stream flow, protecting rivers for navigation, irrigation, and procuring safe supplies of drinking water underwrote the acquisition of urban park land (Green Necklace in Massachusetts), state park land (Adirondack Forest Preserve in New York), federal national forests (Weeks Act acquisitions), and the western forest reservations as well. Although water-oriented goals have not always been an element of subsequent management programs, water continues to be an important part of contemporary land acquisition. Global warming suggests that it will be a prominent management priority as well. Because modern land acquisition programs are increasingly focused on the acquisition of less than full fee, they may muddy the potential for water management on newly acquired lands. We will map a broad range of challenges presented by less-than-fee land acquisition transactions and focus our analysis on how conservation easements address water in both eastern and western programs.

Sally Fairfax:
My research has always focused on public resources, principally those managed by the United States Forest Service and the Bureau of Land Management. Within that broad topic, my interests include legal aspects of resource administration, agency history and culture as it affects management decisions, and the relationship between federal and state governments. Over the years I have worked with diverse students and colleagues on water law and management, especially federal reserved water rights and ground water, minerals leasing, and public lands policy and history.

I am currently focused on changing institutions of resource management, on the mixture of public and private ownership, institutions, and priorities that is emerging to achieve public goals in land management and conservation. My group is working on three very much intertwined projects. First, we are almost at the end of an inventory and analysis of land acquisition programs. The federal government appears to be going out of the business of acquiring land for conservation purposes. A closer look reveals that for several decades, states, localities, and private groups, and diverse priorities, have played a major role in the land acquisition process. Furthermore, a review of the century evinces a number of half forgotten approaches and policies that may be relevant to currently changing political climates. Second, we are working in several different contexts to understand the interplay of government and private action in preservation of working landscapes, agricultural land and open space. I am particularly interested in the emergence of land trusts in that effort, and in comparing the institutional and conceptual frame that is developing in the US with the path that was taken in the UK at the end of the last century. This is an important element of a group project I am pursuing with three colleagues exploring settings in which groups and individuals claim rural places. We are focusing on a comparison of three areas in California. Finally, I am pursuing, as a component of both of the last two items, the role of artisanal agricultural production as an element of land conservation in a transforming rural economy. I am personally focusing on cheese and dairy and organic production generally.

Mary Ann King:
Mary Ann King is a graduate student in the Department of Environmental Science, Policy & Management. She is a co-author of Buying Nature: The Limits of Land Acquisition as a Conservation Strategy, 1780-2003 (forthcoming). She recently published an article in the Harvard Environmental Law Review entitled “Getting Our Feet Wet: An Introduction to Water Trusts”, and she is currently working on an article on the Uniform Conservation Easement Act and on her M.S. thesis which examines shared management of national park land between the National Park Service and Native American tribes.

Class 5 – February 28
Lecturer: Dara O’Rourke, Assistant Professor, Department of Environmental Science, Policy, and Management (University of California, Berkeley)


This paper critically evaluates a new form of public participation in environmental monitoring and regulation advanced through local “bucket brigades,” which allow community members to sample air emissions near industrial facilities. I argue that these brigades represent a new form of “community environmental policing,” in which residents participate in collecting, analyzing, and
deploying environmental information, and more importantly, in an array of public policy dialogues. Use of this sampling technology has had marked effects on local resident perceptions and participation in emergency response and citizen right-to-know. However, when viewed through the lens of the more developed literature on community policing, the bucket brigades are currently limited in their ability to encourage “co-production” of environmental protection between citizens and the state. I conclude by examining means to strengthen the bucket brigades and to more broadly support community participation in environmental regulation.

Dara’s research focuses on the environmental, social, and health impacts of global production systems and new strategies of democratic governance. He is currently studying changes in the organization of industrial production systems, strategies for preventing pollution and workplace health problems, and systems of monitoring multinational supply chains. Dara’s research has been featured in the New York Times, the Wall Street Journal, the Boston Globe, the Los Angeles Times, the Economist, Business Week, Newsweek, ESPN, and other media outlets. Recent publications include books titled Community Driven Regulation: Balancing Development and the Environment (MIT Press 2004) and Can We Put an End To Sweatshops? (Beacon Press 2001, with Archon Fung and Chuck Sabel), and articles in the Journal of Policy Analysis and Management, the Journal of Industrial Ecology, Environmental Management, the International Journal of Occupational and Environmental Health, Boston Review, Dollars and Sense, and The Ecologist.

Class 6 – March 1  
Lecturer: Michael P. Vandenbergh, Associate Professor of Law (Vanderbilt University of Law)


This paper proposes a new conception of the administrative regulatory state that accounts for the vast networks of private agreements that shadow public regulations. The traditional account of the administrative state assigns a limited role to private actors: private firms and interest groups seek to influence regulations, and after the regulations are finalized, regulated firms face a comply-or-defy decision. In recent years, scholars have noted that private actors play an increasing role in the traditional government standard setting, implementation and enforcement roles. This paper demonstrates that the private role in each of these regulatory functions is far greater than others have identified. Furthermore, the paper argues that only when this private regulation is considered can the accountability and efficacy of the administrative state be judged.

Using environmental regulation as an example, the paper examines a wide range of empirical data to demonstrate that public law requirements spawn a vast body of private agreements. These second-order agreements range from corporate acquisition and credit agreements between private firms to “good neighbor agreements” and other agreements between private firms and non-profit groups. The paper shows that these agreements alter the types of parties that have interests in regulatory outcomes, the incentives they face, and the performance of the regulatory regime. Public regulation thus is more dynamic than the leading administrative law accounts suggest because it stimulates private regulated parties to enter into private-private agreements that in turn alter the actions of government. This dynamism adds complexity: in some cases second-order agreements undermine the transparency and responsiveness of the regulatory state, yet in others they reduce the effects of interest group capture and increase the efficacy of public regulations. The Article calls for attention to the public regulatory measures that will generate the optimal blend of public and private regulation.

Professor Michael Vandenbergh joined the Vanderbilt law faculty in 2001 after serving as a partner in a leading national law firm in Washington, D.C. Professor Vandenbergh also served as Chief of Staff of the Environmental Protection Agency from 1993-1995 and as a law clerk to Judge Edward R. Becker of the United States Court of Appeals for the Third Circuit from 1987-1988. Professor Vandenbergh received his B.A. (zoology) in 1983 from University of North Carolina and his J.D. in 1987 from University of Virginia, where he was the editor in chief of the Virginia Law Review. Professor Vandenbergh's research focuses on the relationship between formal legal regulation and informal social regulation of environmentally significant behaviors. Professor Vandenbergh teaches Environmental Law, Private Environmental Law, and Property.
Class 7 – March 14

**Lecturer: David Dana**, Professor of Law, Associate Dean for Faculty and Research (Northwestern University)

Abstract: “Commodifying and Banking Pollution Rights, Discouraging Innovation”

This paper argues that ownership of tradable pollution rights by firms in an industry gives them an incentive to avoid the development of new, potentially diffusible pollution reduction and control technology, and that this anti-innovation incentive should be considered in the setting of rules for trading regimes.

David Dana is a leading scholar in the fields of environmental, property, intellectual property, and professional responsibility law. Before becoming a professor, he was an environmental litigator in both the private (Wilmer, Cutler & Pickering) and public (U.S. Department of Justice) sectors.

Class 8 – March 28

**Lecturer: Dan Tarlock**, Distinguished Professor of Law (Chicago-Kent College of Law)

Abstract: “Are There Any Background Substantive Principles of Environmental Law?”

Environmental law, as we now understand it, did not exist before the late 1960s. Since that time, a discrete area of law has emerged from a combination of extensive federal legislation and judicial decisions forcing agencies to give greater weight to environmental considerations. In a previous paper, I have argued that the it is still difficult to identify distinctive elements of “environmental law” as distinguished from administrative law, statutory construction, and more recently, constitutional law. I also argued that what distinctive principles have emerged are procedural rather than substantive duties. Not surprisingly, environmental law scholars have asked, “Are there no substantive principles?” In this paper, I explore the usual candidate suspects which include: green rather than Lockian property, the public trust and other constraints on resource use choices, the ethical duty to protect non-human constructs such as ecosystems, inter-generation rights, a neo-Kantian human right to minimum risk, and others.

Professor Tarlock holds an A.B. and LL.B. from Stanford University. His teaching and research interests include environmental law, property, land use controls, biodiversity conservation and water law. He holds an A.B. and LL.B. from Stanford University and has previously been a permanent member of the faculties of the University of Kentucky and Indiana University, Bloomington. He has also visited at several law schools including the universities of Chicago, Pennsylvania, Hawaii, Kansas, Michigan and Utah. He is the author of numerous articles and books on environmental law, land use controls and water law including *Environmental Protection: Law and Policy* (4rd ed Aspen Publishing, 2003, with Frederick Anderson, Professor Robert Glicksman, Professor David Markell, Professor Daniel R. Mandelker) and *Water Resources Management*, (5th ed 2002, with Professor James Corbridge and Professor David Getches) and *Law of Water Rights and Resources* (1988 with annual updates). Professor Tarlock has served on several National Research Council/National Academy of Sciences committees studying the protection and recovery of stressed aquatic ecosystems, including a ten year review of the operation of Glen Canyon Dam on the Colorado River and a study of the restoration of the Missouri River ecosystem, published as *The Missouri River Ecosystem: Exploring the Prospects for Recovery* (2002) and from 2001-2004 was a member of an NRC/ NAS committee to assess the future of the U.S. Army Corps of Engineers. In 1998, he was the chief report writer for the Western Water Policy Review Advisory Commission report, *Water in the West*, which was one of the first major federal publications to examine the relationship between urban growth and water use. He is a member of the special legal advisors to the Submissions Unit of the Commission on Environmental Cooperation in Montreal, Canada, which administers the NAFTA Environmental Side Agreement. He has lectured on the problems of ecosystem, natural resources and river basin management in Austria, Australia, Brazil, Canada, China, Germany, Kazakhstan, and Scotland as well as throughout the United States.
Abstract: “Unconventional Federalism”

It is conventional among legal academics to view relationships between the fifty states and the federal government in one of two ways. Either the states operate independently from the federal government, in separate or dual spheres (called "dual federalism"), or the two levels of government interact in a relationship of cooperative federalism, under which the federal government establishes national minimum standards and delegates to the fifty states the power to implement those standards. At issue in academic debates over federalism are two central issues, one constitutional and one theoretical. The constitutional question is whether the Rehnquist Court's revival of many federalism doctrines (state sovereign immunity, the scope of the commerce clause, Congressional "commandeering" of state regulatory officials) is appropriate. The theoretical question—particularly prominent in environmental circles—is whether states or the federal government are best suited to deliver socially optimal levels of environmental protection.

I suggest that these debates view federalism too narrowly in two respects. First, the debates treat states monolithically, as if all fifty states are fungible. Yet states obviously differ in numerous important ways. They have differing regulatory capacity, political preferences, economic power and sophistication, geography and natural resources. Some states—California and New York most obviously—are more similar to other industrialized countries than they are to some of their smaller brethren. These differences may have significant implications in thinking about state/federal relationships and environmental quality.

Second, federalism debates ignore an important and under-recognized category of state/federal relationships, what I call "unconventional federalism." Such programs are neither exclusively the province of federal or state governments, nor do they involve the federal government delegating to all fifty states the job of implementing federal standards. Instead, unconventional federalism involves different mixes of federal-state interaction, sometimes regional in focus, sometimes focused on a specific resource, sometimes state-specific in design.

Examples of unconventional federalist programs vary in their scope and operation. In some instances, regions of the country work cooperatively under the aegis of federal law to regulate an environmental problem like air or water pollution. In another instance one state, California, has a privileged role in regulating various aspects of motor vehicle pollution under the federal Clean Air Act, a role distinct from the other 49 states. In still another example, states possess special regulatory power to oversee the activities of the federal government in coastal waters.

Focusing on these schemes of unconventional federalism demonstrates that unconventional federalism may borrow the best of what each level of government (the states and the federal government) has to offer. Identifying and evaluating these schemes under the terms of more conventional federalism debates may also open up new and creative regulatory possibilities.

Ann Carlson is Associate Dean and Professor of Law at UCLA School of Law. She also co-directs the Frank G. Wells Environmental Law Clinic and teaches first year Property. Professor Carlson's scholarship focuses on important constitutional issues affecting environmental law and policy and on the role social norms play in affecting environmentally cooperative behavior. Her article "Takings on the Ground" was selected by the Land Use and Environmental Laws Review as one of the ten best recently-published environmental law articles in the country. Carlson is also the co-editor of the UCLA Southern California Environmental Report Card for 2002-06. She is a 1989 magna cum laude graduate of Harvard Law School and received her B.A. magna cum laude from UC Santa Barbara in 1982.
Lecturer: Michael Hanemann, Chancellor’s Professor, Department of Agricultural and Resource Studies (University of California, Berkeley)

Abstract: “Climate Change and California”

The paper will discuss recent estimates of the potential effects of climate change on California, including impacts on the California water system, economic impacts, health impacts, environmental impacts, and impacts on the quality of life. It will also discuss policy actions that California might undertake both to reduce greenhouse gas emissions from sources within the state (including the implementation of the Pavley Bill and the possible creation of a California cap-and-trade scheme for CO2), and also policies to improve adaptation to some inevitable consequences of climate change in California.

Professor Hanemann teaches environmental economics and policy in the College of Natural Resources (Department of Agricultural and Resource Economics) and in the Goldman School of Public Policy, and is the Director of the California Climate Change Center at UC Berkeley. He works on various aspects of environmental economics and water resource economics, including non-market valuation, the design of water pollution control policy, and water allocation in the West, and serves on the EPA Science Advisory Board Environmental Economics Advisory Committee.

Lecturer: Christopher H. Schroeder, Charles S. Murphy Professor of Law and Professor of Public Policy Studies, Director of the Public Law Program (Duke University)

Abstract: “Climate Change and California”

Environmentalists are quite often said to be technologically optimistic in the face of more sober assessments advanced by industry. Many environmental laws contain aspirational commands that were beyond the capabilities of then-current technologies to meet at the time the laws were enacted. These were defended on the basis of an expectation that innovation and invention could solve the remaining technological problems. A small set of examples includes achieving compliance with ambient air quality standards by 1975 (as in the 1970 Clean Air Act Amendments of 1970); achieving 90 percent reduction in auto emissions by the 1975 model year (id); achieving the "fishable, swimmable" standard throughout the waters of the United States by 1983 (Clean Water Act Amendments of 1972).

The Bush Administration is actively promoting programs to develop fuel cell vehicles (FCVs), cars that run on hydrogen instead of gasoline. California has also embarked on an ambitious program to create the "hydrogen highway." Many environmental groups support the transition from hydrocarbons to hydrogen in principle but are highly skeptical of the administration's efforts—and even more skeptical of our ability to solve the remaining technological problems (as well as to remove other obstacles standing in the way of FCVs and the hydrogen economy). In contrast, a number of (but certainly not all) significant industrial concerns, such as General Motors and the Royal Dutch/Shell Group are much more bullish on FCVs and the move to hydrogen. What happened to green technological optimism?

My paper will contain three parts. (1) It will lay out the general case for the hydrogen economy in terms of issues of global warming, local air pollution, energy independence, sustainability and decentralization. (2) It will identify the key obstacles to the transition from hydrocarbons to hydrogen as well as the incentives needed to accelerate the transition. (3) It will analyze why there is so much green skepticism toward administration efforts to remove those obstacles and create those incentives.

Professor Schroeder writes on a broad range of topics in environmental law and policy, risk regulation, and tort theory, as well as topics in constitutional law and administrative law and Congressional procedures and affairs.

collaboration with Marie Lynn Miranda of the Nicholas School of the Environment at Duke, he is co-authoring an analysis of the shortcomings of current environmental policy in addressing risk exposures of children. Schroeder also serves as vice president of the Center for Progressive Regulation, a network of scholars promoting progressive approaches to environmental, health and safety policy. The Center’s current projects include a book, *The New Progressive Agenda for Health Safety and the Environment* (2005).

Schroeder has held senior positions in both the executive branch and the legislative branch of government. He served as deputy assistant attorney general in the Office of Legal Counsel, U.S. Department of Justice, and in 1996-97 was the acting assistant attorney general in charge of that office. In that capacity he advised the attorney general and the President on a wide variety of constitutional, statutory and regulatory issues, as well as supervised a professional staff of thirty attorneys. In 1992-93, he was chief counsel to the Senate Judiciary Committee, supervising a staff responsible for preparation for all judicial confirmation hearings, as well as for the legislative responsibilities of the Committee.

He received his B.A. degree from Princeton University in 1968, a M. Div. from Yale University in 1971, and his J.D. degree from University of California, Berkeley (Boalt Hall) in 1974. He lives in Durham, N.C., and has taught at Duke University since 1980. He is married to Katharine T. Bartlett, the Dean of the Duke Law School. They have three children: Emily, Ted and Lily.

**Class 12 – April 25**

**Lecturer: Daniel A. Farber**

Course Conclusion.