

A PROSPECTIVE LOOK AT PROPERTY RIGHTS AND ENVIRONMENTAL REGULATION

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INTRODUCTION

This Article considers the future interaction of environmental regulation and private property rights, with an emphasis on climate change issues. It concludes that environmental issues not satisfactorily resolved at the federal level will lead to more state and local regulation that impinges on traditional understandings of property. Given the uncertainty associated with detrimental environmental outcomes, and the trend towards more proactive, subnational land use controls, more micromanagement of property will result.

Scholars approach the future of environmental and natural resource law from many perspectives. This Article proceeds from the premise that recognition of the significance of property rights is too important to exclude from the dialogue.¹

One principal issue is the appropriate level of responsibility for decision making on issues with environmental ramifications. Options range from individuals and corporations, through local and state governments, to nation states and transnational organizations.

Some environmental problems, notably climate change, have worldwide implications. The subsidiarity principle suggests that national or worldwide solutions are best for problems of global import.² The most clear-cut, transparent, and economically efficient way for individual nations to respond to climate change is through carbon taxes—or perhaps through cap-and-trade regulation, their more inefficient but politically more tenable cousin.³ Since comprehensive solutions seem unlikely in the short to medium term, however, increased local or mixed-level regulation is likely to result.

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¹ This Article is part of a symposium on “A Prospective Look at Property Rights,” presented in conjunction with a similar symposium on “40 Years of Environmental and Natural Resources Law—A Prospective Look.” The symposia first were presented at the annual meeting of the Association of American Law Schools on January 7, 2013.

² See *infra* Part I.B.

³ See Roberta F. Mann, *The Case for the Carbon Tax: How to Overcome Politics and Find Our Green Destiny*, 39 ENVTL. L. REP. NEWS & ANALYSIS 10118 (2009); Gilbert E. Metcalf & David Weisbach, *The Design of a Carbon Tax*, 33 HARV. ENVTL. L. REV. 499 (2009); see also *infra* Part I.C.3.

Increased state and local efforts to deal with serious environmental and natural resource problems will clash with private property rights. Some actors will opportunistically seize upon ostensible climate and environmental concerns to advocate for regulation that would advance other civic and private agendas.⁴

In any article that looks toward the future, trepidation is in order. Prognosticating on the environment and the effects of regulation on property rights necessarily involves assumptions about science, human nature, politics, and law. Predictions have a tendency toward “more of the same,” but extrapolations of existing trends typically are not correct. It also is easy to focus on one type of anticipated problem to the exclusion of others. In the field of environmental and natural resource regulation, for example, how will measures intended to reduce greenhouse gas (“GHG”) emissions affect endangered species or human health? How will environmental interventions in this generation affect individuals in the distant future, given the likely enhanced capability of intervening generations to reach solutions that might, in retrospect, have been better? More germane to this Article, how will environmental considerations affect the current understanding and law of property rights, and how might this influence private property and individual autonomy more generally?⁵

This Article proceeds in three parts. Part I examines the difficulty in reaching a definition of environment and property rights that properly weighs current concerns against the concerns of future generations. It explores climate change as the paradigmatic example. Part II focuses on the importance of private property in future environmental regulation. It examines the lack of standards protecting individuals from regulatory takings, and negative impacts for consumers. Part III considers the problematic implementation of “smart growth” regulations, the use of development exactions, and the potential for rent seeking and abuse in the redevelopment context.

I. THE ENVIRONMENT, PROPERTY, AND THE FUTURE

This Part examines intergenerational issues that keenly affect environmental policy, the appropriate level of decision-making authority using the principle of subsidiarity as a guide, and the effects of “legal centralism” on the implementation of environmental regulation. It then turns to the par-

⁴ See *infra* Part I.D.3.

⁵ In an analogous situation, Professor Douglas Kysar has suggested that dealing with climate change in the context of environmental torts might change judicial thought about epistemic responsibility in many contexts. See Douglas A. Kysar, *What Climate Change Can Do About Tort Law*, 41 ENVTL. L. 1, 4-7 (2011).

adigmatic example of climate change to explore these concepts in concrete terms.

A. *The Environment and Intergenerational Justice*

Environmental policy involves both the relationship of people to nature and the relation of this human generation to other generations.⁶ “Intergenerational equity calls for equality among generations in the sense that each generation is entitled to inherit a robust planet that on balance is at least as good as that of previous generations.”⁷ As Edmund Burke observed, one might consider the intergenerational human community as “a partnership not only between those who are living, but between those who are living, those who are dead, and those who are to be born.”⁸ Given that even a low economic discount rate makes preserving a life hundreds of years from now worth a pittance today, perhaps “discounting cannot substitute for a moral theory setting forth our obligations to future generations.”⁹

Nevertheless, while one might assume most people agree that we have at least some general responsibility to “provide for the welfare of future generations,”¹⁰ the case for acting upon intergenerational welfare is more difficult than might initially appear. Our daily decisions affect who will be born in the next generation and, hence, who will live in all future generations. Path dependence means that tomorrow’s science builds upon today’s and that mankind’s interactions with the Earth might lead to virtuous as well as vicious feedback loops. Thinking about our moral responsibility for the indefinite future is quite different from considering the contemporaneous harms that we might do our fellow humans, other creatures, and the environment.¹¹

It might well be that our balancing of property rights against environmental regulation will occur during a century in which Americans’ standard

⁶ See generally EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY, AND INTERGENERATIONAL EQUITY (1989).

⁷ Edith Brown Weiss, *Our Rights and Obligations to Future Generations for the Environment*, 84 AM. J. INT’L L. 198, 200 (1990).

⁸ EDMUND BURKE, *Reflections on the Revolution in France, and on the Proceedings of Certain Societies in London Relative to that Event*, in 2 THE WORKS OF THE RIGHT HONOURABLE EDMUND BURKE 277, 368 (1855).

⁹ Richard L. Revesz & Matthew R. Shahabian, *Climate Change and Future Generations*, 84 S. CAL. L. REV. 1097, 1097-98 (2011) (“[A]t a discount rate of three percent, ten million dollars five hundred years from now is worth thirty-eight cents today.”).

¹⁰ Daniel A. Farber & Paul A. Hemmersbaugh, *The Shadow of the Future: Discount Rates, Later Generations, and the Environment*, 46 VAND. L. REV. 267, 291 (1993).

¹¹ See Neil H. Buchanan, *What Kind of Environment Do We Owe Future Generations?*, 15 LEWIS & CLARK L. REV. 339, 344-46 (2011).

of living is increasing painfully slowly.¹² If this is the case, the provision of environmental amenities and preservation of natural resources will have to be financed primarily through a reduction in other goods and services, as opposed to being part of a growth dividend. The difficulty in raising taxes in ways that are obvious, such as through explicit carbon taxes, will be exacerbated.¹³ Measures that are indirect therefore are more likely, including development prohibitions and exactions.¹⁴

It is important to keep in mind that there is no intrinsic definition of the “environment.” The roots of “environs,” meaning “vicinity,” go back hundreds of years, while the modern senses of “environment” and “environmentalism” are fairly new constructs.¹⁵ While “the environment” could pertain to any aspect of the natural world, the regulatory framework mostly pertains to mankind’s own benefit. “Broadly stated, environmental law regulates human activity in order to limit ecological impacts that threaten public health and biodiversity.”¹⁶

B. *Environment and Property Through the Lens of Subsidiarity*

1. General Considerations

The concept of subsidiarity refers to power being exercised at the lowest appropriate level.¹⁷ Where conflicts pertaining to resource use are localized within a single parcel, the owner internalizes the costs and benefits and is in the best position to make decisions. Where environmental problems exist on the local level, community answers are best. But some problems

¹² See generally Robert J. Gordon, *Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds* (Nat'l Bureau of Econ. Research, Working Paper No. 18315, 2012), available at <http://www.nber.org/papers/w18315>. Professor Robert Gordon posits that rapid growth during the past 250 years has resulted from three industrial revolutions: the first spanning from 1750 to 1830 and featuring the rise of steam power and railroads; the second between 1870 and 1900, an era characterized by electricity, internal combustion engines, running water and indoor toilets, and communications; and the third from 1996 to 2004, a time of advances in personal computers, the Web, and mobile phones. Today, we face “headwinds,” in the form of “demography, education, inequality, globalization, energy/environment, and the overhang of consumer and government debt.” *Id.* (abstract). He concludes that “[a] provocative ‘exercise in subtraction’ suggests that future growth in consumption per capita for the bottom 99 percent of the income distribution could fall below 0.5 percent per year for an extended period of decades.” *Id.*

¹³ See *infra* Part I.C.3.

¹⁴ See *infra* Part III.A-B.

¹⁵ See Steven J. Eagle, *The Common Law and the Environment*, 58 CASE W. RES. L. REV. 583, 587-88 (2008).

¹⁶ RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 1 (2004).

¹⁷ See generally Aurélian Portuese, *The Principle of Subsidiarity as a Principle of Economic Efficiency*, 17 COLUM. J. EUR. L. 231 (2011) (providing an economic analysis of subsidiarity as applied in the European Union).

are regional or national, and others are global—most notably, climate change.

Since the emission of GHGs anywhere contributes to climate change everywhere, those emissions represent the epitome of externalized costs. Thus, climate change is “the mother of all collective action problems.”¹⁸ Attempts to solve this international problem at the local or state level create the problem of “jurisdictional mismatch.”¹⁹ Likewise, when dealing with somewhat localized problems that nevertheless are not confined to municipal borders, some commentators have found state preemption laws to constitute an important barrier to local efforts.²⁰ One response is to seek “diagonal” or other mixed solutions, with regulatory interplay among various levels of government.²¹

An essential question in this inquiry is how to prevent the abuse of property rights where “the basic concepts of territoriality that underlie much of our federalism jurisprudence are being slowly washed away.”²²

2. The Example of Hydraulic Fracturing

An example of a recent and important environmental problem where federal, state, and local interests are not effectively delineated is hydraulic fracturing, commonly known as “fracking.”²³ This process uses extremely large amounts of water, mixed with a “proppant,” to crack underground shale layers so that embedded natural gas can be extracted.²⁴ Fracking promises to provide America with vast amounts of relatively clean-burning

¹⁸ Sarah Krakoff, *Fragmentation, Morality, and the Law of Global Warming* 28 (Univ. of Colo. Law Sch. Legal Studies Research Paper Series, Working Paper No. 07-10, 2007), available at http://papers.ssm.com/sol3/papers.cfm?abstract_id=976049.

¹⁹ William W. Buzbee, *Recognizing the Regulatory Commons: A Theory of Regulatory Gaps*, 89 IOWA L. REV. 1, 23 (2003).

²⁰ See, e.g., Jonathan Rosenbloom, *New Day at the Pool: State Preemption, Common Pool Resources, and Non-Place Based Municipal Collaborations*, 36 HARV. ENVTL. L. REV. 445, 450-53 (2012) (“While local government authority to regulate is rooted in Home Rule provisions and other state delegations of power, that authority is severely limited by state preemption laws.”).

²¹ See Hari M. Osofsky, *Diagonal Federalism and Climate Change Implications for the Obama Administration*, 62 ALA. L. REV. 237, 241 (2011); Ashira Pelman Ostrow, *Land Law Federalism*, 61 EMORY L.J. 1397, 1436 (2012) (advocating a “local-official-as-federal-agent model”).

²² Daniel A. Farber, *Climate Change, Federalism, and the Constitution*, 50 ARIZ. L. REV. 879, 882 (2008).

²³ See generally John M. Smith, *The Prodigal Son Returns: Oil and Gas Drillers Return to Pennsylvania with a Vengeance: Are Municipalities Prepared?*, 49 DUQ. L. REV. 1, 6 (2011) (discussing the distribution of regulatory authority over the oil and gas industries in Pennsylvania and advocating for greater local control of the hydraulic fracturing process, or “fracking”).

²⁴ Nancy D. Perkins, *The Fracturing of Place: The Regulation of Marcellus Shale Development and the Subordination of Local Experience*, 23 FORDHAM ENVTL. L. REV. 44, 48-49 (2012).

fuel and other major benefits.²⁵ However, the “flowback” of fracking fluids from underground may result in groundwater contamination.²⁶ At present, there are no federal statutes or regulations specifically providing for management of wastewater from fracking operations.²⁷

Specific environmental concerns regarding fracking, in addition to clean water hazards, include the threat that drilling facilities pose to wildlife “by fragmenting habitat, destroying public lands, and introducing invasive species. . . . Drilling operations may also compromise national ambient air quality standards for nitrogen dioxide and particulate matter.”²⁸

Furthermore, boomtown conditions greatly magnify social problems in areas with new and extensive concentrations of fracking, such as the immense Bakken field in Western North Dakota and also in Eastern Montana.²⁹ The nature of fracking will result in wells that are depleted quickly, so that new drilling is constantly required.³⁰ Nevertheless, “North Dakota stands out among its peers for providing the least direct funding for oil-impacted communities.”³¹

In various states, legislatures and courts are considering local versus state control of fracking.³² For example, the Pennsylvania legislature’s response, known as Act 13, was signed into law in February 2012.³³ Act 13

preempts local ordinances that regulate gas well operations, and further provides that local land use ordinances “shall allow for the reasonable development” of the Marcellus Shale. These provisions make clear that Pennsylvania’s municipalities may not regulate the envi-

²⁵ See generally Richard J. Pierce, Jr., *Natural Gas Fracking Addresses All of Our Major Problems* (George Washington Univ. Law Sch., Public Law and Legal Theory Paper No. 2012-128, 2012), available at <http://ssrn.com/abstract=2172441> (asserting that fracking will benefit the U.S. and global economies and environments).

²⁶ See Perkins, *supra* note 24, at 49-50.

²⁷ Nicolle R. Snyder Bagnell, *Environmental Regulation Impacting Marcellus Shale Development*, 19 PENN ST. ENVTL. L. REV. 177, 182 (2011).

²⁸ Perkins, *supra* note 24, at 50 (footnotes omitted).

²⁹ See *Forum Editorial: A Mixed Bag in Oil Patch*, BAKKEN TODAY, (June 25, 2012, 11:30 PM), http://www.bakkentoday.com/event/article/id/365362/publisher_ID/1 (“On one side are the obvious benefits of the oil boom: a flood of revenue, oil company philanthropy, good jobs and the myriad of economic development plusses associated with oil development. On the other side are social problems and dislocations never before seen in western North Dakota: organized crime, housing shortages, escalating rent, evictions, deteriorating roads, price inflation and a general sense of cultural loss and environmental degradation.”).

³⁰ See HEADWATERS ECON. & THE BILL LANE CTR. FOR THE AM. W., BENEFITING FROM UNCONVENTIONAL OIL: STATE FISCAL POLICY IS UNPREPARED FOR THE HEIGHTENED COMMUNITY IMPACTS OF UNCONVENTIONAL OIL PLAYS 2 (2012), available at http://headwaterseconomics.org/wphw/wp-content/uploads/ND_Unconventional_Oil_Communities.pdf.

³¹ *Id.*

³² See generally Joshua P. Fershee, *The Oil and Gas Evolution: Learning from the Hydraulic Fracturing Experiences in North Dakota and West Virginia*, 19 TEX. WESLEYAN L. REV. 23 (2012) (comparing and evaluating state regulatory schemes).

³³ Perkins, *supra* note 24, at 46.

ronmental aspects of shale drilling operations, and must permit gas extraction operations within their borders.³⁴

In *Robinson Township v. Commonwealth*,³⁵ the Pennsylvania Commonwealth Court held that Act 13 did not provide sufficient guidance to the Department of Environmental Protection on when setback waivers might be granted, and thus the Act violated the nondelegation doctrine.³⁶ More germane to the present discussion, the court split on the issue of preemption. The president judge's opinion of the court stated that the statute "violates substantive due process because it does not protect the interests of neighboring property owners from harm, alters the character of neighborhoods and makes irrational classifications."³⁷ It added: "Succinctly, [Act 13] is a requirement that zoning ordinances be amended in violation of the basic precept that 'Land-use restrictions designate districts in which only compatible uses are allowed and incompatible uses are excluded.'"³⁸

The dissent stated that "natural resources of this Commonwealth exist where they are, without regard to any municipality's comprehensive plan," that they "just as easily" might exist in a residential district as in an industrial one, and that Act 13 recognized the interest of Pennsylvanians to "ensure the optimal and uniform development of oil and gas resources . . . wherever those resources are found."³⁹

The Pennsylvania Supreme Court heard oral argument on October 17, 2012.⁴⁰

A similar conflict between state and local control of fracking is occurring in New York. Several towns have banned fracking directly or revised their land use law to preclude it or are considering similar ordinances.⁴¹ One energy company has sued in county court, claiming that state law preempted local laws regulating gas exploration and development, including zoning law.⁴² The trial court found that the Town of Middlefield's amended zoning ordinance, prohibiting "[h]eavy industry and all oil, gas or solution mining and drilling," was not preempted by the state's Environmental Conserva-

³⁴ *Id.* (footnotes omitted) (quoting 58 PA. CONS. STAT. ANN. § 3304(a) (West 2012)).

³⁵ 52 A.3d 463 (Pa. Commw. Ct. 2012) (en banc).

³⁶ *Id.* at 493.

³⁷ *Id.* at 484.

³⁸ *Id.* at 484-85 (quoting *City of Edmonds v. Oxford House, Inc.*, 514 U.S. 725, 732 (1995) (internal quotation marks omitted)).

³⁹ *Id.* at 495 (Brobson, J., dissenting).

⁴⁰ Laura Olson, *Justices Hear Opinions on Marcellus Shale Drilling Law*, PITTSBURGH POST-GAZETTE (Oct. 18, 2012, 12:04 AM), <http://www.post-gazette.com/stories/local/marcellusshale/justices-hear-opinions-on-marcellus-shale-drilling-law-657952>.

⁴¹ Sy Gruza, *Will NYSDEC's Proposed Regulations Prevent the Potential Significant Adverse Impacts of Fracking?*, 42 ENVTL. L. REP. NEWS & ANALYSIS 10331, 10336 (2012).

⁴² *Id.*

tion Law.⁴³ The court characterized the zoning ordinance as “an exercise of the municipality’s constitutional and statutory authority to enact land use regulations even if such may have an incidental impact upon the oil, gas and solution drilling or mining industry.”⁴⁴ Harmonizing the state statute and local ordinance, the court declared: “The state maintains control over the ‘how’ of such [oil and gas drilling] procedures while the municipalities maintain control over the ‘where’ of such exploration.”⁴⁵ Finally, the trial court noted that a 2011 decision of the New York Court of Appeals made clear that a locality might ban mining “in furtherance of its land use authority.”⁴⁶

C. *Legal Centralism and Its Effects*

1. The Concept of “Legal Centralism”

“Legal centralism,” a term coined by John Griffiths,⁴⁷ refers to the primacy of law in shaping human behavior. It is “[t]he view that the justice to which we seek access is a product that is produced—or at least distributed—exclusively by the state.”⁴⁸ Legal centralism “refers to the Hobbesian notion of the centrality of the state and its imposed, formal constraints (such as law) in the maintenance of order.”⁴⁹

In distinguishing the term from “legal pluralism,” Griffiths later wrote that under legal centralism “law is and should be the law of the state, uniform for all persons, exclusive of all other law, and administered by a single set of state institutions.”⁵⁰ Religious, family, and civic norms should be “hierarchically subordinate.”⁵¹

⁴³ *Cooperstown Holstein Corp. v. Town of Middlefield*, 943 N.Y.S.2d 722, 723, 730 (Sup. Ct. 2012).

⁴⁴ *Id.* at 730.

⁴⁵ *Id.* at 729.

⁴⁶ *Id.* at 729 n.2 (citing *Gernatt Asphalt Prods., Inc. v. Town of Sardinia*, 664 N.E.2d 1226 (N.Y. 1996)).

⁴⁷ Marc Galanter, *Justice in Many Rooms: Courts, Private Ordering, and Indigenous Law*, 19 J. LEGAL PLURALISM & UNOFFICIAL L. 1, 1 & n.1 (1981) (discussing a 1979 manuscript by John Griffiths).

⁴⁸ Galanter, *supra* note 47, at 1.

⁴⁹ Lindsey Carson & Ronald J. Daniels, *The Persistent Dilemmas of Development: The Next Fifty Years*, 60 U. TORONTO L.J. 491, 504 n.57 (2010).

⁵⁰ John Griffiths, *What Is Legal Pluralism?*, 24 J. LEGAL PLURALISM & UNOFFICIAL L. 1, 3 (1986).

⁵¹ *Id.*

While people “bargain in the shadow of the law,”⁵² Professor David Fagundes recounts the seminal work of Professors Robert Ellickson and Elinor Ostrom as “strick[ing] at the heart of legal centralism; they suggest that actors create norms independently of, not in reaction to, law.”⁵³ Professor Ellickson’s work, in particular, evinces skepticism toward top-down controls. As Professor Carol Rose described it, his view of centralism with respect to property law is that it is “administratively costly; that it is ham-handedly overprotective against nuisances; that it is rife with special interest favoritism; and perhaps most important, that it often has a number of damaging third-party effects, particularly in reducing housing opportunities for families of modest means.”⁵⁴

An example of the invocation of legal centralism particularly germane to property rights is the call for local governments to identify building and zoning codes as a “mechanism” to “define” physical spaces, thereby “channel[ing] the lifestyles and behaviors” for the purpose of reducing GHG emissions.⁵⁵ Furthermore, the “Environmental Decade” of the 1970s has been termed one of “Regulatory Centralism,” the “regulatory ideal” being “to transfer as much authority as possible to the highest level of government.”⁵⁶

Central regulation is both under- and over-inclusive. Even if decision makers could correctly anticipate future problems in general terms, they could not spell out their responses to all possible contingencies in specific detail, no matter how micromanaging regulations might seem.⁵⁷ Moreover,

⁵² See Robert H. Mnookin & Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L.J. 950, 968 (1979) (observing that divorcing parents develop claims consistent with the “legal rules governing alimony, child support, marital property, and custody”).

⁵³ David Fagundes, *Talk Derby to Me: Intellectual Property Norms Governing Roller Derby Pseudonyms*, 90 TEX. L. REV. 1093, 1095 & nn.3-4 (2012) (citing ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 40 (3d prtg. 1994) (“[L]egal rules hardly ever influence the settlement of cattle-trespass disputes in Shasta County.”); ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 61 (1990) (“On the contrary, what one observes in these cases is the ongoing, side-by-side existence of private property and communal property in settings in which the individuals involved have exercised considerable control over institutional arrangements and property rights.”)).

⁵⁴ Carol M. Rose, *Of Natural Threads and Legal Hoops: Bob Ellickson’s Property Scholarship*, 18 WM. & MARY BILL RTS. J. 199, 200-01 (2009).

⁵⁵ Katrina Fischer Kuh, *Using Local Knowledge to Shrink the Individual Carbon Footprint*, 37 HOFSTRA L. REV. 923, 937-38 (2009).

⁵⁶ Michael G. Faure & Jason Scott Johnston, *The Law and Economics of Environmental Federalism: Europe and the United States Compared*, 27 VA. ENVTL. L.J. 205, 212 (2009) (describing the environmental movement of the 1970s as “a new and massive federal pollution control regulatory structure”).

⁵⁷ See Andrew W. Stumpff, *The Law Is a Fractal: The Attempt to Anticipate Everything*, 44 LOY. U. CHI. L.J. (forthcoming 2013) (manuscript at 4-5), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2157804 (“Writing an exhaustive set of specific and appropriate rules in any

the law cannot anticipate all problems, even in general terms. Planning reflects “our blindness with respect to randomness, particularly the large deviations.”⁵⁸

The growth of legal centralism is impeded by the rule of law, which includes the notion of general rules binding upon everyone, as opposed to rules made on the fly by administrators and judges.⁵⁹ Carbon taxes would comport with this model relatively easily, while a system for dispensing emission permits and administering markets in them would require considerably more regulation. However, despite (or because of) their simplicity and benefits, public choice considerations make their enactment extremely difficult, at best.⁶⁰

2. The Role of Interest Groups

There is considerable debate about whether the collaborative regulation of resource management issues can be accomplished in a way that is both accountable and consistent with the public interest.⁶¹ James Madison endeavored to create a constitutional structure that provided the legitimacy of majoritarian government, partly through a framework that would ensure deliberation and also thwart domination by factions.⁶² “After World War II, the prevailing political theory was an optimistic pluralism tied to Madison’s ideas,” although Professor Theodore Lowi referred to this as “interest-group liberalism.”⁶³ In particular, Lowi attacked the administrative state as incoherent as well as unjust and suggested that the courts revive the nondelegation doctrine, in an attempt to make Congress accountable for key decisions.⁶⁴

context is equivalent to assigning labels to all the points on the number line; that is to say, it is literally an infinite task.”).

⁵⁸ NASSIM NICHOLAS TALEB, *THE BLACK SWAN: THE IMPACT OF THE HIGHLY IMPROBABLE* xix (2007).

⁵⁹ See generally Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175, 1176 (1989) (exploring the “dichotomy between ‘general rule of law’ and ‘personal discretion to do justice’”).

⁶⁰ See *infra* Part I.C.3.

⁶¹ See David J. Sousa & Christopher McGrory Klyza, *New Directions in Environmental Policy Making: An Emerging Collaborative Regime or Reinventing Interest Group Liberalism?*, 47 NAT. RESOURCES J. 377, 381 (2007).

⁶² William N. Eskridge, Jr., *Politics Without Romance: Implications of Public Choice Theory for Statutory Interpretation*, 74 VA. L. REV. 275, 281 (1988).

⁶³ *Id.* at 281 & n.20 (quoting THEODORE J. LOWI, *THE END OF LIBERALISM: THE SECOND REPUBLIC OF THE UNITED STATES* 51 (2d ed. 1979)).

⁶⁴ Thomas W. Merrill, *Capture Theory and the Courts: 1967-1983*, 72 CHI.-KENT L. REV. 1039, 1061 (1997).

The National Environmental Policy Act (“NEPA”)⁶⁵ has been described as “our basic national charter for protection of the environment,”⁶⁶ and as the environmental movement’s Magna Carta.⁶⁷ Nevertheless, the Supreme Court has described it in more constrained fashion, as a statute requiring that agencies consider and disclose environmental considerations in their decision making, adding that “[t]he role of the courts is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions.”⁶⁸ Professor Sam Kalen suggested that Congress intended the “*Magna Carta* of environmental laws” to have a “substantive mandate,”⁶⁹ although the Supreme Court has not agreed.⁷⁰ NEPA unquestionably has generated voluminous litigation.⁷¹

In dealing with any large and complex phenomenon, information and insights are scattered among many people. Properly organized markets make it profitable for individuals to act upon their particular knowledge. Given the decentralization of knowledge in society, dispersed decision making is preferable.⁷² The positing of mandates by statutes and administrative agencies truncates the dissemination-of-information process, helps organize interest group members by defining classes of people and firms subject to regulation, and leads to the concerted efforts of such groups, over time, to capture the agencies set up to regulate them.⁷³

⁶⁵ National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970).

⁶⁶ 40 C.F.R. § 1500.1 (2011).

⁶⁷ See generally Arthur W. Murphy, *The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Agency Coup de Grace?*, 72 COLUM. L. REV. 963 (1972) (describing NEPA as “revolutionary” but criticizing its application).

⁶⁸ *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97-98 (1983).

⁶⁹ Sam Kalen, *Ecology Comes of Age: NEPA’s Lost Mandate*, 21 DUKE ENVTL. L. & POL’Y F. 113, 118 (2010).

⁷⁰ See, e.g., *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989) (“NEPA does not work by mandating that agencies achieve particular substantive environmental results.”).

⁷¹ See generally Michael C. Blumm & Marla Nelson, *Pluralism and the Environment Revisited: The Role of Comment Agencies in NEPA Litigation* 2 n.6 (Lewis & Clark Law Sch., Legal Research Paper Series, Paper No. 2012-20, 2012), available at <http://ssrn.com/abstract=2066818> (“Based on annual surveys of all federal agencies, CEQ statistics show that between 2004 and 2008, an average of 122 new NEPA cases were filed each year, and as many as 251 NEPA cases were pending in 2005.” (citing *NEPA Litigation Survey*, NEPANET, <http://ceq.hss.doe.gov/nepa/nepanet.htm>)).

⁷² See F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 524-26 (1945).

⁷³ RICHARD J. PIERCE, JR. ET AL., ADMINISTRATIVE LAW AND PROCESS § 1.7.2 (4th ed. 2004) (“An agency is captured when it favors the concerns of the industry it regulates, which is well-represented by its trade groups and lawyers, over the interests of the general public, which is often unrepresented.”); see George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3, 3 (1971) (“[A]s a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.”); see also Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J.L. & ECON. 211, 212-13 (1976) (discussing the economics of Professor George Stigler’s model establishing agency capture, stating that “the costs of using the political process limit not only the size of the [favored industry] but also [its] gains”).

However, in order to work effectively, and to prevent “slippage,”⁷⁴ environmental statutes require assiduous work by agencies, good monitoring programs evaluated by outside agencies, and the ability to overcome possible budgetary and political constraints.⁷⁵ An agency may well falter under different sets of demands from changing political administrations sympathetic or hostile to its mission, and subject to conflicting demands of congressional committees and budgetary exigencies.⁷⁶

3. Carbon Taxes Versus Cap-and-Trade

Professor N. Gregory Mankiw stated a fundamental relationship of carbon taxation and cap-and-trade policies: “Cap-and-trade = Carbon tax + Corporate welfare.”⁷⁷

The amount of GHGs that could be emitted consistent with sustainability is limited. Market ownership of emission rights would thwart the despoliation often referred to as the “tragedy of the commons.”⁷⁸ But the process of establishing such rights is “a commons effort itself.”⁷⁹ This is illustrated by the tortuous path of President Obama’s climate initiative through the halls of Congress, with the proposed legislation taking the form of cap-and-trade and giving most tradable emission permits to existing emitters

⁷⁴ See generally Daniel A. Farber, *Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law*, 23 HARV. ENVTL. L. REV. 297 (1999) (discussing the implications of noncompliance with environmental laws).

⁷⁵ See generally Eric Biber, *The Problem of Environmental Monitoring*, 83 U. COLO. L. REV. 1 (2011).

⁷⁶ The U.S. Environmental Protection Agency is an example. See generally JOEL A. MINTZ, ENFORCEMENT AT THE EPA: HIGH STAKES AND HARD CHOICES (rev. ed. 2012) (describing, among other things, the history of EPA’s enforcement programs based on interviews with present and former enforcement officials at EPA and congressional staff).

⁷⁷ Greg Mankiw, *The Fundamental Theorem of Carbon Taxation*, GREG MANKIW’S BLOG (Aug. 2, 2007), <http://gregmankiw.blogspot.com/2007/08/fundamental-theorem-of-carbon-taxation.html>. As chairman of President George W. Bush’s Council of Economic Advisors, Mankiw learned that “full-contact politics” did not reward such candor. He earlier had espoused raising gasoline taxes to fund an across-the-board income tax cut and was forced to step down after defending the outsourcing of jobs as an economic “plus” for the United States. Edmund L. Andrews, *Economics Adviser Learns the Principles of Politics*, N.Y. TIMES, Feb. 26, 2004, at C4.

⁷⁸ Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243, 1245 (1968). By “commons,” Hardin was referring not to resources owned in common, but rather to open access areas in which there was no ownership. An earlier, and more sophisticated, explanation of the problem of common pool resources is H. Scott Gordon, *The Economic Theory of a Common-Property Resource: The Fishery*, 62 J. POL. ECON. 124, 135 (1954) (“[T]he fish in the sea are valueless to the fisherman, because there is no assurance that they will be there for him tomorrow if they are left behind today.”).

⁷⁹ Carol M. Rose, *Property and Emerging Environmental Issues—The Optimists vs. the Pessimists*, 1 BRIGHAM-KANNER PROP. RTS. CONF. J. 405, 415-16 (2012).

instead of auctioning them off.⁸⁰ Thus were derailed plans to have the proceeds of a government permit auction offset other taxes, instead of the permits' value inuring, as Professor Mankiw lamented, to "powerful special interests."⁸¹

Finally, while emitters who are granted the first tradable permits would thus enjoy a windfall, they and subsequent purchasers of those valuable rights would have every incentive to resist changes in law and technology that might enhance the economy or environment but would make the rights less valuable.

D. *Climate Change as a Paradigmatic Environmental Issue*

A widespread consensus exists that climate change is a serious problem. Economist William Nordhaus noted that unwillingness to address it could result in a loss of almost 3 percent of world output in 2100 and 8 percent in 2200.⁸² Failure "to regulate [GHGs] that contribute to global warming, or to use alternative strategies for addressing the problem," could result in "significant, and perhaps catastrophic" damage.⁸³ Some claim that lack of support for a more robust climate policy results in part from a popular "comprehension vacuum," subsequently filled by a "variety of interest groups" that have promoted "emotional and vitriolic" discourse.⁸⁴ There are, to be sure, reputable scientists in the ranks of climate change skeptics.⁸⁵

1. The Kyoto Protocols: Promise and Disappointment

The Kyoto Protocol bound thirty-seven nations to reduce GHG emissions by an average of 5 percent below 1990 levels between 2008 and 2012.⁸⁶ The first commitment period ended in 2012.⁸⁷

⁸⁰ N. Gregory Mankiw, *A Missed Opportunity on Climate Change*, N.Y. TIMES, Aug. 9, 2009, at BU4.

⁸¹ *Id.*

⁸² WILLIAM NORDHAUS, *A QUESTION OF BALANCE: WEIGHING THE OPTIONS ON GLOBAL WARMING POLICIES* 13-14 (2008).

⁸³ Robert W. Hahn, *Climate Policy: Separating Fact from Fantasy*, 33 HARV. ENVTL. L. REV. 557, 558 (2009).

⁸⁴ Shi-Ling Hsu, *A Prediction Market for Climate Outcomes*, 83 U. COLO. L. REV. 179, 181-82 (2011).

⁸⁵ *Id.* at 186-87.

⁸⁶ *Kyoto Protocol*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Feb. 15, 2013).

⁸⁷ *Id.*

The Intergovernmental Panel on Climate Change, the United Nations' scientific advisors, suggest[s] that developed nations must cut their emissions "between 25% and 40% below 1990 levels by 2020, and between 50% and 85% by 2050" in order to "head off the worst effects of climate change." Many believe, however, that such commitments are economically and practically infeasible.⁸⁸

While the Kyoto pact has resulted in reductions in GHG emissions, particularly in Western Europe, "it's done nothing to curb global emissions, which have risen 1.5 times since 1990."⁸⁹ Kyoto signatory nations account for only 20 percent of world GHG emissions, with Japan producing 4 percent.⁹⁰ "Japan has come to object to the Kyoto agreement because it doesn't include the United States and China, which are together responsible for 40 percent of the world's emissions."⁹¹ Other developing nations, including India and Brazil, also are not included.⁹² The foreign ministry has said that Japan "will not participate" in a renewal of the pact after its 2012 expiration.⁹³

Furthermore, even the drop in GHG emissions in Europe largely is due to the fact that European nations are buying from nations such as China goods that are made using coal. This might be described, alternatively, as either outsourcing their emissions, or importing more carbon.⁹⁴

Global climate change, or, more precisely, attempts to moderate climate change, will have a very important role in the development of the right to *use* land, a property right that is arguably more important than the other traditional principal property rights, exclusion and alienability.⁹⁵

In December 2009, as the Copenhagen climate conference fell apart, the chairman of Greenpeace UK, John Sauven, said "the city of Copenhagen is a crime scene tonight, with the guilty men and women fleeing to the airport." His remark captured some of the salient characteristics of climate policy: the importance of treaties and regulation; the central role of politicians, advocacy groups and non-governmental organisations such as Greenpeace; the pervasive moral certainty; and, though this was only in the background, the commitment to

⁸⁸ Erin Sedloff, Comment, *Creating a Category Under the Kyoto Protocol Based on Non Emissions*, 18 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 379, 380-81 (2012) (footnotes omitted) (quoting Editorial, *Kyoto Protocol's Successor: Too Much Too Soon?*, L.A. TIMES (June 4, 2009), <http://articles.latimes.com/2009/jun/04/opinion/ed-copenhagen4>).

⁸⁹ Chico Harlan, *Japan Will Find Kyoto Pledge Hard to Fulfill*, WASH. POST, Oct. 21, 2012, at A9.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.* (quoting Foreign Ministry spokesman Masaru Sato).

⁹⁴ See generally DIETER HELM, *THE CARBON CRUNCH: HOW WE'RE GETTING CLIMATE CHANGE WRONG—AND HOW TO FIX IT* 189-94 (2012) (discussing the feasibility of a tax targeting carbon consumption instead of carbon production).

⁹⁵ See *infra* Part II.B.

renewable energy, especially wind and solar power, as the primary means of cutting carbon emissions.⁹⁶

Japan, “once the poster child for aggressive environmental policy,” now has “little chance of meeting a pledge to cut [GHG] emissions significantly over the next decade, a startling retreat for a country that once spearheaded an international agreement on climate change.”⁹⁷

The lack of progress on an international climate change agreement shows no sign of being resolved any time soon. The Durban Conference of the Parties in December 2011 kept the Kyoto framework on life support, but only on the basis of an agreement to try to reach an agreement by 2015 about emissions caps after 2020. Amongst the main polluters, the USA is not doing much at the federal level. China is making significant investments in renewable energy, but is still rapidly adding more coal-fired power generation. Global emissions have not been dented since 1990, and globally coal has continued to increase both in relative share and in absolute amount. The only event that has made any substantial difference to global emissions is the economic crisis and the associated reduction in economic growth, but even this has had only a limited effect. Otherwise, 20 years of international actions (notably focused on the Kyoto Protocol) have produced no significant mitigation.⁹⁸

2. The Pivot to National and Subnational Responses

Anticipating the failure of the Copenhagen climate conference to agree on a successor to Kyoto, Council on Foreign Relations Senior Fellow Michael Levi asserted: “The core of the global effort to cut emissions will not come from a single global treaty; it will have to be built from the bottom up—through ambitious national policies and creative international cooperation focused on specific opportunities to cut emissions.”⁹⁹

Yet, the relation of national and subnational climate change authority and initiatives is a tricky business. For instance, “[t]he creation of new markets under the guise of cap-and-trade schemes will make it even more difficult to draw lines around federal jurisdiction over interstate commerce. These markets . . . will also make problematic the distinctions between local, national, and global concerns.”¹⁰⁰

⁹⁶ *Climate Change: How to Fix It*, ECONOMIST, Oct. 20, 2012, at 77 (reviewing HELM, *supra* note 94).

⁹⁷ Harlan, *supra* note 89 (citing unnamed government officials).

⁹⁸ Dieter Helm, Cameron Hepburn & Giovanni Ruta, *Trade, Climate Change and the Political Game Theory of Border Carbon Adjustments* 4 (Ctr. for Climate Change Econ. & Policy, Working Paper No. 92, 2012), available at <http://www.cccep.ac.uk/Publications/Working-papers/Papers/90-99/Trade-climate-change-game-theory-carbon-adjustments.pdf>.

⁹⁹ Michael A. Levi, *Copenhagen's Inconvenient Truth: How to Salvage the Climate Conference*, 88 FOREIGN AFF. 92, 93 (2009).

¹⁰⁰ Farber, *supra* note 22, at 882.

3. The Role of States and Federalism in Climate Change

In an influential article,¹⁰¹ Professor Daniel Farber argued for a “bifurcated approach” to the constitutional authority of states to attempt to mitigate climate change. While he advocated that courts reject regulations violative of the interstate or foreign commerce powers or ban lawful transactions under federal trading schemes, he recommended they otherwise adopt a “strong presumption of validity” for such legislation.¹⁰²

“Many state governments have stepped in to fill the void left by the lack of aggressive federal climate mitigation policies.”¹⁰³ These states, “[f]rustrated by a lack of leadership at the national level,” are taking action to address climate change, reflecting that “[w]e need aggressive action at all levels of government and in all sectors of the economy to halt and reverse the increase in these emissions, with all deliberate speed.”¹⁰⁴

Professor Farber’s concerns about regulation of interstate commerce are well founded. A case pending in the U.S. Court of Appeals for the Ninth Circuit, *Rocky Mountain Farmers Union v. Goldstene*,¹⁰⁵ involves an application of the “carbon intensity” and lifecycle emissions analysis requirements of California’s Low Carbon Fuel Standard (“LCFS”) by the California Air Resources Board (“CARB”).¹⁰⁶ Producers of Midwestern ethanol, which is made using coal-fired energy instead of cleaner fuels, were detrimentally affected. The U.S. district court found:

[T]he LCFS discriminates against out-of-state corn ethanol and impermissibly controls extra-territorial conduct. Moreover, Defendants fail to establish that no alternative means exist to address their legitimate concerns of combating global warming. Because the LCFS discriminates against interstate and foreign commerce, and because Defendants failed to satisfy their burden to establish the absence of adequate alternatives, this Court finds that the LCFS violates the dormant Commerce Clause.¹⁰⁷

The dormant Commerce Clause ruling was certified, and the case now is pending in the Ninth Circuit.¹⁰⁸ The industry’s claims include that, rather than imposing the cost of GHG emission reductions on citizens of Califor-

¹⁰¹ See generally *id.*

¹⁰² *Id.* at 881.

¹⁰³ Gabriel Weil, *Subnational Climate Mitigation Policy: A Framework for Analysis*, 23 COLO. J. INT’L ENVTL. L. & POL’Y 285, 287 (2012).

¹⁰⁴ Patrick Parenteau, Response, *Lead, Follow, or Get Out of the Way: The States Tackle Climate Change with Little Help from Washington*, 40 CONN. L. REV. 1453, 1455-56 (2008).

¹⁰⁵ Nos. 12-15131, 12-15135 (9th Cir. filed Jan. 20, 2012) (Bloomberg Law).

¹⁰⁶ Brief of Appellees at 6, *Rocky Mountain Farmers Union v. Goldstene*, Nos. 12-15131, 12-15135 (9th Cir. Aug. 6, 2012).

¹⁰⁷ *Rocky Mountain Farmers Union v. Goldstene*, Nos. CV-F-09-2234 LJO DLB, CV-F-10-163 LJO DLB, 2011 WL 6936368, at *1 (E.D. Cal. Dec. 29, 2011).

¹⁰⁸ *Rocky Mountain Farmers Union*, Nos. 12-15131, 12-15135.

nia, the LCFS “seeks to force reductions in GHG emissions *in other states* (and countries), using the ultimate sale of a portion of the finished product in California as its regulatory hook.”¹⁰⁹

4. California Regulation: Like a Nation State?

On July 31, 2006, flanked by then Prime Minister Tony Blair and global business leaders, California Governor Arnold Schwarzenegger “announced to the world that his state was no longer content to serve only a quasi-sovereign role: ‘California is a great part of the United States, but we happen to be a leading state with a huge economy, and we are, like I say, a nation state.’”¹¹⁰ Governor Schwarzenegger added that, unlike the federal government, California would “show leadership” in GHG emissions, whether other emitters went along or not.¹¹¹

The California Global Warming Solutions Act of 2006,¹¹² commonly referred to as A.B. 32, requires that GHG emissions contributing to climate change be reduced to 1990 levels by 2020, which would constitute a reduction of about 30 percent.¹¹³

A contemporaneous *New York Times* article concluded: “California, in fact, is making a huge bet: that it can reduce emissions without wrecking its economy, and therefore inspire other states—and countries—to follow its example on slowing climate change.”¹¹⁴ That article, in part, inspired Professor Cass Sunstein to explore the problem more systematically:¹¹⁵

In 2006, California enacted a statute that would, by 2020, stabilize the state’s emissions at 1990 levels—a step that would call for a 25% reduction under a “business as usual” approach. This enactment raises many questions. As a first approximation it will, by itself, contribute nothing to reductions in climate change by 2050, 2100, or any other date. Recall that the Kyoto Protocol would have produced only a modest reduction in warming by 2100; if California embarked on a reduction to 1990 levels on its own, without any action by any other state or nation, there would be no discernable impact on the world’s climate. At the same time, a 25% reduction in greenhouse gases would almost certainly impose significant costs

¹⁰⁹ Brief of Appellees, *supra* note 106, at 17.

¹¹⁰ Douglas A. Kysar & Bernadette A. Meyler, *Like a Nation State*, 55 UCLA L. REV. 1621, 1622 (2008) (quoting Arnold Schwarzenegger, Governor of Cal., Remarks at a Roundtable Discussion on Energy and Climate Issues (July 31, 2006), in *Gov. Schwarzenegger, British Prime Minister Tony Blair Sign Historic Agreement to Collaborate on Climate Change, Clean Energy*, CA.GOV, <http://gov.ca.gov/news.php?id=2918>).

¹¹¹ *Id.*

¹¹² CAL. HEALTH & SAFETY CODE §§ 38500-38599 (West 2012).

¹¹³ *Climate Change Programs*, CAL. AIR RES. BD., <http://www.arb.ca.gov/cc/cc.htm> (last visited Feb. 15, 2013).

¹¹⁴ Felicity Barringer, *California, Taking Big Gamble, Tries to Curb Greenhouse Gases*, N.Y. TIMES, Sept. 15, 2006, at A1.

¹¹⁵ Cass R. Sunstein, *Of Montreal and Kyoto: A Tale of Two Protocols*, 31 HARV. ENVTL. L. REV. 1, 34 n.232 (2007).

on the citizens of California. Hence there is a positive question: Why did California vote for a program that would appear to produce no benefits while imposing real costs? There is also a normative objection, which is that California should not, in fact, impose real costs on its own citizens without also delivering benefits to those citizens, or at least to the world.¹¹⁶

Sunstein postulated that possible explanations included a desire by the state's governor, contemplating a tough reelection campaign, to signal his commitment to what many residents considered the moral issue of climate change.¹¹⁷

The failure of predicted multistate initiatives in Western, Midwestern, and Northeastern states has thwarted predictions by environmentalists that the United States would “lock in major cuts” in GHGs.¹¹⁸ Indeed, “California is pressing ahead—without the six states that initially planned to join it.”¹¹⁹ Robert Stavins, who heads the Harvard environmental economics program, said that “there are ‘legitimate concerns’ about whether California’s imported electricity, which makes up half of its carbon emissions, may end up selling fossil-fuel energy to other states while directing its renewable sources toward California utilities.”¹²⁰

Complementing the energy provisions of A.B. 32, the California Sustainable Communities Strategy Act of 2008 (“S.B. 375”),¹²¹ was described as

a landmark piece of anti-sprawl legislation that promises to achieve smart and sustainable land use planning and development throughout the state. The bill is succinctly described as “providing [vehicle] emissions-reduction goals around which regions can plan—integrating disjointed planning activities and providing incentives for local governments and developers to follow new conscientiously-planned growth patterns.”¹²²

S.B. 375 extends well beyond traditional land use legislation.

Urban planners, traffic engineers, and homebuilders now talk of “complete streets,” “active transportation,” and “walkability,” putting pedestrians and bicyclists on the same plane as automobiles. These and other key terms in holistic planning connote the public benefits that S.B. 375 promises to deliver beyond reductions in global warming emissions. “Compact de-

¹¹⁶ *Id.* at 58-59 (footnotes omitted).

¹¹⁷ *Id.* at 59.

¹¹⁸ Juliet Eilperin, *Climate Initiatives Advancing in States, but Slowly*, WASH. POST, Nov. 6, 2012, at A2.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ S.B. 375, 2008 Leg., 2007-2008 Sess. (Cal. 2008).

¹²² Robert H. Freilich & Neil M. Popowitz, *The Umbrella of Sustainability: Smart Growth, New Urbanism, Renewable Energy and Green Development in the 21st Century*, 42 URB. LAW. 1, 19-20 (2010) (quoting Press Release, Cal. Office of the Governor, Governor Schwarzenegger Signs Sweeping Legislation to Reduce Greenhouse Gas Emissions Through Land-Use (Sept. 30, 2008), available at <http://gov.ca.gov/news.php?id=10697>).

velopment,” for example, translates to more undeveloped land for wildlife, for growing food locally, and for filtering out pollutants in stormwater runoff.¹²³

Another explanation of California’s outlier status is that its citizens are perhaps not sacrificing their state’s economic interests to their altruistic or moral preferences. Instead, they are using what Professor Ann Carlson dubbed “iterative federalism.”¹²⁴ Under this model, “[t]he most innovative state responses to climate change are neither the product of state regulation alone nor are they exclusively the result of federal action. Instead, such regulations are the results of repeated, sustained, and dynamic lawmaking efforts involving both levels of government.”¹²⁵

Professor Carlson adds,

[t]he California experience demonstrates a significant benefit of devolution: minimizing the risk of overly stringent national regulation while allowing individual states to experiment and take risks. Premature federal adoption of California’s rigorous emissions standards might have proven much costlier than allowing California first to experiment and then having the federal government act.¹²⁶

Of course, an individual state’s strategies might implicate a constitutionally questionable shift of burdens to other states.¹²⁷

5. Environmental Regulations at Cross Purposes

Nontrivial decision making inevitably involves tradeoffs. Benefits to some elements of the biosphere might well harm others, and programs that produce some benefits to humans might entail corresponding detriments. Thus, it is important to provide “a rationale for resolving conflicting habitat needs among resources of concern.”¹²⁸

One important environmental issue involves the relationship between energy efficiency and public health in the U.S. Green Building Council’s Leadership in Energy and Environmental Design (“LEED”) certification programs.¹²⁹ A recent report discusses the collision within LEED standards between energy efficiency and human health, explaining that the “LEED

¹²³ Mary D. Nichols, *Sustainable Communities for a Sustainable State: California’s Efforts to Curb Sprawl and Cut Global Warming Emissions*, 12 VT. J. ENVTL. L. 185, 189 (2010).

¹²⁴ Ann E. Carlson, *Iterative Federalism and Climate Change*, 103 NW. U. L. REV. 1097, 1099 (2009).

¹²⁵ *Id.*

¹²⁶ *Id.* at 1103.

¹²⁷ See, e.g., *supra* notes 105-109 and accompanying text (discussing the pending *Rocky Mountain Farmers Union* litigation).

¹²⁸ BRUCE L. SMITH ET AL., *IMPERFECT PASTURE: A CENTURY OF CHANGE AT THE NATIONAL ELK REFUGE IN JACKSON HOLE, WYOMING I* (2004).

¹²⁹ See *infra* Part III.C.4 (discussing LEED in the context of secondary rent seeking).

program for ‘new construction and renovation’ considers human health within its ‘indoor environmental quality’ category,” which “constitute[s] only 13.6 percent of the total possible award.”¹³⁰

Chemical and pollutant source control and materials emissions are perhaps most relevant to human health among all the criteria considered, yet collectively account for a very small percentage of the total score awarded to a project. A building may receive “platinum,” or the highest ranking in the LEED system, without any points being awarded in the category intended to protect human health

* * *

LEED building certification standards that insufficiently account for threats to human health are being adopted or encouraged by many U.S. laws and regulations. A rapidly growing number of federal, state, and local laws and regulations are adopting LEED standards that affect building codes and zoning and subdivision regulations.¹³¹

The question of possible incompatibility of LEED building standards and public health brings up a broader issue involving the coordination and compatibility of regulations. According to Professor Holly Doremus,

Calls for unified environmental regulation and oversight are common today, for good reason. Fragmentation of authority and responsibility may mean that no one ever takes a comprehensive view of the system, or that agencies work at cross-purposes. It can bring unnecessary duplication, with attendant inefficiencies. More subtly, where multiple agencies share authority over the multiple causes of an environmental problem, each may be tempted to avoid taking politically difficult steps to address it.¹³²

But, Professor Doremus’s observation cuts in several directions. Her point about duplication seems fairly clear. However, is it the case that a comprehensive view would point to a clear strategy? Does dealing with the multiple causes of an environmental problem create new environmental problems, or might it ease them?

As an example of strategic thinking, Professor J. B. Ruhl suggests that, in developing a Fish and Wildlife Service response to *Massachusetts v. EPA*,¹³³

the ESA [Endangered Species Act] should not be used to regulate [GHG] emissions, but rather that it should be focused on establishing protective measures for species that have a chance of surviving the climate change transition and establishing a viable population in the

¹³⁰ ENV’T & HUMAN HEALTH, INC., LEED CERTIFICATION: WHERE ENERGY EFFICIENCY COLLIDES WITH HUMAN HEALTH 8 (2010), available at http://www.ehhi.org/reports/leed/LEED_report_0510.pdf.

¹³¹ *Id.* at 9 (citation omitted).

¹³² Holly Doremus, *Through Another’s Eyes: Getting the Benefit of Outside Perspectives in Environmental Review*, 38 B.C. ENVTL. AFF. L. REV. 247, 251 (2011) (footnote omitted).

¹³³ 549 U.S. 497 (2007).

future climate regime. In particular, the ESA can help ensure that human adaptation to climate change does not prevent other species from adapting as well.¹³⁴

While enforcement concerns have centered on exploitation of traditional carbon-based energy sources, conflicts with animals and animal habitats occur in conjunction with renewable energy resources, as well.¹³⁵ Renewable energy is produced at low densities and thus adversely affects substantial areas.¹³⁶ Notably, the land-intensive nature of such projects potentially has adverse impacts on open space and aesthetic values,¹³⁷ and the siting of wind power facilities has drawn numerous complaints of “visual pollution.”¹³⁸

Restrictions on low-density housing, advocated to reduce infrastructure costs and energy use, might have untoward consequences for human ecology, such as by affecting the socioeconomic mix of people in ethnic neighborhoods.¹³⁹ Urban growth boundaries and similar restrictions on residential development result in less spacious and more expensive housing.¹⁴⁰ All of this leads to questioning the long-term effects of taking sides to preserve one aspect of the environment at the ensuing expense of another.

6. Avoidance of Climate Change Issues

The potential future conflicts between environmental regulation and property rights highlighted in the this Article are one significant reason why

¹³⁴ J.B. Ruhl, *Climate Change and the Endangered Species Act: Building Bridges to the No-Analog Future*, 88 B.U. L. REV. 1, 2 (2008).

¹³⁵ See generally Alexandra B. Klass, *Energy and Animals: A History of Conflict*, 3 SAN DIEGO J. CLIMATE & ENERGY L. 159, 160 (2012) (noting the “long history of conflict between energy development and animals,” with particular attention to judicial attempts to balance legal mandates aimed at enhancing energy production with those seeking to protect animals and habitat).

¹³⁶ See Ronald H. Rosenberg, *Making Renewable Energy a Reality—Finding Ways to Site Wind Power Facilities*, 32 WM. & MARY ENVTL. L. & POL’Y REV. 635, 641 (2008) (“By using so many acres of land for these large, manufactured generating structures, multi-turbine wind farms represent a major change to existing, low-density, natural land use patterns.”).

¹³⁷ See Alexandra B. Klass, *Renewable Energy and the Public Trust Doctrine*, 45 U.C. DAVIS L. REV. 1021, 1040 (2012).

¹³⁸ See, e.g., Adam Sherwin, “Sighting” *Wind Energy Facilities in Vermont: Finding the Right Balance Between Societal Benefits and Aesthetic Burden*, 17 BUFF. ENVTL. L.J. 1, 32 n.207 (2010) (noting that a proposed offshore wind farm project in Massachusetts “has drawn opposition for its ‘visual pollution’” (quoting Editorial, *Blowhards: The Fabulous Debate over Wind Power on Nantucket Sound*, WALL ST. J., Jan. 24, 2009, at A10).

¹³⁹ See, e.g., *Chinese Staff & Workers Ass’n v. City of New York*, 502 N.E.2d 176, 180-81 (N.Y. 1986); see also *infra* notes 233-238 and accompanying text.

¹⁴⁰ See, e.g., William A. Fischel, *Comment on Anthony Downs’s “Have Housing Prices Risen Faster in Portland than Elsewhere?”*, 13 HOUSING POL’Y DEBATE 43, 44 (2002) (asserting that the urban growth containment policy adopted by Portland, Oregon—of which urban growth boundaries are a prominent feature—“probably does cause higher housing prices”).

the politics of environmental protection in general, and climate change in particular, are so difficult. “The two most effective ways of reducing global warming pollution—taxing it or regulating it—are politically toxic in a year when economic problems are paramount.”¹⁴¹ Furthermore,

[i]nternational efforts to address climate change, which showed great promise when Mr. Obama took office, have sputtered in recent years because of fears that limiting carbon emissions means limiting economic growth. There is also considerable resistance to any plan that would require the United States and other wealthy countries to take stronger measures than those demanded of China, India and other fast-growing economies that are responsible for the bulk of the growth in global emissions.¹⁴²

II. PROPERTY RIGHTS AND ENVIRONMENTAL REGULATION

This Part explores the under-inclusion of property rights concepts in the environmental regulation decisionmaking context. It then proceeds to examine three instances where property rights are especially in jeopardy: “smart growth” and the use of transferrable development rights, land development exactions, and green redevelopment’s susceptibility to crony capitalism.

A. *The Importance of Private Property*

A strong system of private property rights promotes economic well-being and also protects individual liberty and autonomy. Historically, property in land has been a principal source of wealth and also a guarantor of individual liberty. The emphasis on property rights enunciated by John Locke and the Whigs “profoundly influenced the founding generation.”¹⁴³ “By the late eighteenth century, ‘Lockean’ ideas on government and revolution were accepted everywhere in America; they seemed, in fact, a statement of principles built into English constitutional tradition.”¹⁴⁴ Summing up this heritage, President John Adams proclaimed, “Property must be secured, or liberty cannot exist.”¹⁴⁵

¹⁴¹ John M. Broder, *Candidates Agree World Is Warming, but Talk Stops There*, N.Y. TIMES, Oct. 26, 2012, at A18 (noting that while President Obama and Governor Mitt Romney “agree that the world is warming and that humans are at least partly to blame,” both “have seemed most intent on trying to outdo each other as lovers of coal, oil and natural gas”).

¹⁴² *Id.*

¹⁴³ James W. Ely Jr., *The Constitution and Economic Liberty*, 35 HARV. J.L. & PUB. POL’Y 27, 29-30 (2012).

¹⁴⁴ PAULINE MAIER, *AMERICAN SCRIPTURE: MAKING THE DECLARATION OF INDEPENDENCE* 87 (1997).

¹⁴⁵ JOHN ADAMS, *Discourses on Davila*, in 6 THE WORKS OF JOHN ADAMS, SECOND PRESIDENT OF THE UNITED STATES 223, 280 (Charles Francis Adams ed., 1851).

A contemporary analysis by constitutional historian James Ely concluded that property is the “guardian of every other right.”¹⁴⁶ Precisely because “private property is one of our most comprehensive social institutions, . . . it is not a sensible construction . . . to limit it to . . . the protection of the right to exclude only when the conception from Roman times forward has always included the rights of use and disposition as well.”¹⁴⁷

However, the meaning of “property” hardly is uncontested. Contrasting with the Lockean account stressing individual rights, property has been viewed through other lenses, including the “civic republican” stress on community and individual virtue.¹⁴⁸ Some commentators, including Professors Eric Freyfogle,¹⁴⁹ Joseph Sax,¹⁵⁰ and others,¹⁵¹ point in various ways to property as rooted in community generally rather than in individualism. Professor Christopher Serkin asserted that economics-oriented accounts of property rights miss fundamental aspects of the connection that can develop between people and existing uses of their property.¹⁵²

As noted by Professor Eric Claeys, some commentators have assumed that the concept of property and recognition of its importance would remain undisturbed even while it is treated as instrumental and its substance transformed to suit immediate policy goals.¹⁵³ This author has expressed skepticism about that project elsewhere.¹⁵⁴ Some legal scholars have argued that no special constitutional or normative protection is owed existing land us-

¹⁴⁶ JAMES W. ELY, JR., *THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS* (3d ed. 2008).

¹⁴⁷ Richard A. Epstein, *Taking Stock of Takings: An Author's Retrospective*, 15 WM. & MARY BILL RTS. J. 407, 408 (2006).

¹⁴⁸ See generally William Michael Treanor, *The Original Understanding of the Takings Clause and the Political Process*, 95 COLUM. L. REV. 782, 820-22 (1995) (differentiating republicanism from Lockean liberalism).

¹⁴⁹ See Eric T. Freyfogle, *Context and Accommodation in Modern Property Law*, 41 STAN. L. REV. 1529, 1545 (1989); Eric T. Freyfogle, *Ownership and Ecology*, 43 CASE W. RES. L. REV. 1269, 1284-85 (1993); Eric T. Freyfogle, *The Owning and Taking of Sensitive Lands*, 43 UCLA L. REV. 77, 91 n.54 (1995).

¹⁵⁰ See Joseph L. Sax, *The Search for Environmental Rights*, 6 J. LAND USE & ENVTL. L. 93, 103-04 (1990); Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149 (1971); Joseph L. Sax, *The Unfinished Agenda of Environmental Law*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 1, 8-9 (2008) [hereinafter Sax, *Unfinished Agenda*].

¹⁵¹ See, e.g., Gregory S. Alexander, Eduardo M. Peñalver, Joseph William Singer & Laura S. Underkuffler, *A Statement of Progressive Property*, 94 CORNELL L. REV. 743, 743-44 (2009).

¹⁵² Christopher Serkin, *Existing Uses and the Limits of Land Use Regulations*, 84 N.Y.U. L. REV. 1222, 1273-74 (2009) (expanding upon Professor Margaret Radin's view that property enhances personhood).

¹⁵³ Eric R. Claeys, *Property 101: Is Property a Thing or a Bundle?*, 32 SEATTLE U. L. REV. 617, 619 (2009) (book review) (noting that the “bundle of sticks” metaphor is “conceptual shorthand for an implicit normative claim: that policy analysis may treat property as an instrument for directly promoting immediate policy goals, without disrupting property's foundational functions”).

¹⁵⁴ Steven J. Eagle, *The Really New Property: A Skeptical Appraisal*, 43 IND. L. REV. 1229 (2010).

es.¹⁵⁵ Often, the gravamen of disputes is whether the property rights of individuals are the baseline and predominant interest, or whether the environmental concerns enunciated by environmentalists and some government officials are the baseline interest.¹⁵⁶

Also of note, in 1947 England itself promulgated legislation, the Town and Country Planning Act, abrogating the doctrine that landowners are entitled to make new uses of their land.¹⁵⁷ Professor Peter Byrne attributed this as a consequence of “the nineteenth century development of ‘the great movement for the regulation of life in the cities and towns in the interests of public health and amenity.’”¹⁵⁸

1. Individual Autonomy Versus Community Obligation

The importance of private property is not denigrated by the interrelated nature of the environment.¹⁵⁹ However, in Professor Sax’s view, the environment is akin to a commons that everyone has an obligation to care for.¹⁶⁰ These disparate perspectives are illustrated in the debate between Sax and Professor Richard Epstein regarding *Just v. Marinette County*,¹⁶¹ in which, in 1972, the Wisconsin Supreme Court upheld a prohibition on almost all development within a specified distance from navigable waters.¹⁶²

Professor Sax’s argument is that interdependence requires stewardship.

Here is a case that traditional property law does not comfortably fit. To be sure, the Justs owned land, and certainly had an expectation of developing it. On the other hand, whatever developmental right the Justs would ordinarily have, there is certainly no authority to suggest that they had a right to damage a navigable river.

* * *

¹⁵⁵ See generally Serkin, *supra* note 152, at 1261 (concluding that existing uses should be subject to the same takings and due process analyses that apply to all regulation and governmental action).

¹⁵⁶ See generally Phillip M. Kannan, *The Precautionary Principle: More than a Cameo Appearance in United States Environmental Law?*, 31 WM. & MARY ENVTL. L. & POL’Y REV. 409, 412-16 (2007) (analyzing, through the lens of societal baselines, the Supreme Court’s opinions as to whether we should look to private property rights or environmental protection in discerning the meaning of “navigable waters” under the Clean Water Act in *Rapanos v. United States*, 547 U.S. 715 (2006)).

¹⁵⁷ J. Peter Byrne, *Ten Arguments for the Abolition of the Regulatory Takings Doctrine*, 22 ECOLOGY L.Q. 89, 106-07 & n.113 (1995).

¹⁵⁸ *Id.* at 107 (quoting *Belfast Corp. v. O. D. Cars Ltd.*, [1960] A.C. 490 (H.L.) 523 (appeal taken from N. Ir.)).

¹⁵⁹ See JOHN MUIR, *MY FIRST SUMMER IN THE SIERRA* 110 (Sierra Club Books 1988) (1911) (“When we try to pick out anything by itself, we find it hitched to everything else in the universe.”).

¹⁶⁰ See Sax, *Unfinished Agenda*, *supra* note 150, at 2.

¹⁶¹ 201 N.W.2d 761 (Wis. 1972).

¹⁶² *Id.* at 772.

The supposed strength of Epstein's physical invasion test, and of his reliance on traditional tort law standards as a measure, is its moral quality. In a world in which individuals have distinct and independent items of property, there is at least some claim to be left alone, both by others and by the state. But if interdependency is the dominant fact (your land is inextricable from the navigable waters that you do not own)—and that is the essence of the wetland, as revealed by modern biological knowledge—then it would seem that the traditional property approach, such as the physical invasion test, would deserve thoughtful reconsideration.¹⁶³

Professor Epstein's rejoinder is that discarding the traditional doctrine that land ownership includes the right of development would make us vulnerable to self-seeking decision making.

If the argument is that any environmental consideration can constrain development in the wetlands, then the same objections that Joe raises can be raised with respect to any and all property at any and all times so that the only issue is one of political will.

Now why do I passionately resist the idea that somehow or other as we know more about the interactions of various kinds of natural behavior and phenomena, we should feel free to "re-define" the underlying property rights? The answer I think is very clear from what I've said before: somebody is going to have to do the redefining. If [Sax] is correct, then, in effect all development rights cease to be well specified. They may stay with the individual, or they may be blocked by the state, but there is no process which prevents the alternation back and forth from one side to the other. It then becomes the classic rent seeking dynamic driving you to a social minimum.¹⁶⁴

2. Common Law Environmentalism

The common law long has held that interference with quiet enjoyment of a neighbor's land is actionable as a nuisance, even without physical trespass.¹⁶⁵ More generally, a person cannot use his land to harm another.¹⁶⁶ Through common law concepts of private and public nuisance, much environmentally destructive activity could be precluded.¹⁶⁷ The common law served as a "kind of zoning" by encouraging polluters to settle away from populated areas, and later providing incentive for pollution control technology.¹⁶⁸ However, "its requirement that plaintiffs demonstrate individualized proof of causal injury was a significant obstacle to its ability to respond to

¹⁶³ Joseph L. Sax, *Takings*, 53 U. CHI. L. REV. 279, 290 (1986) (reviewing RICHARD A. EPSTEIN, *TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* (1985)).

¹⁶⁴ Symposium, *Proceedings of the Conference on Takings of Property and the Constitution*, 41 U. MIAMI L. REV. 49, 54 (1986).

¹⁶⁵ See *Aldred's Case*, (1611) 77 Eng. Rep. 816, 821-22 (K.B.).

¹⁶⁶ *Tenant v. Goldwin*, (1704) 92 Eng. Rep. 222, 224 (K.B.) ("[E]very man must so use his own, as not to damnify another.").

¹⁶⁷ See Jason J. Czarnezki & Mark L. Thomsen, *Advancing the Rebirth of Environmental Common Law*, 34 B.C. ENVTL. AFF. L. REV. 1 (2007); Roger Meiners & Bruce Yandle, *Common Law and the Conceit of Modern Environmental Policy*, 7 GEO. MASON L. REV. 923 (1999).

¹⁶⁸ Robert V. Percival, *Environmental Law in the Twenty-First Century*, 25 VA. ENVTL. L.J. 1, 5 (2007).

the multiple-source, multiple-pollutant problems that we encounter far more typically today.”¹⁶⁹

3. The Lack of Standards Protecting Against Takings

Aside from instances in which government deprives a landowner of all economic use of a parcel,¹⁷⁰ undertakes a permanent physical invasion,¹⁷¹ or exacts an interest as a condition for granting a development permit,¹⁷² there is no objective standard for determining when the owner is entitled to just compensation under the Takings Clause.¹⁷³ The Supreme Court’s general test for such takings is the ad hoc, multifactor determination set forth in *Penn Central Transportation Co. v. New York City*¹⁷⁴ and affirmed in *Palazzolo v. Rhode Island*¹⁷⁵ and which also can be found in the Court’s subsequent summary of takings law in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*.¹⁷⁶

Although eschewing an objective test, *Penn Central* noted three significant factors: the “economic impact of the regulation on the claimant,” the “extent to which the regulation has interfered with distinct investment-backed expectations,” and the “character of the governmental action.”¹⁷⁷ The Court has declined to examine the extent to which other tests should be included in the balance,¹⁷⁸ how the three enumerated tests might be weighted, or how many tests the claimant has to satisfy, and by what standard.¹⁷⁹ The Supreme Court’s *Penn Central* line of cases might be an instance, as Professor Thomas Merrill provocatively put it, where “a ‘totality of the circumstances’ analysis masks intellectual bankruptcy.”¹⁸⁰

¹⁶⁹ *Id.* at 6.

¹⁷⁰ See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1007 (1992).

¹⁷¹ See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 421 (1982).

¹⁷² See *Dolan v. City of Tigard*, 512 U.S. 374, 377 (1994); *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 827 (1987); see also *infra* Part III.A.

¹⁷³ U.S. CONST. amend. V (“[N]or shall private property be taken for public use, without just compensation.”).

¹⁷⁴ 438 U.S. 104 (1978).

¹⁷⁵ 533 U.S. 606 (2001). Justice Sandra Day O’Connor declared, “[o]ur polestar instead remains the principles set forth in *Penn Central* itself and our other cases that govern partial regulatory takings.” *Id.* at 633 (O’Connor, J., concurring).

¹⁷⁶ 535 U.S. 302 (2002). The Court quoted Justice O’Connor’s “polestar” language approvingly. *Id.* at 335-36.

¹⁷⁷ *Penn Central*, 438 U.S. at 124.

¹⁷⁸ See, e.g., *Kavanau v. Santa Monica Rent Control Bd.*, 941 P.2d 851, 860 (Cal. 1997) (enumerating ten regulatory takings factors in addition to the three posited in *Penn Central*, and adding that “instead of applying these factors mechanically, checking them off as it proceeds, a court should apply them as appropriate to the facts of the case it is considering”).

¹⁷⁹ See, e.g., *CCA Assocs. v. United States*, 667 F.3d 1239 (Fed. Cir. 2011).

¹⁸⁰ Thomas W. Merrill, *The Economics of Public Use*, 72 CORNELL L. REV. 61, 93 (1986).

The jurisprudence of Justice Anthony Kennedy is reflective of the all-facts-and-circumstances approach, as evidenced by his concurring only in the judgment in *Lucas v. South Carolina Coastal Council*,¹⁸¹ his asserted willingness to impose heightened scrutiny of condemnation for redevelopment where this is evidence of systematic abuse in *Kelo v. City of New London*,¹⁸² and his swing opinion about the scope of the Clean Water Act in *Rapanos v. United States*.¹⁸³ In any event, Justice Kennedy has an “astounding record” for being in the majority in environmental cases.¹⁸⁴

B. *Environmental Law Might Subordinate Property Rights*

In considering the future of environmental and natural resources law, it is no surprise that environmental supporters might treat property rights as incidental to the enterprise. Indeed, government agencies with environmental missions are prone to discuss property rights, if at all, only in the context of the potential for inverse condemnation litigation, and to honor property rights only to the extent necessary to avoid having to pay just compensation for their appropriation.¹⁸⁵

Environmental issues are particularly amenable to incidental treatment of property rights, since conventional understandings of property often emphasize its attribute that permits an owner to exclude others.¹⁸⁶ This gives short shrift to alienability, another important attribute of “property.”¹⁸⁷ For present purposes, however, the overwhelming aspect of “property” that often is neglected in environmental law is the attribute of use.

¹⁸¹ 505 U.S. 1003 (1992).

¹⁸² 545 U.S. 469 (2005). Justice Anthony Kennedy upheld takings of some residences for retransfer for private economic revitalization as a permissible public use. *Id.* at 492-93. (Kennedy, J., concurring).

¹⁸³ 547 U.S. 715 (2006).

¹⁸⁴ Michael C. Blumm & Sherry L. Bosse, *Justice Kennedy and the Environment: Property, States' Rights, and a Persistent Search for Nexus*, 82 WASH. L. REV. 667, 672-73 (2007) (quoting Richard J. Lazarus, *Restoring What's Environmental About Environmental Law in the Supreme Court*, 47 UCLA L. REV. 703, 714-15 (2000) (noting that Justice Kennedy had dissented only once out of 57 environmental cases in which he participated between 1988 and 2000, with the exception of an original action involving an interstate water compact)).

¹⁸⁵ One example is the California Coastal Commission's use of the term “takings override” to describe the (very limited, in its view) situations in which its mission of environmental preservation must yield to property rights. See Steven J. Eagle, *The Parcel and then Some: Unity of Ownership and the Parcel as a Whole*, 36 VT. L. REV. 549, 593-96 (2012) (describing efforts of the Commission to treat in unitary fashion separate parcels with no demonstrated legal overlap of ownership but with some neighborly coordination in uses).

¹⁸⁶ See Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 734 (1998) (“[I]t is widely agreed that someone who has property in a resource typically will have at least some right to exclude others from using or interfering with that resource . . .”).

¹⁸⁷ See, e.g., *Andrus v. Allard*, 444 U.S. 51, 65-66 (1979) (upholding prohibitions on the sale of legally owned eagle feathers as facilitating prosecutions for illegal possession).

From a conceptual perspective, “[t]he basis of a property entitlement is in the *use* of something, which provides a substantive baseline for defining the limits of the legally enforced right to exclude.”¹⁸⁸ Another way of putting it is that “property consists of a conceptual right instituted to secure a normative interest in determining exclusively the use of an external asset. Normatively, the core of property consists of *use* of an *external asset*.”¹⁸⁹ From a practical perspective, the environment is not affected by who has nominal legal title to land, or who has the power to exclude others from the land. What counts is not the occupant’s title but rather the occupant’s actions.

The Supreme Court has held that the complete deprivation of a landowner’s economically viable use requires just compensation.¹⁹⁰ However, it would make little sense for government to acquire land through eminent domain when it could achieve the same result either by articulating a modicum of environmental justification¹⁹¹ or by permitting the owner to retain a modicum of benefit.¹⁹² But the sweep of aspirational statutes like the Endangered Species Act can be great,¹⁹³ so that incidental environmental effects count as well as intended ones.¹⁹⁴

Restrictions on property based on projected nuisance-like uses have profound consequences. “In the context of modern zoning, the critical decision is not whether the operation of a particular factory or apartment house happens on the facts of the case to constitute a nuisance. It is whether the structure may be built at all.”¹⁹⁵

¹⁸⁸ Adam Mossoff, *What Is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 423 (2003).

¹⁸⁹ Eric R. Claeys, *Exclusion and Exclusivity in Gridlock*, 53 ARIZ. L. REV. 9, 19 (2011).

¹⁹⁰ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1030-32 (1992); see *supra* Part II.A.3.

¹⁹¹ See *Lucas*, 505 U.S. at 1025 n.12 (“Since such a justification can be formulated in practically every case, this amounts to a test of whether the legislature has a stupid staff.”).

¹⁹² See *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 538 (2005) (emphasizing that *Lucas* applies only to “regulations that completely deprive an owner of ‘all economically beneficial us[e]’” (quoting *Lucas*, 505 U.S. at 1019)). *Lingle* shortly thereafter stated that “[i]n the *Lucas* context, of course, the complete elimination of a property’s *value* is the determinative factor.” *Id.* at 539 (emphasis added). It is not clear if the latter statement is a rhetorical variation or represents a change in the Court’s view.

¹⁹³ See generally Brian E. Gray, *The Endangered Species Act: Reform or Refutation?*, 13 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 1, 1 (2007) (observing that the ESA’s “overarching philosophy . . . was to protect and to repropagate endangered and threatened species no matter how dire their current existence and with only passing acknowledgement of the reliance interests of those whose past activities and future plans placed those species in peril”).

¹⁹⁴ See, e.g., *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 707 (1995) (interpreting the Endangered Species Act to forbid uses of land incidentally interfering with the habitat of a protected species).

¹⁹⁵ Richard A. Epstein, *The Social Consequences of Common Law Rules*, 95 HARV. L. REV. 1717, 1733 (1982).

1. Government Regulation for Environmental Purposes

American state and local regulation of land uses had its genesis in prophylactic measures that would preclude the creation of private and public nuisances. The U.S. Supreme Court gave its imprimatur to comprehensive zoning in *Village of Euclid v. Ambler Realty Co.*,¹⁹⁶ which noted that land use regulation was justified by the increasing complexity of urban life.¹⁹⁷ In restating that the police power is based “on the general and rational principle, that every person ought so to use his property as not to injure his neighbors.”¹⁹⁸ *Euclid* brought to the fore the extent to which governmental power should be used to achieve ends not traditionally associated with public or private nuisance.

Urban revitalization and the elimination of “blight”¹⁹⁹ have been justifications for the wholesale condemnation of land and subsequent retransfer for private redevelopment, a device approved by the Supreme Court in *Kelo*.²⁰⁰ This author has criticized courts for not closely examining the facts of plausibly abusive condemnations in subsequent takings cases, as *Kelo* had promised.²⁰¹ *Kelo* involved efforts aimed at revitalizing rundown cities. However, environmental goals require—or are used as justification for—a coordinated reimagining of land uses well beyond anything found in blight or revitalization cases. Correspondingly, the potential for misguided or abusive arrogation of property rights is much greater.²⁰²

In a sketch of the development of environmental law, Professor Robert Percival described a seminal decade: “In a remarkable burst of legislative activity during the 1970s, Congress enacted legislation creating the federal regulatory infrastructure that protects the environment today.”²⁰³ He noted that these statutes greatly expanded federal agency regulatory responsibilities and provided for citizen suits “to force agencies to carry out their ambitious responsibilities,”²⁰⁴ and that Congress—intending to make environmental awareness an integral part of every agency’s mission—also required

¹⁹⁶ 272 U.S. 365 (1926).

¹⁹⁷ *Id.* at 386-87.

¹⁹⁸ Slaughter-House Cases, 83 U.S. (16 Wall.) 36, 62 (1872).

¹⁹⁹ See Wendell E. Pritchett, *The “Public Menace” of Blight: Urban Renewal and the Private Uses of Eminent Domain*, 21 YALE L. & POL’Y REV. 1, 3 (2003) (explaining how urban “blight,” a very expansive term, often is equated to a public menace and used as a metaphor for disease in order to facilitate the public or private takeover of potentially desirable land).

²⁰⁰ *Kelo v. City of New London*, 545 U.S. 469 (2005) (holding that condemnation for revitalization to ameliorate local economic distress does not violate the Public Use Clause).

²⁰¹ Steven J. Eagle, *Public Use in the Dirigiste Tradition: Private and Public Benefit in an Era of Agglomeration*, 38 FORDHAM URB. L.J. 1023, 1061-62 (2011).

²⁰² See *infra* Part III.B.

²⁰³ Percival, *supra* note 168, at 6.

²⁰⁴ *Id.*

detailed impact statements where actions might significantly affect the environment.²⁰⁵

States and localities also have shown an increasing proclivity to regulate the uses of land for environmental purposes. Early statewide legislation in Vermont,²⁰⁶ Florida,²⁰⁷ and Oregon²⁰⁸ was designed to preserve natural resources and amenities. The impetus for environmental regulation at the national and local levels is based on the inability of traditional nuisance law, with its “requirement that plaintiffs demonstrate individualized proof of causal injury . . . to respond to the multiple-source, multiple-pollutant problems that we encounter far more typically today.”²⁰⁹

Modern environmental law has sharpened our awareness of the rich sources of the common law of nuisance as well as its limitations. It largely has inverted Justice Antonin Scalia’s invocation of “background principles of the State’s law of property and nuisance” in *Lucas*,²¹⁰ from constituting the unusual exception to owners’ development rights to serving as a focus for environmentalists’ litigation to prevent development.²¹¹ The relationship of protected property rights and environmental imperatives remains fluid.

2. The Precautionary Principle Meets Property Rights

The everyday maxim “better safe than sorry” is instantiated in the precautionary principle. “Avoid steps that will create a risk of harm. Until safety is established, be cautious; do not require unambiguous evidence.”²¹² There is a vast and long-recognized difference between risks that are quantifiable and those that are not.²¹³ In *The Black Swan*,²¹⁴ Nassim Nicholas

²⁰⁵ *Id.* at 6-7.

²⁰⁶ VT. STAT. ANN. tit. 10, §§ 6001-6093 (2010).

²⁰⁷ FLA. STAT. ANN. §§ 380.012 to -.12 (West 2012).

²⁰⁸ OR. REV. STAT. ANN. § 197.010 (West 2012).

²⁰⁹ Percival, *supra* note 168, at 6.

²¹⁰ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1029 (1992).

²¹¹ See Michael C. Blumm & Lucas Ritchie, *Lucas’s Unlikely Legacy: The Rise of Background Principles as Categorical Takings Defenses*, 29 HARV. ENVTL. L. REV. 321, 322 (2005); Christine A. Klein, *The New Nuisance: An Antidote to Wetland Loss, Sprawl, and Global Warming*, 48 B.C. L. REV. 1155, 1156-57 (2007).

²¹² Cass R. Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003, 1003-04 (2003).

²¹³ See generally FRANK H. KNIGHT, *RISK, UNCERTAINTY AND PROFIT* (1921) (distinguishing “uncertainty” (unknown perils) from “risk” (quantifiable perils)). In a more popular formulation, former Secretary of Defense Donald Rumsfeld distinguished between “known unknowns” and “unknown unknowns.” Michiko Kakutani, *Rumsfeld’s Defense of Known Decisions*, N.Y. TIMES (Feb. 3, 2011), http://www.nytimes.com/2011/02/04/books/04book.html?pagewanted=all&_r=1& (reviewing DONALD RUMSFELD, *KNOWN AND UNKNOWN: A MEMOIR* (2011)).

²¹⁴ See generally TALEB, *supra* note 58.

Taleb argued that we inherently underestimate the risk of high-impact, low-probability events in our daily lives.

In a recent article,²¹⁵ Professor Daniel Farber noted that the precautionary principle is “controversial” and pointed to three criticisms. First, it is “increasingly frustrating that there is no convergence either as to what [it] means, or as to what regions of action (environment, public health) it is supposed to apply.”²¹⁶ Second, applying the principle itself creates risks, because “risks are on all sides of the situation.”²¹⁷ Finally, Farber wrote that “[Professor] Sunstein has argued that when the precautionary principle ‘seems to offer guidance, it is often because of the operation of probability neglect,’ meaning the cognitive incapacity of individuals to attend to the relevant risks.”²¹⁸

Professor Sunstein challenged the precautionary principle in a subsequent article, “not because it leads in bad directions, but because, read for all that it is worth, it leads in no direction at all. The principle threatens to be paralyzing, forbidding regulation, inaction, and every step in between.”²¹⁹ While the precautionary principle is primarily an international law concept, it has found its way into U.S. domestic law.²²⁰

According to Professor Sunstein, both President Reagan and President Obama “embraced” cost-benefit analysis and shared a belief that it might vindicate the taking of “aggressive regulatory steps.”²²¹

Like other good things, precaution might be carried too far. To use a U.S. Supreme Court inverse condemnation analogy, the Court warned that regulatory takings claims based on development permit applications for “grandiose” projects would not ripen for federal judicial review until the developers proffered “less ambitious” plans.²²² In a balance of individual property owners’ rights and state and local environmental initiatives, grandiosity might mark exaggerated notions of ecological danger. Similarly, political leaders who are environmental decisionmakers might be prone to grandiosity, as perhaps was the case with Governor Schwarzenegger’s proc-

²¹⁵ Daniel A. Farber, *Uncertainty*, 99 GEO. L.J. 901, 916-19 (2011).

²¹⁶ *Id.* at 917 (quoting Christopher D. Stone, *Is There a Precautionary Principle?*, 31 ENVTL. L. REP. NEWS & ANALYSIS 10790, 10791 (2001) (internal quotation marks omitted)).

²¹⁷ *Id.* at 918 (quoting Cass R. Sunstein, *Probability Neglect: Emotions, Worst Cases, and Law*, 112 YALE L.J. 61, 93 (2002) (internal quotation marks omitted)).

²¹⁸ *Id.* (footnote omitted) (quoting Sunstein, *supra* note 217, at 94).

²¹⁹ Sunstein, *supra* note 212, at 1004.

²²⁰ Kannan, *supra* note 156, at 426-28.

²²¹ Cass R. Sunstein, Op-Ed., *Climate Change: Lessons from Ronald Reagan*, N.Y. TIMES, NOV. 11, 2012, at SR4.

²²² *MacDonald, Sommer & Frates v. Cnty. of Yolo*, 477 U.S. 340, 353 n.9 (1986) (“Rejection of exceedingly grandiose development plans does not logically imply that less ambitious plans will receive similarly unfavorable reviews.”).

lamation that California global warming statutes should be those befitting a “nation state.”²²³

3. Restricting Construction Makes Housing Expensive

While stringent limitations on residential development arise from many environmental purposes, there is a tradeoff. After examining a nationwide index of directly measured land values by metropolitan areas, Professor David Albouy and Mr. Gabriel Ehrlich concluded that “[r]egulatory and geographic constraints, as well as construction costs, are shown to increase the cost of housing relative to land. On average, 30 percent of housing costs are due to land, with an increasing fraction in higher-value areas, implying an elasticity of substitution between land and other inputs of 0.5.”²²⁴ Furthermore, “[t]he increase in housing costs associated with greater regulation appears to outweigh any benefits from improved quality-of-life.”²²⁵

The authors also examined disaggregated measures of regulation and geography and found that “[a]mong regulatory constraints, exactions, supply restrictions, and state court and political involvement appear to have the greatest role in raising costs.”²²⁶ Professor Albouy and Mr. Ehrlich cited work by Professors Edward Glaeser and Joseph Gyourko and economist Raven Saks, stating that the price of units in Manhattan multistory buildings exceeds the marginal cost of producing them, attributing the difference to regulation. They find the cost of this regulatory tax is larger than the externality benefits they consider, mainly from preserving views.²²⁷

Writing for a more general audience, Professor Glaeser stated that the basis for sustained regional growth is the personal satisfaction of residents and potential migrants.²²⁸ Census data from 2010 indicate that population is not moving to high-income areas, or to areas with high amenity values.

²²³ See *supra* note 110 and accompanying text.

²²⁴ David Albouy & Gabriel Ehrlich, *Metropolitan Land Values and Housing Productivity*, at abstract (Nat’l Bureau of Econ. Res., Working Paper No. w18110, 2012), available at <http://ssrn.com/abstract=2066406>.

²²⁵ *Id.*

²²⁶ *Id.* at 17.

²²⁷ *Id.* at 17-18 (citing Edward L. Glaeser, Joseph Gyourko & Raven Saks, *Why Is Manhattan So Expensive? Regulation and the Rise in Housing Prices*, 48 J.L. & ECON. 331 (2005)). Professors Edward Glaeser and Joseph Gyourko’s work demonstrates that housing and inferred land values differ most in heavily regulated environments. Edward L. Glaeser & Joseph Gyourko, *The Impact of Building Restrictions on Housing Affordability*, 9 FED. RES. BANK N.Y. ECON. POL’Y REV. 21, 35 (2003).

²²⁸ Edward L. Glaeser, *What Democrats Might Learn from the Census*, N.Y. TIMES ECONOMIX BLOG (Jan. 11, 2011, 6:00 AM), <http://economix.blogs.nytimes.com/2011/01/11/what-democrats-might-learn-from-the-census> (referring to data from the 2010 Census and stating that migrants move because of higher wages, quality of life, and “affordable housing, which typically comes from abundant supply”).

Instead, Glaeser states, they are moving to areas where housing is cheap because building is abundant.²²⁹

A related element is that localities select revitalization projects, and their developers, through less-than-transparent processes subject to favoritism and abuse.²³⁰

4. The Sweeping Scope of Potential Regulation

An example of the sheer breadth of environmental laws can be found in the New York Environmental Conservation Law,²³¹ whose stated purpose is

to declare a state policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and enhance human and community resources; and to enrich the understanding of the ecological systems, natural, human and community resources important to the people of the state.²³²

Courts have interpreted the statute as covering such disparate topics as the visual impact of a proposed project,²³³ and, in *Chinese Staff and Workers Ass'n v. City of New York*,²³⁴ “whether the introduction of luxury housing into the Chinatown community would accelerate the displacement of local low-income residents and businesses or alter the character of the community.”²³⁵

These decisions support the view that New York’s State Environmental Quality Review Act (“SEQRA”) mandates review of “virtually all discretionary acts taken by State agencies and local governments in New York.”²³⁶ These discretionary acts include not only those undertaken by state agencies or otherwise with state funds, but also agency approvals of private projects.²³⁷ The New York Court of Appeals noted in *Chinese Staff* that the “potential acceleration of the displacement of local residents and businesses is a secondary long-term effect on population patterns, community goals and neighborhood character such that [SEQRA] requires these

²²⁹ *Id.*

²³⁰ *See infra* Part III.C.

²³¹ N.Y. ENVTL. CONSERV. LAW (McKinney 2005).

²³² *Id.* § 8-0101.

²³³ *Lucas v. Planning Bd. of LaGrange*, 7 F. Supp. 2d 310 (S.D.N.Y. 1998).

²³⁴ 502 N.E.2d 176 (N.Y. 1986).

²³⁵ *Id.* at 178.

²³⁶ John F. Shea, III, *Environmental Law and Regulation in New York*, 9 FORDHAM ENVTL. L. REV. 223, 226 (1997) (book review).

²³⁷ *Id.*

impacts on the environment to be considered in an environmental analysis.²³⁸

Looking back at SEQRA in operation, Professor Stewart Sterk observed:

Although New York courts, in dealing with SEQRA litigation, have generally acted sensibly, the social cost of SEQRA has been enormous. My conclusion is that the environmental impact statement requirement should be abandoned for ordinary zoning questions, perhaps to be replaced by a tax on development that would be used to fund a more substantive environmental conservation effort. Especially in New York, where voters recently rejected an environmental bond issue, this change might prove a far more effective way to combat threats to the environment.²³⁹

III. MANDATING A SMARTER FUTURE

Broadly speaking, attempts to shape land use patterns so as to enhance environmental goals could take one of two forms. The first method is requiring landowners to internalize additional burdens resulting from their chosen lifestyles, such as through the use of carbon taxes and fees for extra costs of public infrastructure, like additional road and utility costs for low-density neighborhoods. The second is a command-and-control approach that requires owners to adhere to proscribed land use templates. This Part illustrates that advocates of “sustainable” development trend toward the latter approach, which might result in substantial diminution in private property rights.

A. *Smart Growth and Suburban “Sprawl”*

Seizing the rhetorical high ground, opponents of low-density suburban growth have invoked the image of sloth in adopting the label “sprawl” to describe it. Sprawl has been defined as “low-density development on the edges of cities and towns that is ‘poorly planned, land-consumptive, automobile-dependent, [and] designed without regard to its surroundings.’”²⁴⁰

Leading opponents have summarized its detriments:

Sprawl has engendered six major crises for America’s major metropolitan regions. These crises are: (1) central city and first- and second-ring suburban decline; (2) environmental degradation through loss of wetlands, sensitive lands, and air and water quality degradation; (3) massive gasoline energy overutilization; (4) fiscal insolvency, infrastructure deficiencies, and

²³⁸ *Chinese Staff*, 502 N.E.2d at 180-81.

²³⁹ Stewart E. Sterk, *Environmental Review in the Land Use Process: New York’s Experience with SEQRA*, 13 CARDOZO L. REV. 2041, 2042 (1992).

²⁴⁰ DWIGHT YOUNG, LINCOLN INST. OF LAND POL’Y, ALTERNATIVES TO SPRAWL 4 (1995) (quoting Richard Moe, then president of the National Trust for Historic Preservation).

taxpayer revolts; (5) devastating agricultural land conversion; and (6) housing inaffordability.²⁴¹

Moreover,

[t]he problem is not growth per se, but dysfunctional growth. The solution is not no growth, but smart growth achieved by directing development back to central cities and other areas that yield sustainable communities. Tax incentives, brownfield redevelopment, elimination of sprawl-enhancing subsidies, urban growth boundaries, transferable development rights, and many other initiatives comprise the smart growth agenda.²⁴²

On the other hand, detractors see “sprawl” as a “clever and effective euphemism” to denigrate suburbanization, the affirmative choice of many millions of Americans.²⁴³ As an alternative to rigid regulation, cities and suburbs could permit developers of large private new communities to subdivide them in ways that might attract new residents. Low-density development might reasonably be charged impact fees to force them to internalize the costs of additional roads, utilities, and other infrastructure. Likewise, carbon taxes could offset contributions to climate change. However, smart growth might result in the prohibition of low-density development, or in the imposition of convoluted penalties in the form of regulatory barriers upon it.²⁴⁴

The aspect of climate change resulting in rising sea levels has led to intensifying demand that development patterns be reshaped. “No matter how stringent, no matter how well enforced, no matter how costly, building codes cannot eliminate disaster risk.”²⁴⁵ Furthermore, “[w]hile Smart Growth has great potential for making our communities more livable, more cost effective, and more environmentally sound, ‘Smart Growth in dumb places’—those that are particularly disaster prone—is the antithesis of true sustainability.”²⁴⁶

²⁴¹ Robert H. Freilich & Bruce G. Peshoff, *The Social Costs of Sprawl*, 29 URB. LAW. 183, 184 (1997).

²⁴² Timothy J. Dowling, *Reflections on Urban Sprawl, Smart Growth, and the Fifth Amendment*, 148 U. PA. L. REV. 873, 874-75 (2000).

²⁴³ Clint Bolick, *Subverting the American Dream: Government Dictated “Smart Growth” Is Unwise and Unconstitutional*, 148 U. PA. L. REV. 859, 859 (2000).

²⁴⁴ See generally Nichols, *supra* note 123, at 188-89 (stating that there are “no penalties” for regions not meeting California Sustainable Communities Strategy and Climate Protection Act goals, but rather that developers who comply get “incentives” in the form of “relief from certain environmental review requirements”).

²⁴⁵ Lisa Grow Sun, *Smart Growth in Dumb Places: Sustainability, Disaster, and the Future of the American City*, 2011 BYU L. REV. 2157, 2157.

²⁴⁶ *Id.* at 2159.

Professor Byrne recently has gathered evidence of anticipated sea level increases internationally and along the coasts of the United States.²⁴⁷ “Global climate change has and will lead to substantial rises in global sea levels. . . . Prompt and far-reaching legal and cultural reforms are needed to reduce global emissions.”²⁴⁸

In a “hotspot” along the U.S. East Coast, the increase in sea level might be “dramatically higher.”²⁴⁹ “New York City estimates that with rapid ice melting, it could face sea-level rise of more than seven meters.”²⁵⁰ Professor Byrne educes:

The now inevitable rise in sea levels poses new and difficult challenges to property rights and land-use regulation. Inundation and storm surges will physically destroy private and public property at great loss. But perhaps more fundamentally, the threats of such losses and the predictable efforts to contain them will call for new approaches to land-use regulation and strain traditional understandings of property rights in land. Neither the common law nor traditional notions of zoning contain legal resources adequate to cope with the economic, environmental, and human risks that sea-level rise will generate. New forms of regulation and shifts in the content of common law rules will generate novel claims of regulatory takings, confronting courts with puzzling questions of fundamental rights under unprecedented climatic conditions.²⁵¹

The extensive flooding and loss of life in the Northeast resulting from the Hurricane Sandy, in October 2012, exacerbate these concerns and pose new questions about U.S. government policies that subsidize the repeated rebuilding of homes, businesses, and infrastructure in flood-prone areas.²⁵²

1. Transferrable Development Rights and Their Infirmities

Transferable Development Rights (“TDRs”) permit the recipient to develop a parcel more intensively than regulations otherwise would permit,

²⁴⁷ J. Peter Byrne, *The Cathedral Engulfed: Sea-Level Rise, Property Rights, and Time*, 73 LA. L. REV. 69, 73-76 (2012) (noting aggregate data suggesting a worldwide increase of between 0.59 and almost 2 meters and an increase along the U.S. Pacific and Gulf coasts of about 1 to 1.4 meters).

²⁴⁸ *Id.* at 69-70.

²⁴⁹ *Id.* at 75.

²⁵⁰ *Id.*

²⁵¹ *Id.* at 69.

²⁵² See Ginia Bellafante, *Paying to Rebuild, and Rebuild Again*, N.Y. TIMES (Nov. 16, 2012), <http://www.nytimes.com/2012/11/18/nyregion/paying-to-rebuild-after-the-storm-now-and-in-the-future.html>; Justin Gillis & Felicity Barringer, *As Coasts Rebuild and U.S. Pays, Repeatedly, the Critics Ask Why*, N.Y. TIMES (Nov. 18, 2012), <http://www.nytimes.com/2012/11/19/science/earth/as-coasts-rebuild-and-us-pays-again-critics-stop-to-ask-why.html?pagewanted=all&r=0>; Orrin H. Pilkey, Op-Ed., *We Need to Retreat from the Beach*, N.Y. TIMES (Nov. 14, 2012), <http://www.nytimes.com/2012/11/15/opinion/a-beachfront-retreat.html>; Christopher Rhoads & Leslie Scism, *The Future Question for Storm Victims: Can the Past Be Rebuilt?*, WALL ST. J. (Nov. 16, 2012, 10:35 PM), <http://online.wsj.com/article/SB10001424127887324595904578120962784383982.html>.

and are provided as a quid pro quo for stringent development restrictions or prohibitions applied on the recipient's other land.²⁵³ While an early New York Court of Appeals decision seemed skeptical about the legality of TDRs,²⁵⁴ the device won favor in the U.S. Supreme Court's *Penn Central* decision.²⁵⁵ Justice William Brennan concluded that TDRs granted to the railroad constituted "mitigation" of the impact of the City's regulation, as opposed to compensation for a taking.²⁵⁶

Subsequently, in *Suitum v. Tahoe Regional Planning Agency*,²⁵⁷ a regulation left the owner with no economically viable use of her land. She was awarded TDRs, which she asserted did not constitute a "use" under *Lucas*.²⁵⁸ The Court ignored the issue and simply reversed the Ninth Circuit's determination that the value of the TDRs was unknown, so that her claim was unripe.²⁵⁹ Professor Richard Lazarus, who argued for TRPA, later wrote that relevancy of the value of the TDRs was "far more significant than the ripeness 'finality' issue because of its portent for the reach of *Lucas* and the use of techniques such as TDRs."²⁶⁰

Since *Penn Central*, TDRs have been used as a tool for government agencies to protect environmentally valuable property by restricting its development and by awarding owners rights that could be sold to developers of less environmentally sensitive land.²⁶¹ The growth of TDRs has led Professor Vicki Been and Mr. John Infranca to suggest that they no longer should be understood "just as a creative mechanism to soften the effect of rigid zoning restrictions, but should be recognized as well as a tool land use decision makers can use in place of, or in tandem with, upzonings, bonuses, and other devices for increasing density."²⁶²

²⁵³ See Julian Conrad Juergensmeyer, James C. Nicholas & Brian D. Leebrick, *Transferable Development Rights and Alternatives After Suitum*, 30 URB. LAW. 441, 441 n.1 (1998) ("A TDR program is a growth management tool in which the development potential from sensitive lands is transferred to nonsensitive lands through private market transactions.").

²⁵⁴ Fred F. French Investing Co. v. City of New York, 350 N.E.2d 381, 389 (N.Y. 1976).

²⁵⁵ Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 137 (1978).

²⁵⁶ *Id.*

²⁵⁷ 520 U.S. 725 (1997).

²⁵⁸ *Id.* at 728; see *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1019 (1992).

²⁵⁹ *Suitum*, 520 U.S. at 733.

²⁶⁰ Richard J. Lazarus, *The Measure of a Justice: Justice Scalia and the Faltering of the Property Rights Movement Within the Supreme Court*, 57 HASTINGS L.J. 759, 814 (2006).

²⁶¹ See generally Gregory M. Parkhurst & Jason F. Shogren, *Evaluating Incentive Mechanisms for Conserving Habitat*, 43 NAT. RESOURCES J. 1093, 1109-12 (2003) (discussing TDRs and describing TDR programs across the country).

²⁶² Vicki Been & John Infranca, *Transferable Development Rights Programs: "Post" Zoning?*, 78 BROOK. L. REV. (forthcoming 2013) (manuscript abstract), available at <http://ssrn.com/abstract=2144808>.

Another effect of TDRs is to impose costs on developers, assertedly to “help internalize externalities associated with land development.”²⁶³ Perhaps more aggressively, possession of TDRs has been advocated “as a basis for standing to challenge agency implementation of other environmental protection legislation.”²⁶⁴

Conventional thinking casts TDRs as a benign tool that helps localities protect resources while providing owners with offsetting benefits. However, such analyses ignore the interests of third parties, the owners of land in the receiving area where TDRs may be deployed. It seems clear that if more intense uses should be permitted under the police power in the receiving zone, that should inure to the benefit of landowners there and should not be set aside for those who were awarded TDR “currency” by dint of stringent restrictions on their land in sending zones. The effect, as this author has noted elsewhere, is that “government confiscates development rights through the use of overly-stringent zoning. The rights are then repackaged and transferred to others.”²⁶⁵ In effect, development potential that is permissible under the police power is arrogated by the government without compensation and transferred to others in amelioration of their potential takings claims.

If the amount of development in the receiving zone must be limited to only a few larger structures, the analysis is unchanged. TDRs should be awarded not to third parties but to landowners in the receiving zone. They could sell those rights to developers, who would have to acquire a specified number of them to be permitted to designate a parcel for higher density use.²⁶⁶

This “rob Peter to pay Paul” infirmity with TDRs, together with other problems such as uncertainty in their possible market value, makes their expansion a threat to property rights, even to help achieve laudable environmental goals.

²⁶³ Shi-Ling Hsu, *A Two-Dimensional Framework for Analyzing Property Rights Regimes*, 36 U.C. DAVIS L. REV. 813, 880 (2003). “Because a developed parcel imposes environmental costs that an undeveloped parcel does not, the requirement of obtaining sufficient TDRs effectively imposes a cost at the margins on development, a cost that is not realized if the right to develop comes fully attached to land ownership.” *Id.*

²⁶⁴ Danieli Evans, *Concrete Private Interest in Regulatory Enforcement: Tradable Environmental Resource Rights as a Basis for Standing*, 29 YALE J. ON REG. 201, 237 (2012).

²⁶⁵ Steven J. Eagle, *Environmental Amenities, Private Property, and Public Policy*, 44 NAT. RESOURCES J. 425, 441 n.92 (2004).

²⁶⁶ See, e.g., *Barancik v. Cnty. of Marin*, 872 F.2d 834, 837 (9th Cir. 1988).

2. Generic Police Power Ordinances

Another substantial problem with the use of augmented land use regulation for environmental reasons is the subordination of specific zoning procedures to a nebulous view of the police power.

In *New Jersey Shore Builders Ass'n v. Township of Jackson*,²⁶⁷ developers challenged a local ordinance requiring property owners to replace most trees that they remove or, if that were not feasible, to make a payment into a fund dedicated to the planting of trees and shrubs on public property.²⁶⁸ The builders' expert asserted that "the ordinance does not promote a property forest management plan; the ordinance is inconsistent, overly vague, and imprecise; and the ordinance unfairly distinguishes between residential lots and commercial lots, which does not further its stated purpose."²⁶⁹ The township's expert stated that the ordinance was modeled after a "no net loss" policy designed for tree removal from state-owned land, and that it was intended to further "the reforestation or reestablishment of the tree canopy with[in the] Township as a whole and not in any one particular area."²⁷⁰

The trial judge found the Township's argument that the ordinance would help maintain the biomass within its borders "tenuous at best," and concluded that utilization of the fund to plant trees exclusively on public property did not "bear a real and substantial relationship to the purposes of the Ordinance."²⁷¹

The New Jersey Supreme Court rejected the trial court's application of the state's Municipal Land Use Law ("MLUL").

Although it touches on the use of land, the ordinance is not a planning or zoning initiative that necessarily implicates the MLUL. Indeed, there are numerous ordinances, for example, health codes, environmental regulations, building codes, and laws regulating the operation of particular businesses, that touch on the use of land, but are not within the planning and zoning concerns of the MLUL. Those ordinances are enacted pursuant to the general police power and apply to everyone. That is the nature of the tree removal ordinance at issue here: it is a generic environmental regulation, and not a planning or zoning initiative.²⁷²

The state supreme court added that the ordinance was based on the police power and passed muster under the rational basis standard. "The police power does not have its genesis in a written constitution. It is an essential element of the social compact, an attribute of sovereignty itself, possessed

²⁶⁷ 970 A.2d 992 (N.J. 2009).

²⁶⁸ *Id.* at 995.

²⁶⁹ *Id.* at 998.

²⁷⁰ *Id.* at 998-99 (quoting the testimony of landscape architect Jeffrey Nagle, witness for the Township of Jackson) (internal quotation marks omitted).

²⁷¹ *Id.* at 1000 (internal quotation marks omitted).

²⁷² *Id.* at 1002.

by the states before the adoption of the Federal Constitution.”²⁷³ In a subsequent case involving an election law challenge,²⁷⁴ the court quoted *Shore Builders* in declaiming the “plenary” powers of the state legislature to promote the “public health, safety, welfare, and morals.”²⁷⁵ It also referred to the power as “an essential element of the social compact.”²⁷⁶

In *Shore Builders*, the court held that dedicating land for the provision of biomass is not a land use issue, but rather a police power issue. This is not an outlier position, since the New Jersey Supreme Court has made similar sweeping declarations about zoning for affordable housing²⁷⁷ and about the presumed servitude on all private property for the free-expression rights of others.²⁷⁸ The ruling does, however, point to a tendency to subordinate other interests in the face of invoked environmental needs.

B. *Land Development Exactions*

1. The Increasing Use of Development Exactions

Exactions on development are fees, dedications of land, or other obligations that are imposed as conditions for government approval of real estate development applications.²⁷⁹ At first, exactions of property related to the requirement that developers construct roads, schools, or similar facilities within subdivisions to serve their residents.²⁸⁰ Over time, “in lieu” fees were accepted as substitutes, which facilitated developer contributions to off-site improvements, such as feeder roads, sewers, or larger schools serving several new subdivisions.²⁸¹ The process “combined the local government’s regulatory powers with its duty to provide public services. Termed ‘regulation for revenue’ by modern observers, this methodology blended land use regulation with revenue-enhancing or cost-shifting objectives to

²⁷³ *Shore Builders*, 970 A.2d at 1001 (quoting *Roselle v. Wright*, 122 A.2d 506, 510 (N.J. 1956)).

²⁷⁴ *In re* Contest of November 8, 2011 Gen. Election of Office of N.J. Gen. Assembly, 40 A.3d 684, 698-99 (N.J. 2012) (challenging a one-year durational residency requirement for candidates for state office).

²⁷⁵ *Id.* at 701 (quoting *Shore Builders*, 970 A.2d at 1001).

²⁷⁶ *Id.* (quoting *Roselle*, 122 A.2d at 510).

²⁷⁷ *See* *S. Burlington Cnty. NAACP v. Twp. of Mount Laurel*, 456 A.2d 390, 415 (N.J. 1983).

²⁷⁸ *See* *N.J. Coal. Against War in the Middle E. v. J.M.B. Realty Corp.*, 650 A.2d 757, 770 (N.J. 1994).

²⁷⁹ *See generally* Ronald H. Rosenberg, *The Changing Culture of American Land Use Regulation: Paying for Growth with Impact Fees*, 59 SMU L. REV. 177 (2006) (discussing origins and growth of development regulation and exactions).

²⁸⁰ *See* R. Marlin Smith, *From Subdivision Improvement Requirements to Community Benefit Assessments and Linkage Payments: A Brief History of Land Development Exactions*, 50 LAW & CONTEMP. PROBS. 5, 6 (1987).

²⁸¹ *See* Rosenberg, *supra* note 279, at 197-204.

establish a local governmental practice known as imposing ‘development exactions.’²⁸²

Development exactions are not insubstantial. A 2006 study by Professor Jennifer Evans-Cowley showed that the average impact fee for a single family home the previous year was \$7,669, with fees ranging the \$446 road impact fee in DuPage County, Illinois, to the \$41,108 fee in Gilroy, California for roads, water, sewer, drainage, parks, libraries, fire, police, general government, and schools.²⁸³ Exactions for the provision of community public goods raise substantial issues of intergenerational fairness, since those who owned their homes prior to the fee imposition were subsidized by the real estate taxes paid by local residents who came before them. As noted in Professor Robert Ellickson’s classic study, existing homeowners in homogeneous suburbs can use their majoritarian power so that “the political process is stacked against those who benefit from new housing construction.”²⁸⁴

2. The Supreme Court’s Exactions Jurisprudence

In *Lingle v. Chevron U.S.A. Inc.*,²⁸⁵ the Supreme Court recapitulated its regulatory takings doctrine and the primacy of *Penn Central*.²⁸⁶ However, it singled out for separate treatment “the special context of land use exactions.”²⁸⁷

[T]hese cases involve a special application of the “doctrine of ‘unconstitutional conditions,’” which provides that “the government may not require a person to give up a constitutional right—here the right to receive just compensation when property is taken for a public use—in exchange for a discretionary benefit conferred by the government where the benefit has little or no relationship to the property.”²⁸⁸

The Supreme Court held in *Nollan v. California Coastal Commission*²⁸⁹ that there must be an “essential nexus” between an exaction as a condition of development approval and advancement of police powers con-

²⁸² *Id.* at 192 (footnote omitted) (citing ALAN A. ALTSHULER & JOSÉ A. GÓMEZ-IBÁÑEZ, REGULATION FOR REVENUE: THE POLITICAL ECONOMY OF LAND USE EXACTIONS (1993)).

²⁸³ Jennifer Evans-Cowley, *Development Exactions: Process and Planning Issues 2* (Lincoln Inst. of Land Pol’y, Working Paper No. WP06JEC1, 2006), available at http://www.lincolninst.edu/pubs/dl/1177_Evans%20Cowley%20Final.pdf.

²⁸⁴ Robert C. Ellickson, *Suburban Growth Controls: An Economic and Legal Analysis*, 86 YALE L.J. 385, 407 (1977).

²⁸⁵ 544 U.S. 528 (2005).

²⁸⁶ *Id.* at 538. Justice O’Connor has called *Penn Central* the Court’s regulatory takings “polestar.” *Palazzolo v. Rhode Island*, 533 U.S. 606, 633 (2001) (O’Connor, J., concurring).

²⁸⁷ *Lingle*, 544 U.S. at 538.

²⁸⁸ *Id.* at 547 (quoting *Dolan v. City of Tigard*, 512 U.S. 374, 385 (1994)).

²⁸⁹ 483 U.S. 825 (1987).

ferred on the agency.²⁹⁰ In *Dolan v. City of Tigard*,²⁹¹ it explained that an exaction must be justified by an “individualized determination” that there is a “rough proportionality” that “the required dedication is related both in nature and extent to the impact of the proposed development.”²⁹²

Professor Marc Poirier wrote that “essential nexus” and “rough proportionality” are “hardly beacons of clarity,”²⁹³ and Professor Timothy Mulvaney has amplified Poirier’s observation with a list of possible meanings of those statements.²⁹⁴

Although subsequent cases imply that *Nollan-Dolan* exactions must be of interests in real property,²⁹⁵ the U.S. Supreme Court never has stated that explicitly, and other courts have split on the issue.²⁹⁶ Since *Dolan* was decided in 2004, the Supreme Court has declined to explain whether exaction takings might be found in instances when development permits are denied on the basis of developers’ refusal to consent to exactions, and whether the concept of exactions applies to required proffers of cash, personal property, or services, in addition to interests in land. In October 2012, however, the Court granted review in a case presenting those issues, *Koontz v. St. Johns River Water Management District*.²⁹⁷

²⁹⁰ *Id.* at 837.

²⁹¹ 512 U.S. 374 (1994).

²⁹² *Id.* at 391 (internal quotation marks omitted).

²⁹³ Marc R. Poirier, *The Virtue of Vagueness in Takings Doctrine*, 24 CARDOZO L. REV. 93, 107 n.55 (2002).

²⁹⁴ Timothy M. Mulvaney, *Exactions for the Future*, 64 BAYLOR L. REV. 511, 519 n.36 (2012) (“There are at least five values that could be relevant: (1) the public cost of those harms attributable to the proposed development; (2) the cost of the burden borne by the applicant in reducing those public costs; (3) the expected reduction in those public costs resulting from the permit conditions; (4) the market value of the ‘property’ acquired through the permit condition; and (5) the financial benefits the applicant will realize from the permit.”).

²⁹⁵ See, e.g., *City of Monterey v. Del Monte Dunes at Monterey, Ltd.*, 526 U.S. 687, 702-03 (1999) (“[W]e have not extended the rough-proportionality test of *Dolan* beyond . . . land-use decisions It was not designed to address, and is not readily applicable to, the much different questions arising where, as here, the landowner’s challenge is based not on excessive exactions but on denial of development.”).

²⁹⁶ Compare *Ehrlich v. City of Culver City*, 911 P.2d 429, 433 (Cal. 1996) (holding that *Dolan* is applicable to cash exactions), with *Bonnie Briar Syndicate, Inc. v. Town of Mamaroneck*, 721 N.E.2d 971, 975-76 (N.Y. 1999) (stating that *Dolan* is limited to real property interests).

²⁹⁷ 133 S. Ct. 420 (2012) (mem.). The questions presented are:

1. Whether the government can be held liable for a taking when it refuses to issue a land-use permit on the sole basis that the permit applicant did not accede to a permit condition that, if applied, would violate the essential nexus and rough proportionality tests set out in *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 512 U.S. 374 (1994); and
2. Whether the nexus and proportionality tests set out in *Nollan* and *Dolan* apply to a land-use exaction that takes the form of a government demand that a permit applicant dedicate money, services, labor, or any other type of personal property to a public use.

To the extent that *Koontz* might broaden exactions within the ambit of *Nollan-Dolan* beyond dedications of land to which the developer agrees, it is apt to have a very substantial impact on the land use planning process. “Zoning for dollars” has long been the name of the game,²⁹⁸ and cities still regard development exactions as “where we print the money.”²⁹⁹

3. Exactions for the Ecological Future

The vague definition of development exactions, together with their pervasive use in traditional infrastructure funding, lead to the issue of how development exactions might be employed for dealing with environmental issues, notably climate change.

“Contingent exactions,” a concept recently suggested in Professor Mulvaney’s *Exactions for the Future*,³⁰⁰ would facilitate the “reasonable implementation of exactions aimed at anticipated, future harms while reducing some takings liability concerns.”³⁰¹ “From the developer’s perspective,” Professor Mulvaney adds, “any uncertainty regarding land assembly would be eliminated,” with current use of the land being “impaired” only by the “common law doctrine of waste.”³⁰²

Furthermore, the developer would confer an interest in the “relevant segment of land that gives the state possession of that land only if and when specified triggering events occur.”³⁰³ Only then “would the developer be charged with removing any structures or otherwise preparing the land for the state’s possession.”³⁰⁴

There are two possible downsides to contingent exactions that Professor Mulvaney noted. First, in deciding whether owners of possessory interests commit common law waste against remainder owners, courts tend to defer to possessors where their interests will be of long future duration. Therefore, the potential that the contingency triggering the state’s remain-

Petition for Writ of Certiorari at i-ii, *Koontz v. St. Johns River Water Mgmt. Dist.*, 133 S. Ct. 420 (2012) (No. 11-1447), 2012 WL 1961402.

²⁹⁸ Jerold S. Kayden, *Zoning for Dollars: New Rules for an Old Game? Comments on the Municipal Art Society and Nollan Cases*, 39 WASH. U. J. URB. & CONTEMP. L. 3, 3 (1991) (“[C]ities grant private real estate developers the legal right to disregard zoning restrictions in return for their voluntary agreement to provide urban design features such as plazas, atriums, and parks, and social facilities and services such as affordable housing, day care centers, and job training.”).

²⁹⁹ See generally Aaron J. Yowell, Note, *That’s Where We Print the Money: Trading Increased Density for Public Amenities*, 15 N.Y.U. ENVTL. L.J. 493 (2007) (discussing density bonus programs).

³⁰⁰ Mulvaney, *supra* note 294.

³⁰¹ *Id.* at 556.

³⁰² *Id.* at 559.

³⁰³ *Id.* at 556.

³⁰⁴ *Id.* at 559.

der coming into possession might be delayed for a long period would permit the present interest holder to “spoil the property.”³⁰⁵

The second downside, “arguably more disconcerting” than the first, is the possibility that the state will fail to enforce its rights.³⁰⁶ By the time the triggering event occurs, the advantage of receiving the development permit might have “faded into the past” in the owner’s mind. The owner might, therefore, feel a “new” uncompensated loss, and the government, out of concern regarding the constituent’s “immediate economic plight,” might willingly “subordinate its position as the future interest holder.”³⁰⁷

4. Contingent Exactions Are Unworkable

Professor Mulvaney stated that his intent was to suggest a broad approach to exactions in the face of uncertainty and to highlight its benefits while leaving the details for future scholarship.³⁰⁸ Thus, the comments here are intended to explore its implications. The central problem with the “contingent exaction” is that its implementation would eviscerate owners’ use rights, if indeed potential owners would be able to obtain title at all.

One problem concerns the relation of the land that would be subject to a contingent easement and the rest of the owner’s parcel. Extrapolating from *Nollan*, where the exaction was of an easement of way along the shore behind a house,³⁰⁹ and from *Dolan*, in which the easement was along a creek behind petitioners’ hardware store,³¹⁰ Professor Mulvaney wrote that “[a]ny current use of that strip would only come with the *risk* that [the developer] may need to abandon that use upon the triggering events.”³¹¹

However, given the multiplicity of future concerns that might cause a locality to demand a contingent exaction, and the physical contours and other characteristics of land belonging to the owner and others in the vicinity, it might well be that the contingent exaction would involve land bearing a different relation to the parcel than a strip along its far edge. For instance, the “strip” might go through the center of a parcel used for a shopping center or office building. Neither the owner, nor potential mortgagees or long-term lessees, would willingly assume the risks entailed in erecting, financing, and using such a structure to begin with. It is for this reason that the American Land Title Association (“ALTA”) offers a policy endorsement that indemnifies the holder from losses occasioned by the failure of parcels

³⁰⁵ *Id.* at 563-64.

³⁰⁶ Mulvaney, *supra* note 294, at 565.

³⁰⁷ *Id.* at 565-66 (internal quotation marks omitted).

³⁰⁸ *Id.* at 556.

³⁰⁹ *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 827 (1987).

³¹⁰ *Dolan v. City of Tigard*, 512 U.S. 374, 379 (1994).

³¹¹ Mulvaney, *supra* note 294, at 559.

that are separately deeded, but unified in use, to have contiguous boundaries.³¹² In eminent domain actions where the government has taken an easement, just compensation for the “severance damages” to the rest of an owner’s parcel often is substantial.³¹³

In short, the possibility that intervening events, statutes, or court interpretations might trigger contingent environmental rights makes the land subject to such rights largely undevelopable. If might be, of course, that this was the original intent. In such an instance, however, a conservation easement or similar servitude would suffice.

C. *Green Redevelopment and Crony Capitalism*

1. The Nature of Crony Capitalism

Extensive government involvement in land development often is problematic. As this author has discussed elsewhere,³¹⁴ government partnerships with private developers can lead to “crony capitalism.” As Professor John Coffee put it,

[t]his is the dark side of concentrated ownership; put simply, the separation of cash-flow rights from voting rights can serve as a means by which those controlling the public sector can extend their control over the private sector. At a minimum, the prospect of crony capitalism—that is, closely interlocked political and economic leaderships, each reciprocally assisting the other—ensures that concentrated owners will need to become deeply involved in government in order to protect their positions from existing rivals, new entrants, and political sycophants.³¹⁵

Urban renewal has been an archetypical situation in which crony capitalism occurs.³¹⁶ Public officials want to utilize the expertise of urban rede-

³¹² Tonya Mason, *New Commercial Transactions Endorsements*, INVESTORS TITLE COMPANY (2004), available at <http://www.invttitle.com/node/1555> (“[T]he ALTA 19 endorsement provides insurance against loss or damage the insured may sustain due to any gaps, strips or gores separating any of the contiguous boundary lines as described in the ALTA 19 endorsement. The ALTA 19 endorsement may be used with either a Loan Policy or an Owner’s Policy for commercial or residential transactions.”).

³¹³ See, e.g., *Rogers v. United States*, 96 Fed. Cl. 472 (2011); see also 4A NICHOLS ON EMINENT DOMAIN § 14.02 (3d ed. 2008).

³¹⁴ Eagle, *supra* note 201, at 1033-34.

³¹⁵ John C. Coffee, Jr., *The Rise of Dispersed Ownership: The Roles of Law and the State in the Separation of Ownership and Control*, 111 YALE L.J. 1, 72 (2001).

³¹⁶ See generally David J. Barron, *Keith and the Good City*, 45 U.C. DAVIS L. REV. 1945, 1946 (2012) (“On one standard account, cities were not democratic agents during urban renewal. Instead, they were the staging ground for a peculiarly stark kind of crony capitalism. Powerful interests captured city hall and remade the urban environment for their own gain, even as they touted their desire to serve the public interest.”).

velopers, since the specialized information that they acquire in their work is itself valuable property. They also value discretion and loyalty, since public officials loath becoming embarrassed.³¹⁷ Redevelopers, in turn, need government approvals and value the inside track to construct projects that they identify as needed.³¹⁸ Thus, developers contribute to campaigns and work in tandem with officials with whom they have formed a relationship.³¹⁹ In some foreign nations, problems of illegality and corruption are significantly more pronounced.³²⁰ Nevertheless, the relationship of crony capitalism and development, including expansive green development, is a significant problem in the United States.³²¹

2. Local Redevelopment Agencies

Developments in California over the past century illustrate disputes among property owners, local governments, and state government regarding the extent and direction of command over resources.³²² According to Professor George Lefcoe, “[e]ven successful redevelopment efforts are often implemented with a jaw-dropping lack of financial transparency, accountability, and oversight” of redevelopment agencies.³²³ He added that California redevelopment agencies “‘were best understood as ‘secret governments’ that piled on billions in debt [. . .] and handed out subsidies to favored developers without much scrutiny or accountability.’”³²⁴

³¹⁷ See Eagle, *supra* note 201, at 1078-79.

³¹⁸ See *id.* at 1080-81.

³¹⁹ See *id.*

³²⁰ See generally Benjamin J. Richardson, *Is East Asia Industrializing Too Quickly? Environmental Regulation in Its Special Economic Zones*, 22 UCLA PAC. BASIN L.J. 150, 183-84 (2004) (noting that, in Malaysia and Indonesia, authoritarian governance has “engendered destructive crony capitalism,” and that environmental governance “remains weak as there are few formal legal mechanisms by which government-developer alliances can be challenged by citizens”).

³²¹ See generally Timothy A. Canova, *Banking and Financial Reform at the Crossroads of the Neoliberal Contagion*, 14 AM. U. INT’L L. REV. 1571 (1999) (reporting on American crony capitalism, conflicts of interest, and lack of transparency).

³²² See generally George Lefcoe, *Redevelopment in California: Its Abrupt Termination and a Texas-Inspired Proposal for a Fresh Start* (Univ. of S. Cal. Ctr. in Law, Econ. & Org., Working Paper No. C12-7, 2012), available at <http://ssrn.com/abstract=2072560> (discussing the events preceding the Supreme Court of California’s decision in *California Redevelopment Ass’n v. Matosantos*, 267 P.3d 580 (Cal. 2011), and recommending a new redevelopment law).

³²³ *Id.* at 7.

³²⁴ *Id.* at 7-8 (quoting Ben Boychuk & Pia Lopez, *Head to Head: What Should Be the Future of Redevelopment in California?*, SACRAMENTO BEE (Jan. 11, 2012, 12:00 AM), <http://www.sacbee.com/2012/01/11/4178469/what-should-be-the-future-of-redevelopment.html>).

More generally, “redevelopment agencies will need clear standards to prevent untoward discretion and excessive private benefits.”³²⁵

3. Secondary Rent Seeking

Economic rents are payments for goods in fixed supply, like undeveloped land. Thus, owners of land could receive a stream of leasehold income or substantial proceeds on sale, none of which affects the amount of the good in question. Since the right to receive such rents is valuable, individuals will exercise ingenuity or pay to control them. Economists refer to this as “rent seeking.”³²⁶

“Secondary rent seeking” refers to rents sought by private actors as a consequence of the initial rent-seeking activity. In other words, the secondary rent seeker’s gain is dependent on primary rent seeking, and thus has an incentive to encourage it. An important example is urban revitalization involving the power of eminent domain. Redevelopers lobby for government condemnation of parcels in areas already or subsequently deemed “blighted,” although also having high potential for upscale development. After condemnation, numerous small parcels might be cleared of structures, assembled into superparcels, and transferred to favored developers for lucrative development. “Cases involving delegation of eminent domain to one or a few private parties, or involving condemnation followed by retransfer of the property to one or a few private parties, present the primary situations where such secondary rent seeking is likely to occur.”³²⁷

The interests created by rent seeking often are not mere expectancies, but rather they become a form of property, dubbed by economists “regulatory property.”³²⁸ As with other forms of property, holders fight tenaciously to retain their entitlements.³²⁹ Two aspects of such regulatory property, as enhanced by secondary rent seeking, are the growth of LEED green build-

³²⁵ Amy Lavine, *From Slum Clearance to Economic Development: A Retrospective of Redevelopment Policies in New York State*, 4 ALB. GOV’T L. REV. 212, 269 (2011).

³²⁶ See generally Gordon Tullock, *The Welfare Costs of Tariffs, Monopolies, and Theft*, in TOWARD A THEORY OF THE RENT-SEEKING SOCIETY 39, 48 (James M. Buchanan et al. eds., 1980). The specific term “rent seeking” was coined by Professor Anne Krueger. See Anne O. Krueger, *The Political Economy of the Rent-Seeking Society*, 64 AM. ECON. REV. 291 (1974).

³²⁷ Merrill, *supra* note 180, at 87-88.

³²⁸ See generally Bruce Yandle & Andrew P. Morriss, *The Technologies of Property Rights: Choice Among Alternative Solutions to Tragedies of the Commons*, 28 ECOLOGY L.Q. 123 (2001) (coining the term). The fact that pieces of tin stamped as New York City taxi medallions are worth hundreds of thousands of dollars is a good illustration. *Id.* at 144 n.52.

³²⁹ Recall Justice Oliver Wendell Holmes’s letter to William James, noting that the adverse possessor “shapes his roots to his surroundings, and when the roots have grown to a certain size, can’t be displaced without cutting at his life.” OLIVER WENDELL HOLMES, *Letters to William James*, in THE MIND AND FAITH OF JUSTICE HOLMES 409, 417-18 (Max Lerner ed., 1943).

ing certification,³³⁰ and, more generally, land use regulation as a facilitator of crony capitalism.³³¹

4. Green Building Certification and Secondary Rent Seeking

The U.S. Green Building Council (“USGBC”) is a private organization that certifies green building through its LEED system.³³² “LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.”³³³ Notably, business interests make up 89 percent of USGBC voting members.³³⁴ Currently, “more than 200 federal, state and local government agencies now require [LEED] in hope of conserving energy and minimizing environmental damage.”³³⁵ Professor John Wargo stated, “You’ve got the building industry playing a strong role in setting these standards that are then being adopted as law. I don’t think many people understand that.”³³⁶

The building industry’s influence over LEED, while raising some concerns, also has propelled LEED’s dramatic growth across the U.S. and into 139 countries. LEED has won wide acceptance among people who plan, design and construct buildings as a way to win environmental approval and boost profit. There are 13,500 LEED-certified commercial buildings in the U.S., and another 30,000 have applied for LEED approval.³³⁷

Among other incentives, in some states obtaining LEED certification might carry tax advantages.³³⁸

³³⁰ See *infra* Part III.C.4.

³³¹ See *supra* Part III.B.1.

³³² *About USGBC*, U.S. GREEN BLDG. COUNCIL, <http://new.usgbc.org/about> (last visited Feb. 14, 2013).

³³³ *What LEED Is*, U.S. GREEN BLDG. COUNCIL, <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988&gclid=COXDmsXrobMCFQsf4AodPgMApg> (last visited Feb. 14, 2013). “LEED certification provides independent, third-party verification that a building, home or community was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.” *Id.*

³³⁴ Thomas Frank, *‘Green’ Growth Fuels an Entire Industry*, USA TODAY (Nov. 14, 2012, 10:19 AM), <http://www.usatoday.com/story/news/nation/2012/10/25/green-building-big-business-leed-certification/1655367>.

³³⁵ *Id.*

³³⁶ *Id.* (internal quotation marks omitted).

³³⁷ *Id.*

³³⁸ Clinton G. Wallace, Note, *The Case for Tradable Tax Credits*, 8 N.Y.U. J. L. & BUS. 227, 249 n.96 (2011) (noting that various government units have incentivized LEED certification or similar building standards). “For example, New York State had a Green Building Tax Credit, a semi-transferable credit for buildings that meet certain environmental requirements.” *Id.*

Additional interested parties may also result in lobbying and rent-seeking that has negative consequences for society in terms of efficiency and fairness. In the LEED example, the construction company possibly has another interest: in increasing demand for construction projects generally. This does not distinguish tradable tax credits from other types of government intervention, but the stronger political constituency described here means that a tradable tax credit may become fertile ground for rent-seeking because it will be well-protected by a variety of interests. Recall that this paper assumes that government policymakers can identify activities that create positive externalities but that will not occur without government intervention. Lobbying and rent-seeking may alter this assumption, or at least alter the ability of policymakers to follow through on this assumption. To the extent that strong political coalitions can influence undesirable policy outcomes, the tradable tax credit mechanism may carry inherent risks that are less acute with other forms of tax credit.³³⁹

Those connected with USGBC, or who otherwise have special expertise in LEED, have a special incentive to urge that LEED certification be required for development projects.³⁴⁰ In addition, the use of LEED standards delegates municipal police power regulation into a proprietary system and locks the municipality into that system.³⁴¹

The operation of LEED is a good illustration of a group of knowledgeable and acquainted businesspeople and professionals who work together in devising, applying, and profiting from industry standards, which are incorporated into government programs and become a vehicle for private gain.³⁴²

CONCLUSION

This Article has focused on the need for a more sustainable environment, consistent with the protection of private property rights. This best can be achieved through a broad sharing of environmental burdens together with mechanisms, such as a carbon tax, that permit individuals and land-owning entities to make necessary adjustments in their activities and land use in ways least costly to their overall purposes and enterprise. Environ-

³³⁹ *Id.* at 269 n.150 (citation omitted).

³⁴⁰ *See, e.g.,* Frank, *supra* note 334 (“Maryland LEED expert David Pratt became president of the building council’s state chapter in 2006 and was named to three government advisory groups, which helped persuade Maryland, Baltimore and Howard County, Md., to require LEED certification for new public buildings. The new laws boosted Pratt’s consulting group and his new business selling LEED software—and made Maryland one of the most popular states for LEED.”).

³⁴¹ *See* Douglas S. Reiser, *Construction Goes “Green”: Adapting to Green Construction Standards and the Laws Behind Them*, in *NEW DEVELOPMENTS IN GREEN CONSTRUCTION LAW* 33, 41-42 (2011).

While the LEED mandate might sound like a step in the right direction, many in the legal arena cringed when public agencies began to dabble in LEED mandates from private construction. Detractors worried that public agencies were relying too much on private, third party review, and demanding an exceptional building standard of normal commercial building.

Id. at 39.

³⁴² *Cf.* Canova, *supra* note 321, at 1583 (noting collaboration among professionals and officials).

mentalism is not incompatible with strong property rights. Both, together, can help develop a more prosperous, stable, and sustainable world.³⁴³

³⁴³ See Kalen, *supra* note 69, at 114 & n.6.