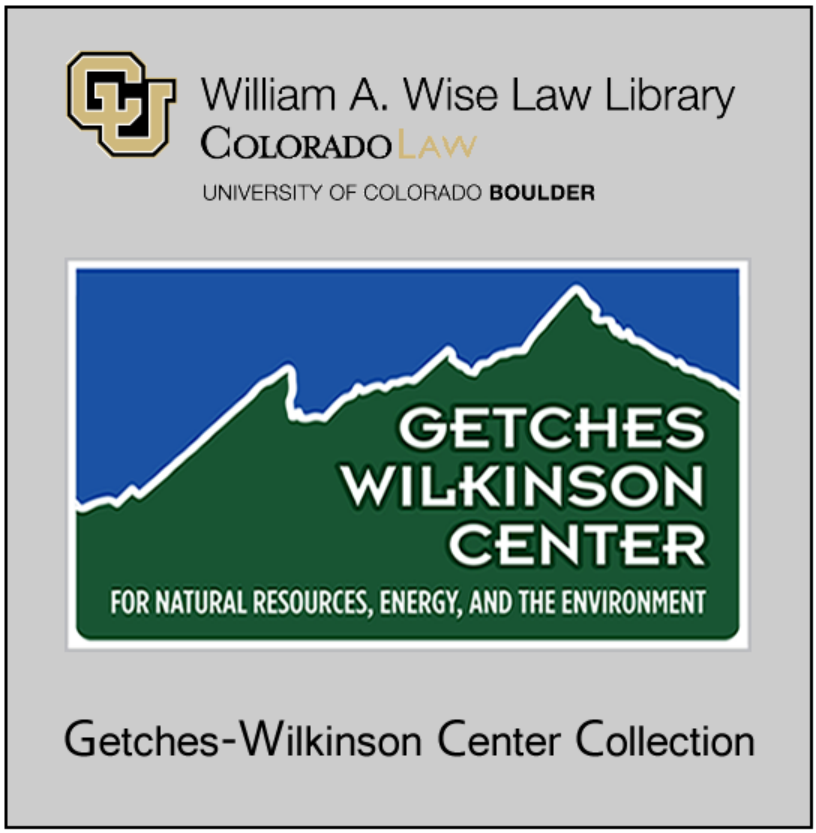
6-6-2007

Historical Evolution and Future of Natural Resources Law and Policy: The Beginning of an Argument and Some Modest Predictions

Sally K. Fairfax

Helen Ingram

Leigh Raymond



Sally K. Fairfax, Helen Ingram & Leigh Raymond, *Historical Evolution and Future of Natural Resources Law and Policy: The Beginning of An Argument and Some Modest Proposals*, *in* THE FUTURE OF NATURAL RESOURCES LAW AND POLICY (Natural Res. Law Ctr., Univ. of Colo. Law Sch. 2007).

Historical Evolution and Future of Natural Resources Law and Policy:
The Beginning of An Argument And Some Modest Predictions

Sally K. Fairfax, Helen Ingram, and Leigh Raymond

The purpose of this paper is to locate the evolution of natural resource law and policy within the larger evolution of Americans' understanding of government and property; and to use the trajectory of that evolution to suggest some likely patterns of future developments. In this discussion we follow closely the role of science and property in the centralization of control over land and water.

I. The Trajectory in Six Eras

1. The First Hundred Years

The Articles of Confederation--Limits on its powers did not stop the Confederated Congress from taking initial steps toward establishing the Army Corps of Engineers, or deter the Congress from adopting a series of General Land Ordinances[1] in 1785 and 1787 domain.

Property rights of the era were grounded in the ideas of John Locke: ownership was frequently defended based on individual labor and frequently conceived of in relation to concrete, material objects – in particular, to land.[2] The vision of property as a highly divisible "bundle of sticks" with separable rights moving among multiple owners would not arrive for another 100 years.[3] In the humid eastern colonies, property rights in water were tied to ownership of the land, a right to reasonable use of whatever flowed past or fell from the sky.[4] Similarly, management was closely tied to ownership: what the man and his slaves or workers did on the man's farm.

The Federal Constitution--The Constitution created small concrete steps toward and enormous potential for centralization. It recognized the federal government's right to own and manage western territories, albeit temporarily. The federal government's role was originally understood as limited to the rights of a "mere proprietor,"[5] plus the responsibility for the "primary disposal of the soil," to assure the orderly development of

---

[1] Once you have read Gates, History of Public Land Law Development (1968), especially Chapters 1 and 3, the best sources are from the acts' bicentennial period: Peter S. Onuf, Statehood and Union: A History of the Northwest Ordinance (1986); Robert M. Taylor, Jr., The Northwest Ordinance 1787: A Bicentennial Handbook (1987), and John J. Patrick, Lessons on the Northwest Ordinance (1986).

[2] William B. Scott, In Pursuit of Happiness: American Conceptions of Property from the Seventeenth to the Twentieth Century (1977); R. Jeffrey Lustig, Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920 (1982).

[3] Morton J. Horwitz, The Transformation of American Law 1870-1960 (1992); Eric T. Freyfogle, The Owning and Taking of Sensitive Lands, 43 UCLA L. Rev. 77 (1995)

[4] Riparian doctrine was not all that simple but the basics were familiar and imported from England. But see, regarding more arid, Spanish colonies of the same general period, Sonya Lipsett-Rivera. *To Defend Our Water with the Blood of Our Veins: The Struggle for Resources in Colonial Puebla (1999).* .

[5] Cowart and Fairfax. "Public Lands Federalism: Judicial Theory and Administrative Reality," 15 Ecology Law Quarterly 375 (1988)

the western territories. That is, in Article I, Congress was authorized to make all rules regarding to whom and on what terms the public domain would pass into state or private ownership. The federal government as primary disposer began rather free handedly and remained that way well into the 20th century.

On the other side of the land coin, government authority over private property was limited in part by the Fifth Amendment. Until the late 19th century, the dominant Fifth Amendment issue related to the justness of compensation: the courts weighed "givings" against takings to assess a transaction's "just-ness."[6]

Surprising, perhaps, since the Constitution does not mention water, Congress early on took a more activist role regarding early water policy. Water management was rooted in science long before George Perkins Marsh and the Progressive era. The Corps of Engineers was the only formally trained body of scientists in the new republic. Further, the as part of the nation's small army, the Corps was available to serve the wishes of Congress and the executive branch.[7] Enthusiasm for federal subsidies was a very early pattern in natural resource law and policy: politicians wanted the Corps to undertake both military construction and works "of a civil nature."[8] Familiar elements of the ACE's current profile were carved in stone by the 1824 Supreme Court ruling in Gibbons v. Ogden. Centralization, scientization and subsidies were early defined by water policy.

2. **Post- Civil War—Industrialization, Expansion, and the Corporation**

American's points of reference for life changed radically,[9] and expectations of government changed accordingly. Well-organized and diverse private interests followed the ACE model and lobbied Congress for programs that would meet their priorities.

As the 19th century closed, federal authority over public land expanded under a more expansive reading of the ambiguous Article I property clause combined with the federal government's equally ambiguous Article IV power of "exclusive legislation" over forts,

---

[6] See for starters, the ubiquitous but controversial Abraham Bell & Gideon Parchomovsky, *The Giving and Taking of Property* (Forthcoming 2007). See also Abraham Bell & Gideon Parchomovsky, *The Uselessness of Public Use*, 106 Colum. L. Rev. (Forthcoming); *Taking Compensation Private*, 59 Stan. L. Rev. (Forthcoming). *Of Property and Federalism*, 115 Yale L. J. 72 (2005); *A Theory of Property*, 90 Cornell L. Rev. 531 (2005); *Of Property and Anti-Property*, 102 Mich.L. Rev. 1 (2004); *Not Just Compensation*, 13 J. Contemp. Legal Issues 29 (2003); *Givings*, 111 Yale L. J. 547 (2001).

[7] The Corps history is adapted, cut and pasted from http://www.hq.usace.army.mil/history/beg last visited April 8. 2007.

[8] The Corps history is adapted, cut and pasted from http://www.hq.usace.army.mil/history/beg last visited April 8. 2007.

[9] A good general source is LAND RIGHTS: THE 1990'S PROPERTY RIGHTS REBELLION (Bruce Yandle ed. 1995), especially Nancie G. Marzulla, *The Property Rights Movement: How it Began and Where it is Headed* 1-30. *See also* N. Ehrenreich, *A Trend?: The Progressive Potential in Privatization*, 73 DENV. U. L. REV. 1235 (1996).

arsenals and similar land acquired by the government for specific purposes.[10] The federal government morphed from a mere proprietor to a proprietor plus to a sovereign in a series of court cases starting with Camfield in 1897.[11] Acquisition of land by the federal government for similar purposes was soon to follow.[12]

3. **The Progressive Era**[13]

The transformative power of the railroads gave rise to new ways of organizing capital flows, natural resource consumption, industrial management, and property. Progressive activists relied on the idea of scientific management to expand government agencies like the Forest Service[14] and the Reclamation Service and to consolidate their control over vast portions of the federal estate.[15] The imported and putatively scientific field of forestry gave legitimacy to some centralization, [Light (1911)[16] and Grimaud (1911)[17]] even during the Supreme Court's Lochner era efforts to stem the rising tide of unscientific social regulation.[18]

Federal subsidies of water development and irrigation intensified. Yet the apparently centralizing era is complicated by the fact that the federal reclamation crusade soon had to relinquish control to compromise with water users. [19] Similarly, the apparent severance of the federal property owner's riparian water rights from the public domain lands made room for the ascendancy of state administered prior appropriation systems to replace riparian rights in most western jurisdictions. [20]

Underwriting these complex developments was an equally complexifying notion of property, which morphed from its Lockean roots to permit both federal initiatives and

---

[10] Discussed, with appropriate brevity in L. Raymond and S. K. Fairfax. Fragmentation of Public Domain Law and Policy: An Alternative to the 'Shift to Retention' Thesis. 39 Natural Resources Journal 649-753 (1999). See also, Fairfax, et al, Buying Nature, at .
and will less brevity in the materials cited therein. Originally the federal government was not viewed as having the power of eminent domain within states. The states acquired what lands the feds needed within their boundaries and donated it to the central government. That changed in 1888.

[11] Camfield v. U. S., 167 U.S. 518 (1897)

[12] Fairfax et al., Buying Nature at ____ (2005).

[13] For our basic view of the progressive era, see L. Raymond and S. Fairfax, *Fragmentation of Public Domain Law and Policy*, 39 NAT. RESOURCES J. 649 (1999), at 656-660 and references cited therein. See also, SAMUEL P. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY (1959) and ROBERT H. WIEBE, THE SEARCH FOR ORDER: 1877-1920 (1967).

[14] Samuel P. Hays, Conservation and the Gospel of Efficiency (1999).

[15] Raymond and Fairfax, *supra* at 669-671. For more detailed treatments, *see* James Q. Wilson, *The Rise of the Bureaucratic State*, 41 THE PUBLIC INTEREST 77 (1975), or STEPHEN SKOWRONEK, BUILDING A NEW AMERICAN STATE: THE EXPANSION OF NATIONAL ADMINISTRATIVE CAPACITIES, 1877-1920 (1982).

[16] Light v. US, 220 US 523 (1911)

[17] U S v. Grimaud, 220 U.S. 506 (1911).

[18] The legislative fall out from The Octopus and the rise of the US Forest Service may have passed judicial scrutiny because they were scientific. Just a hypothesis.

[19] According to Karen Smith, excessive costs resulted for the Federal government because there were not adequate numbers of settlers to occupy the newly irrigated lands in Nevada. *The Magnificent Experiment: Building the Salt River Project, 1880-1917.* Tucson: University of Arizona Press, 1986.

[20] Robert G. Dunbar, *Forging New Rights in Western Waters* (1983).

corporate expansion. Modern corporations pushed the law to recognize a growing division of labor between owners (the shareholders), who held the right to a company's revenue, and managers who exercised primary control over the day-to-day operation of the company.

Supreme Court decisions giving private entrepreneurs something close to ownership of "a particular legal environment" considerably expanded the scope of private property beyond land and material goods.[21] Populist and progressive reformers alike contested many of these changes.[22] Ironically, the courts also thwarted the corporate grasp on the Chicago waterfront,[23] and invented a federal quasi-appropriative water right to bolster federal land reservations for Native Americans.

4. **The Depression**

The Depression can be understood as the ultimate flowering of progressive era ideas:[24] the Progressive era's centralization and faith in scientific expertise peaked as the feds moved front and center in natural resource, water, and land use planning. Agricultural relief programs allowed the federal government assumed the right to adjust almost any ownership pattern what was not socially and economically optimal, Lockean property rights bottomed out.[25]

But the Taylor Grazing Act[26] underscores that this Progressive era overlay on a profoundly Lockean tradition of property, not an about face but a complication of ownership. To illustrate, under the 1934 Taylor Grazing Act, the newly created Division of Grazing was very keen to continue recognizing Lockean based claims to control over the public domain, as mitigated by important egalitarian and subsistence considerations.

4. The Environmental Era

Depression Era enthusiasm for centralized government science lasted through the first heady days of the 1970s and then petered out as science complexified as a source of government authority. Environmentalists generally followed the established path to Washington to address the growing concerns with air and water quality. But

[21] Morton Horowitz. The Transformation of American Law, 1870-1960: The Crisis of Legal Orthodoxy (1992).
[22] Indeed, it is fair to observe that the federal and state legislatures were encouraged by progressive reformers and discouraged by the Supreme Court regarding regulation of the expansive economy in what is now somewhat controversially called the Lochner Era. See Cass R. Sunstein, Lochner's Legacy, 87 Colum. L. Rev. 873 (1987). But compare the conservative reposte, for example, Bernstein, David E., "Lochner's Legacy's Legacy" . George Mason Law & Economics Research Paper No. 03-15 Available at SSRN: http://ssrn.com/abstract=394861 or DOI: 10.2139/ssrn.394861
[23] Illinois Central Railroad v. Illinois , 146 U.S. 387 (1892)
[24] The standard conceptualization is either that FDR completed TR's mission (Swain) or displaced it with a new vision (Schlesinger).
[25] Buying Nature, discussing Wooton. This was virtually always to the advantage of the owners however, See the discussion of the Weeks Act and its Depression Era expansion, supra.
[26] 43 U.S.C. §§ 315-316o, June 28, 1934,

simultaneously, they challenged government science in wilderness debates, grazing debates, the clear cutting controversy and ever more generally.

With astonishing speed, the federal government passed one major statue after another in the post-Earth Day fervor of the era, dramatically enhancing central authority over many aspects of our lives. Suddenly, scientific experts at the newly constituted Environmental Protection Agency were charged with setting acceptable levels of air and water pollution without regard to cost or industry concern.

Yet, the public lands agencies found themselves embroiled in public controversy over the recreational and increasingly ecological effects of standard management practices. The National Forest Management Act[27] (NFMA), the Federal Land Policy and Management Act[28] (FLPMA) imposed a complex, comprehensive, long-term resource assessment on federal managers. The planning mandated public involvement and opened the agencies to public scrutiny.[29] An energized judicial reading of the APA[30] and NEPA subjected all federal agencies to intense public and judicial scrutiny as scientific bureaucracy gave way.

And, yet again, the limits of environmental movement became clear when Jimmy Carter had to rescind his plan for cutting funding for eighteen ongoing water projects. However, more arduous economic and environmental reviews were instituted, and a precedent of "no new starts" of additional projects was established in 1981, although the Corps did continue to get money for "preauthorization studies"[31]. The tougher standards of evaluation along with the fact that most good dam sites had already been used suggested that the era of big days was over.

6. **The Regan Revolution**

Regan and his successors moved into this growing complexity by exalting markets and private property and discouraging confidence in government action and regulation. While Reagan failed to dismantle the federal regulatory infrastructure of the 1970s, his efforts undermined its credibility. The tuna-porpoise debates at the WTO suggested, moreover, that perhaps it did not matter what Congress said.[32]

---

[27] 6 U.S.C. §§ 1600-1614, August 17, 1974, as amended 1976, 1978, 1980, 1981, 1983, 1985, 1988 and 1990.

[28] 43 U.S. C. §35. Described from the Bureau of Land Management's perspective in The Federal Land Policy and Management Act as Amended available at http://www.blm.gov/flpma/FLPMA.pdf

[29] Achterman, G.L. and S.K. Fairfax. *The Public Participation Requirements of the Federal Land Policy and Management Act*. 21 ARIZ. L. REV. 501 (1979).

[30] See generally, Richard Stewart, The Reformation of American Administrative Law, 88 HARV. L. REV. 1667, 1682-83, 1713-15 (1975). See also, Scenic Hudson v FPC, 354 F.2d 608 (2d Cir. 1965).

[31] Jeanne Nienaber Clarke and Daniel C McCool, *Staking Out the Terrain: Power and Performance Among Natural Resources Agencies* ,Albany: Statue University of New York Press, 1996.

[32] Perrin, William F., CHRONOLOGICAL BIBLIOGRAPHY OF THE TUNA-DOLPHIN PROBLEM, 1941-2001. NOAA Technical Memorandum NOAA-NMFS-SWFSC-356, 194pp. (2004)
. Available on the web at http://swfsc.noaa.gov/uploadedFiles/Divisions/PRD/Programs/ETP_Cetacean_Assessment/TPBiblio.pdf .

Not helping matters any was a growing sense of concern over whether federal scientists were really as non-partisan or as competent as we all had hoped.[33] Spurred by early skeptics like Ashley Schiff,[34] critics of the public land agencies increasingly wondered if the federal scientists had the right ideas on basic issues like fire management to species conservation to pesticide use. Ever more prominent and more intense conflicts over good versus "junk" science helped to further weaken public faith in scientific experts at the federal level and otherwise.[35]

But a large part of the conversation had moved to regulation on private lands: a series of modest Fifth Amendment victories[36] encouraged more market-based alternatives to conservation increasingly being promoted by free market thinkers of the period.[37] Land trusts touted "private" land conservation without government acquisition or regulation.[38] Common rights in resources were routinely marketized: environmental groups have paid ranchers for livestock killed by endangered wolves, for example, and have tried to bid on grazing permits and timber sales as conservation buyers.[39] Others have bitterly resisted this ongoing "commodification" of nature.[40]

Rumors of the demise of public regulation over private land were exaggerated. Nevertheless, the reluctance to use the full force of the federal regulatory hammer, especially on private lands, was increasingly palpable and the search for more collaborative, and creative, alternatives to increasingly intractable conflicts was growing.[41]

The final result, as our story nears the present, is complexity. Hundreds of local groups organized around watersheds have tried, with uneven success, to manage their mixtures of federal and/or private lands better than commodity users or federal managers could do alone.[42] Some have firmly excluded the feds from the process (e.g. the Quincy Library Group), while others have included them closely (The Land Trust Alliance) but they are all searching for more collaborative, less confrontational ways to manage natural resources that span various institutional boundaries.[43] And, despite the best efforts of conservative politicians and their allies, there has been no swing back to a happier time of

[33] Herbert Kaufmann, "Revolutions in the Doctrine of Public Administration." APSR 1954.
[34] Ashley Schiff, Fire and Water: Scientific Heresy in the U.S. Forest Service. (1962)
[35] See Samuel Hays, Beauty, Health, and Permanence: Environmental Politics in the United States 1955-1985 (2004)
[36] A limerick on the subject would have to include First English, Lucas, Dolan, and Nolan.
[37] Anderson and Leal, FME.
[38] Raymond and Fairfax (2002) supra.
[39] Sally K. Fairfax and Andrea Issod, "Trust Principles as a Tool for Grazing Reform: Learning from Four State Cases." 33 Environmental Law (2003).
[40] For a nice sample of this, see Timothy Luke, *Ecocritique* (1997), especially chapter 3 on The Nature Conservancy.
[41] Oliver Houck, (1993); DeWitt John, *Civic Environmentalism* (1994), Craig Thomas, *Bureaucratic Landscapes* (2003) on NCCP example of all this.
[42] Douglas Kenney here?
[43] Fairfax et al. (2005) penultimate chapter (thinking of that park in DC if you want to riff here Sally – or Whidbey up in Washington?)

private rights ascendant. There has been instead a profusion of actors, and arrangements, and institutions resulting in growing mosaics of conservation and use on the ground.

Part III. The Next 50 Years: Where Does our Trajectory Take Us

1. Review: So Where Are We Now, Approximately?

a. Goals of Natural Resources Law and Policy

Government and public goals have varied enormously during our trajectory. However, since the very first, private and then corporate quest for profit has never varied. Neither has the basic policy tool: subsidies—in the form of give aways or regulations that burden the opposition have dominated policy.

b. Science and Natural Resource Policy

The government science that justified a growing federal role has departed the field. Science is now recognized as plural, uncertain, and branded by the contexts in which it is produced. [44] The result is more complexity.

c. Property

After years of embracing markets and "blurring" the distinction between public and private property, policy entrepreneurs are now talking actively about the National or Global Commons being owned equally by citizens of a given state or the world.[45] This "intrinsic" right to natural resources based simply on equal human rights is ironically but substantially Lockean.[46] Also ironic is the fact that such ideas could usher in an era of stronger asserted public control over natural resources like public lands and water, rather than weaker, even as public institutions implement those controls through market-based mechanisms.

IV. Where Do These Trajectories Take Us

Global climate change will impose new priorities on government that will further erode public confidence in political processes: resources will be ~~m~~anaged to prevent the disasters, flood, fire, intense storms, coastal inundation and inadequate potable water.

This new goal set will further discredit political decision making that is already under assault from incompetence, corruption, dishonesty and public recognition of all of those things.

[44] The Data Quality Act snuck through Congress as Sec. 515 of the Treasury and General Government Appropriations Act for 2001 (Public Law 106-554). It names a problem that it solves
[45] Barnes (2001)
[46] Climate change: see Agarwal and Narain (1991), Shue (1993); minerals, see Raymond (2007); water, see New Yorker article on Bechtel in Bolivia (get cite)

The comprehensive long range planning, ecosystem management, sustainability, and other slogans of the late 20th century government resource programs will fall of their own weight: we simply cannot afford the science required or the monitoring that ostensibly follows. The era of strong, centralized, scientific government control of public resources is ending, being replaced in part by an era of markets.

We anticipate that the dominant resource problem, the one that will shape institutions will be a growing crisis in water availability. As this arena becomes increasingly marketized, science will provide less succor for advocates of public decision making.

That is not to say that science will disappear as an element of decision making. Although science wars were once thought to discredit all science, increasing controversy has appeared to democratize science so that citizen scientists collect their own data and do their own monitoring. Science is no longer a trump card, but one will still have to have some to have a winning hand.

Government agencies will not, typically, hold that hand. Instead, the epicenter of 21st century resource policy and management will be a combination of private property and the new property described half a century ago by Charles Reich: The right to or ability to generate government largesse. It is an overstatement to assert that government will continue to have influence because those who benefit from subsidies will have to cede it enough authority to continue raising and collecting taxes but that will be a large part of it. On the other hand, a small but growing trend toward greater collective ownership of public resources, often expressed through quasi market-based institutions like the "sky trust," shows another, more populist and egalitarian side to this ongoing transformation of public resource management. To what degree these "new" property rights will be traditional subsidies to powerful interests or more egalitarian forms of common ownership remains a vital unanswered question.

Given the past 200 years of history, however, it is hard to be optimistic. In this sense, it seems likely that the political discourse and government priorities for resource management in general and water in particular will recede in importance. Thus, we wager on "more of the same" and perhaps much more in the critical area of water policy. As sea levels rise and extreme weather events become more common, there will be intense pressure to return to the construction of dams and levees, even though many agree that such projects do not provide solutions.

It seems unlikely that recently installed public participatory mechanisms will be dismantled, but the water resources community has a long history of fashioning multipurpose projects that have something in them that is attractive to nearly every constituency. More generally, natural resources governance will increasingly become network activity that associates private property owners, primarily global corporations, in negotiations with NGOs and governmental actors.