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Commentaries

Land Use, Science, and Spirituality: The Search for a True and Lasting Relationship with the Land

Charles Wilkinson*

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I. INTRODUCTION

Unfortunately, in addressing the issue of land use in the West, the point of departure has to be the shadows of sadness that most westerners see moving across the landscapes we love so. That's not to say that the land no longer uplifts and heals us, for it surely still does. Yet now we live with an unease, an uncertainty, still other shadows on the land.

What a confusing time. In this election year, the TV tells us how fine America is doing, how a candidate's job is to keep America moving ahead on the same fast track. Yet by now we have learned too much and it nags at us: global warming; acid rain; species extinction that Edward O. Wilson estimates is taking place at 1,000 to 10,000 times the rate before our species walked the earth; and, in more concrete terms in every day America, clogged-up traffic, crowded classrooms, and bulldozers scouring new subdivisions at the edge of town.¹

^{*.} Moses Lasky Professor of Law and Distinguished University Professor, University of Colorado. This Article was presented in Missoula on April 14, 2000, as the keynote address at the annual conference of the Public Land and Resources Law Review. I initially developed some of these ideas in an address at the Public Interest Law Conference at the University of Oregon. I send out my gratitude to my assistants, Anna Ulrich and Cynthia Carter, for their many contributions.

I dedicate this Article to Ellen and Bob Knight of Missoula, who exemplify the kind of citizen commitment that can in time create a sustainable relationship with western lands.

^{1.} Edward O. Wilson's analysis of extinction rates can be found at THE BIOPHILIA HYPOTHESIS 33-38 (Stephen R. Kellert & Edward O. Wilson eds., 1993). See generally EDWARD O. WILSON, THE DIVERSITY OF LIFE (1993).

The shadows are especially poignant and painful here in the West, where the land is so entwined with daily life. At the end of World War II, the West held 17 million people. Then the boomers got what they have always wanted: The Big Rock Candy Mountain. Today, the region holds 60 million.² In that short flash, the cities went to metropolises and then to megalopolises. In the country, the towns have grown to cities. This is not some continuation of past trends. Like the loss of species, it is a radical break from the past, a difference in kind, not degree. The West is under assault, under construction, up for sale, up for grabs.

Let me explain, through one of my laments, one way I think of the radical revolution that has swept over this region so quickly.

For twelve years I taught at the University of Oregon Law School, and lived in the broad, green, giving Willamette Valley. I loved to hike and fish the upper Willamette River and its tributaries. One day, I pulled over, parked, and hiked a river trail along the Willamette, just poking around.

I came over a rise and faced Dexter Dam, which was upriver. I walked on and stood on a slope near the dam looking into the pool below it. The dam was storing water, not releasing much.

It was spring and a few salmon, no more than ten, were circling in the quiet water. I found myself watching one fish in particular. He approached the dam, nosed up against it, then circled back. Then he made a run at the concrete barrier. Of course, it was futile and he careened off to the left. Then he circled back and charged the dam again. And again. And again.

I couldn't watch anymore. I knew this was a total blockage. All the spawning ground upriver—his homeland—had been shut down. There was no hope for him, no place to go. I went back to my car and did my best to find some satisfaction in the fact that, although the clearcuts out of the Oakridge Ranger District had wounded the forests and altered the stream flows, at least the trout I would pursue in the high country above the dam could live their lives much as they always had.

I felt despair for that salmon, but he was not my whole lament, for the old rivers also flowed through my mind. I knew a little about those rivers directly—I've seen some good salmon runs and one great one—but most of what I know of the old rivers, which are real to me, has come to me through the stories of friends, old hands who knew the country before the changes.

Some of them are from the Siletz Tribe, over on the central Oregon coast. Art Bensell, who's gone now, was born in the second decade of the last century and grew up when the land was still mostly natural, before the dams and big clearcuts. When he was a little boy, Art used to take salmon for his family out on Dewey Creek, a slip of a stream that flows past the edge of the town of

See U.S. Department of Commerce, Bureau of the Census, Homepage. http://www.census.gov/population/www/estimates/.html (visited May 31, 2000).

Siletz. Not much of a stream, but in the early fall the rains would build it up, energize it, and give the chinook incentive to charge up to the redds where they were born. Art, just eight or nine, who had no spear or net, would be out there with a pitchfork, waiting for them, ready to lay in food for the winter. The hefty fish—twenty, thirty, forty pounds, almost Art's weight—would blast up Dewey Creek. Art said it was like they were everywhere, and he would stab at them with his unlikely, inefficient weapon and wrestle them up on the shore. He would take ten, twenty, maybe thirty, some for the grill that night and the next, most for the smokehouse.

Art never swore much. Once he told me, though, looking back to the little boy he once was: "Those chinooks were strong and fast and they'd knock me down. Flat down. That damned creek was freezing. Those rocks were rough. But what the hell could I do?"

A generation later, Stanley Strong came back from World War II, a proud veteran. Stanley, too, was Siletz and he, too, is gone now. Stanley told me a story about the mainstem Siletz River just after the war.

When he got back from far Europe, on a bright September day, the first thing he did was to take a hike up the river trail that tribal people had used for thousands of years. As he walked along, on a bluff above the river, a large cloud came over. "It worried me," Stanley told me, "that I hadn't brought my jacket. So I pulled my collar up high on my neck.

"Then I looked up and the sun was still shining. No clouds in the sky.

"Then I looked back at the river. I should have known. It wasn't a cloud that had turned our river black. It was the fall run of Siletz River chinook."

And so, today, although we revel in our recent ventures into glacial Bob Marshall or volcanic Three Sisters or sheer-walled Canyonlands, we are burdened by ravages of development and population growth that have recast the West. We have our laments. It is no pleasure to recount them but we disserve a noble cause, and the truth, if we do not. Despite the discomfort, and the pain, we need to tell it straight—to ourselves, to others.

I believe there is another aspect to telling it straight, which is, that despite the relentless growth machine, we can still reclaim the West. To be sure, growth seems to have an armor of inevitability and trying somehow to stem it, slow it, or even manage it can seem beyond our comprehension. Yet we can now realize that we are in a dynamic time, perhaps in the early stages of still another revolution. Public opinion is surging. All the polls support increased protection of the environment. Growth is one of the most pressing public

issues in every western state and number one in several.³ This has happened very quickly for the ravages of the post-World War II boom snuck up on us. The watchword had always been that any growth was good growth in this region that thought of itself as a backwater.⁴ Then, in the 1970s, signs of discontent over growth began to appear in the three coastal states.⁵ In the interior West, anxiety became widespread in the late 1980s and 1990s. Now, just as the magnitude of development is unprecedented, so can we also say that the public reaction against it is without precedent.

But public concern is just an abstraction unless it is manifested in action and I, at least, am convinced—in a way I was not a few years ago—that we have moved into an era of action and that we are making some considerable progress toward making a land ethic into a working public policy. I don't mean to diminish the force of development in the West-it is a mighty, hard-edged machine—but when we piece together recent accomplishments, say, over the course of the past decade, we find a society that has begun to put its ideals into impressive action. These concrete achievements ought to give us the heart to refuse to guit and to build a determination that westerners will not tolerate the wrecking of the West, that people who love the lands and waters of the West can in time create their own inevitability, and that the forces of unsustainable development absolutely will be slowed and in time brought to a halt.

Land policy in the West can be understood as proceeding in four broad arenas. One, and perhaps now the most important, is comprehensive land-use planning at the state, regional, and local levels. But land-use planning in that sense is linked in important ways, direct and indirect, with the other three areas: policy regarding government-owned lands—federal, state, and tribal; the work of non-profit land trusts; and river policy. The four areas should, and increasingly do, interact. By looking at the startling accomplishments made in those areas in recent times, we can begin to appreciate the resolve of the people and the possibilities for the future, including the realistic chance that within a generation we can bring our official policies into harmony with these lands we so revere.

^{3.} See, e.g., Kathleen Ingley, 73% of Arizonans in Poll Support Control of Sprawl, ARIZ. REPUBLIC, May 28, 1999, at B1; Jane Anne Morrison, Voters Cite Growth as Top Issue, LAS VEGAS REVIEW-JOURNAL, Apr. 30, 1999, at 1A; Suzette Brewer, Biggest Threat: Rampant Growth, DENV. POST, Feb. 16, 1996, at B2; Roger M. Showley, Growth Is Major Issue Across Country, SAN DIEGO UNION-REVIEW, Feb. 20, 2000, at H4; Fred Brown, Growth Bills, DENV. POST, Apr. 5, 2000, at B9.

^{4.} On pro-growth attitudes in the Southwest, see CHARLES WILKINSON, FIRE ON THE PLATEAU: CONFLICT AND ENDURANCE IN THE AMERICAN SOUTHWEST 172-185 (1999) and the authorities cited there.

^{5.} One notable event was the adoption by Oregon of the Land Conservation and Development Act in 1973. OR. REV. STAT. ANN. §§ 197.005-20. See infra note 90 and accompanying text.

^{6.} See supra note 3. See, e.g., Marty Trillhaase, Eastern Idaho Residents Lead Concern Over Growth, Poll Shows, IDAHO FALLS POST REGISTER, Jan. 28, 1994, at A1; Paul Larmer and Ray Ring, Can Planning Rein in a Stampede?, HIGH COUNTRY NEWS, Sept. 5, 1994 at 6; John B. Cromartie and John M. Wardwell, Migrants Settling Far and Wide in the Rural West, 14 RURAL DEVELOPMENT PERSPECTIVES 2 (1999).

I would like to assess each of the four areas of western land policy I've just mentioned, leaving state and local land-use planning for last because of its primacy and because there are lessons from the other areas that can be of considerable use in land-use planning.

II. POLICY TOWARD GOVERNMENT-OWNED LANDS

A. Federal Lands

When we examine the history of the western federal public lands—fully one-half of all land in the region⁷—in the year 2000, we can mark down four eras as the most significant. Earliest is the bombastic time of the mid-nine-teenth century, spurred by the California Gold Rush, when we set in place laws to allow nearly unrestrained extraction.⁸ Then comes the time at the turn of the last century—the time of Muir and Roosevelt and Pinchot and Mather—when Americans created and implemented a conservation ethic.⁹ Next is the tumultuous post-World II era, when the cities of the West boomed through the development of the public's deep forests; the fast rivers and sheer canyons, so perfect for concrete impoundments; and deposits of coal, oil and gas, and uranium.¹⁰ And, fourth is the past generation, especially the 1990s when prodigious changes in the ways public lands and resources are administered brought an end to the West as a place premised on natural resource extraction.

In early 2001, Bruce Babbitt will finish his term, having served, along with Stewart Udall, longer than any Interior Secretary except Harold Ickes of the FDR administration. And surely Babbitt must be considered in their company as our greatest secretaries for it has been Babbitt's work, more than any other factor, that has moved the public lands away from extraction-first toward sustainability.¹¹

- 7. See Bureau of Land Management, Public Land Statistics 5 (1991).
- 8. See generally Charles F. Wilkinson, Crossing the Next Meridian: Land, Water, and the Future of the West (1992).
- 9. For treatments of this period, see generally Samuel P. Hays, Conservation and the Gospel of Efficiency (1980); Harold K. Steen, The U.S. Forest Service: A History (1976); Stephen Fox, John Muir and His Legacy: The American Conservation Movement (1981).
- 10. On post-war urban growth in the West, *see* Carl Abbott, The Metropolitan Frontier: Cities in the Modern American West 57-68 (1993); Gerald D. Nash, The American West Transformed: The Impact of the Second World War (1985).
- 11. To date, the three longest serving secretaries are Ickes (twelve years in the Franklin Roosevelt administration), Udall (eight years under Kennedy and Johnson), and Ethan Hitchcock (eight years under Wilson). Administration: For the Books, NAT'L J., May 22, 1999. On Ickes, see T.H. WATKINS, RIGHTEOUS PILGRIM: THE LIFE AND TIMES OF HAROLD L. ICKES, 1874-1952 (1990). On Udall, see, e.g., FIRE ON THE PLATEAU, supra note 4, at 216-223; MICHAEL P. COHEN, THE HISTORY OF THE SIERRA CLUB 268-273 (1998) (Udall's conservation achievements). On Babbitt, see, e.g., Michael Riley, Babbitt Thrives in Crossfire of Industry, Environmentalists, HIGH COUNTRY NEWS, Aug. 22, 1994, at A1; Sean Paige, Seizing Land for Posterity, WASH. TIMES, Feb. 7, 2000, at Insight 1.

The Hardrock Mining Law of 1872¹² is still on the books, but in fact it is a very different legal regime than when Babbitt took office. He defiantly stalled on the handing out of patents and, when a court ordered him to act, called a press conference to announce the issuance of patents and a check—which he displayed in a poster-sized version—from the American people to the American Barrick Mining Company in the amount of \$10 billion.¹³ It was not long before a congressional appropriations rider, still in effect, barred the processing of patents.¹⁴ A series of legal opinions, written by mining-law expert Interior Solicitor John Leshy, interpreted provisions in the 1872 law to limit mining.¹⁵ The Department is administering the old act more rigorously to limit pollution and damage to the land¹⁶ and is deep into the process of amending the BLM mining regulations so that mining companies will be regulated in a manner consistent with our contemporary determination to protect public health, lands, and rivers.¹⁷

In a very different arena, where western ranchers have been steadily improving their grazing practices, 18 the Interior Department rewrote the grazing

^{12. 30} U.S.C. § 22-54 (1994). For a comprehensive treatment of hardrock mining, see JOHN D. LESHY, THE MINING LAW: A STUDY IN PERPETUAL MOTION (1987).

^{13.} See Tom Kenworthy, A \$1 Billion Return for \$275, WASH. POST, Sept. 7, 1995, at A17; Sam Kalen, An 1872 Mining Law for the New Millennium, 71 U. COLO. L. REV. 343 (2000). On the ordering of Secretary Babbitt to issue mining patents, see Barrick Goldstrike Mines v. Babbitt, No. CV-N-93-550 HDM (PHA) (D. Nev., filed March 21, 1994) (described in Independence Mining Co. v. Babbitt, 885 F. Supp. 1356 (D. Nev. 1995)). See also Memorandum, Bruce Babbitt, Secretary, United States Department of the Interior to Assistant Secretary, Land & Minerals, and Acting Director, Bureau of Land Management, Upgrading Hardrock Mining Environmental Regulation (Jan. 6, 1997).

^{14.} Department of Interior and Related Agencies Appropriations Act, 1995, Pub. L. No. 103-332, § 112, 108 Stat. 2499, 2519 (codified as amended in scattered sections of 25 U.S.C., 43 U.S.C., and 48 U.S.C.).

^{15.} See Memorandum, from John D. Leshy, Solicitor, U.S. Department of the Interior to Director, Bureau of Land Management, Regulation of Hardrock Mining, (Dec. 27, 1999) [hereinafter Leshy Regulation Memo], discussed infra in text accompanying notes 63-65; Memorandum from John D. Leshy, Solicitor, United States Department of the Interior to Director, Bureau of Land Management, Patenting of Mining Claims and Millsites in Wilderness Areas, M-36994 (May 22, 1998); Memorandum from John D. Leshy, Solicitor, United States Department of the Interior to Director, Bureau of Land Management, M-36990, Entitlement to a Mineral Patent Under the Mining Law of 1872 (Nov. 12, 1997); Memorandum from John D. Leshy, Solicitor, United States Department of the Interior to Director, Bureau of Land Management, M-36988, Limitations on Patenting Millsites Under the Mining Law of 1872 (Nov. 7, 1997). See also Decision [of Bruce Babbitt, Secretary of the Interior] Upon Review of United States v. United Mining Company, 142 IBLA 339 (May 15, 2000) ("Comparative Value" test applies to the Building Stone Act of 1892; decision does not reach applicability of the test to General Mining Law of 1872).

^{16.} The Department has closely scrutinized the Mining Law on various issues including the right to a patent, how many millsites are allowed, and when there is a discovery of a valuable mineral deposit. Kalen, *supra* note 13, at 353-389.

^{17. 64} Fed. Reg. 6422 (1999) (to be codified at 43 C.F.R. pt. 3800) (proposed Feb. 9, 1999).

^{18.} See, e.g., DAN DAGGET, BEYOND THE RANGELAND CONFLICT: TOWARD A WEST THAT WORKS (1995); Tom Knudson, The Ranch Restored: An Overworked Land Comes Back to Life, HIGH COUNTRY NEWS, March 1, 1999, at 13; Ed Marston, Grazing: The Shape of the Future, HIGH COUNTRY NEWS, Feb. 7, 1994, at 16; Courtney White, Spread the News: Conservation Ranching Works, HIGH COUNTRY NEWS, http://www.hcn.org/wotr/dir/usedstories/WOTR_990824_white.html (visited June 2, 2000).

regulations to provide substantial, science-based federal standards and, at the same time, to facilitate consensus resolutions at the local level through resource advisory councils. 19 In endangered species policy, the Babbitt administration, with Professor Joseph Sax taking a lead role as special counsel, established a creative and expansive set of new administrative policies, emphasizing a greatly broadened role for habitat conservation plans (HCPs).²⁰ This vigorous response probably averted an evisceration of the Endangered Species Act by the 104th Congress. Now, just a few years later, we can see that the ESA—the nation's strongest environmental law—is insulated from radical change by the best protector all, a national public that understands, and believes in, the preservation of species.²¹ Babbitt, as administrator of the Endangered Species Act, played a key role, too, in the 1994 Northwest Forest Plan, one of the most far-sighted and ambitious actions our nation has ever taken in conservation policy.²² That plan, designed to protect the Northern spotted owl, Pacific salmon, marbled murrelet, and other species, revamped management of public lands—and, to a lesser, but still significant extent, private lands—in the west-side, old-growth forests in Oregon and Washington.²³

^{19.} See Grazing Administration – Exclusive of Alaska, 60 Fed. Reg. 9894 (Feb. 22, 1995) (codified at 43 C.F.R. §§ 1784.0-1 to 1784.6-2, 4100.0-1 to 4180.2 (1996)); Bruce M. Pendery, Reforming Livestock Grazing on the Public Domain: Ecosystem Management-Based Standards and Guidelines Blaze a New Path for Range Management, 27 ENVTL. L. 513, 514-515 (1997).

^{20.} From 1982 to 1992, the U.S. Fish and Wildlife Service issued only 14 HCPs, but by September 1996, 197 HCPs had been approved with another 200 under consideration. U.S. Fish and Wildlife Service, Department of the Interior, Habitat Conservation Planning Is Streamlined Under New Guidelines Announced By Two Agencies, Press Release, Dec. 3, 1996. See also Bruce Babbitt, The Endangered Species Act and "Takings": A Call For Innovation Within the Terms of the Act, 24 ENVTL. L. 355, 365 (1994); Karin P. Sheldon, Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act, 23 N.Y.U. ENVTL. L. J. 279 (1998); J.B. Ruhl, How To Kill Endangered Species, Legally: The Nuts and Bolts of Endangered Species Act "HCP" Permits for Real Estate Development, 5 ENVTL. LAW 345 (1999). For criticism of the recent HCPs, see AMERICAN LANDS, BROKEN PROMISES OF RECOVERY: THE CLINTON ADMINISTRATION'S 10-PRONG ATTACK ON ENDANGERED SPECIES (2000). On Joseph Sax and HCPs, see Zygmunt J.B. Plater, The Three Economies: An Essay in Honor of Joseph Sax, Ecology L. Q. 411, 428 (1998).

^{21.} See, e.g., Jessica Mathews, Endangered Species: The Truth, WASH. POST, July 7, 1994, at C7; K.O. Dawes, Nature Briefings, CHICAGO SUN-TRIBUNE, Mar. 15, 1992, at 37; Ellen Gamerman, Poll Shows Widespread Support for Endangered Species Act, STATES NEWS SERVICE, Jan. 27, 1992.

^{22.} See Forest Service, U.S. Department of Agriculture, Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Related Species Within the Range of the Northern Spotted Owl (Apr. 13, 1994). See generally BIOREGIONAL ASSESSMENTS: SCIENCE AT THE CROSSROADS OF MANAGEMENT AND POLICY 87-117, 121-126 (K. Norman Johnson et al. eds., 1998). Upon challenge by both the timber industry and conservationists, the Northwest Forest Plan was upheld. Seattle Audubon Soc'y v. Lyons, 871 F.Supp. 1291 (W.D. Wash. 1994), aff'd sub nom, Seattle Audubon Soc'y v. Moseley, 80 F.3d 1401 (9th Cir. 1996). For an analysis of the current status of the Northwest Forest Plan, see Rebecca W. Watson, Ecosystem Management In the Northwest: "Is Everybody Happy?", NAT. RESOURCES & ENV'T (WTR 2000). For the background of the plan, see STEVEN LEWIS YAFFEE, THE WISDOM OF THE SPOTTED OWL: POLICY LESSONS FOR A NEW CENTURY (1994).

^{23.} See, e.g., BIOREGIONAL ASSESSMENTS, supra note 22 at 87-117.

The Northwest Forest Plan evidences our recent, but rapidly accelerating, attention to making policy according to large, naturally-defined landscapes. This also has played out dramatically in President Clinton's national monument declarations, a long and Rooseveltian tradition.²⁴ In September 1996. Clinton established the 1.7 million-acre Grand Staircase-Escalante National Monument in southern Utah.²⁵ The administration rolled up its sleeves and went to further work. Babbitt has criss-crossed the West, meeting with local people and congressional delegations, suggesting areas that he might recommend to the President if the delegations did not introduce their own protective legislation.²⁶ Any doubts about secretarial or presidential seriousness were removed in January, 2000, when Clinton established the one million acre Grand Canyon-Parashant National Monument on the North Rim and other monuments.²⁷

Reform also has been pervasive in the national forests under Jack Ward Thomas and Mike Dombeck, the first two biologists to serve as chief.²⁸ Both have promoted ecosystem management and watershed protection and restoration.²⁹ In the past decade the annual timber harvests from the national forests

^{24.} See, e.g., HAL ROTHMAN, PRESERVING DIFFERENT PASTS: THE AMERICAN NATIONAL MONUMENTS (1989).

^{25.} See Proclamation No. 6920, 61 Fed. Reg. 50223 (1996); James R. Rasband, Utah's Grand Staircase: The Right Path To Wilderness Preservation?, 70 U. COLO. L. REV. 483 (1999); VISIONS OF THE GRAND STAIRCASE-ESCALANTE: EXAMINING UTAH'S NEWEST MONUMENT (Robert B. Keiter et al. eds., 1998).

^{26.} See Michelle Nijhuis, The Secretary's Must-do List for Western Lands, HIGH COUNTRY NEWS, Nov. 22, 1999, at 12.

^{27.} See Proclamation No. 7265, 65 Fed. Reg. 2825 (2000) (establishing the Grand Canyon-Parashant National Monument); Judith Graham, U.S. Land Protection Plans Are Monumental, Chi. Trib., Feb. 18, 2000, at N3; Bruce Babbitt, Crowding of the West Spurs Need for Integrated Landscape Management, PEOPLE, LAND & WATER, U.S. Department of the Interior, Feb./March 2000 at 24 (describing how the establishment of the Grand Canyon-Parashant National Monument relates to western land management). Clinton has recently created or expanded several other national monuments. Proclamation No. 7295, 65 Fed. Reg. 24095 (2000) (Giant Sequoia National Monument); Proclamation No. 7264, 65 Fed. Reg. 2821 (2000) (California Coastal National Monument); Proclamation No. 7263, 65 Fed. Reg. 2817 (2000) (Agua Fria National Monument); Proclamation No. 7266, 65 Fed. Reg. 2831 (2000) (boundary enlargement of Pinnacles National Monument).

^{28.} On Thomas, see, e.g., Larry Swisher, Thomas Appointment is a Break with Tradition, LEWISTON MORNING TRIBUNE (Lewiston, Idaho), Nov. 22, 1993, at 5A; Reform of the Forest Service: Joint Oversight Hearings Before the Subcomm. on National Parks, Forests and Public Lands and Subcomm. on Oversight and Investigations of the House Comm. on Natural Resources, 103d Cong., 2d Sess. 11 (1994) (statement of Dr. Jack Ward Thomas, Chief, U.S. Forest Serv., U.S. Dep't of Agric.) (Forest Service in a perfect position to make substantive changes concerning ecosystem management). On Dombeck, see Daniel Lewis, Straight Arrow: They're Taking Bets in D.C. on Whether the Forest Service's Reform-Minded Boss Can Outlast the Politics of the Place, SEATTLE POST-INTELLIGENCER, July 18, 1999, at G1; Dick Thompson, Ruckus in the Woods, TIME MAG., Feb. 15, 1999, at 33.

^{29.} See, e.g., Mike Dombeck, Chief USDA Forest Service, The State of the Forest: Extending Our Land Ethic (March 27, 2000), available online at http://www.fs.fed.us/intro/speech/20000328.htm; Dr. Jack Ward Thomas, Chief USDA Forest Service, Concerning the Future Forest Service, Address Before the National Capital Chapter, Society of American Foresters (Sept. 14, 1994), available online at

has dropped from 11-12 billion board feet, where it had stayed for a quarter of a century, to less than 3 billion board feet.³⁰ The agency is now deep into an epic initiative—the assessment of how the 60 million acres of roadless land, an area the size of Oregon, should be managed.³¹ As of now, while acknowledging the uncertainties of legislation by appropriations riders, we can expect that the agency guidelines will be handed down during this calendar year and that most of that land will be classified as roadless, with the dominant use being watershed protection. The combination of several new monuments or congressionally-established protected areas, the roadless area study, and major regulation-writing in both the Forest Service and the Department of the Interior gives every sign that the year 2000 will be one of the most productive in the history of federal public land law.

One foundation for recent public lands policy has been the integration of science into law. This movement has proceeded on several fronts, of which I will mention two. In grazing reform, much of the attention given to the 1995 BLM grazing regulations has involved the resource advisory committees.³² Those regulations, however, also include quite detailed and ambitious science-based rangeland health standards. These are some of the requirements:

At a minimum, State or regional guidelines developed under paragraphs (a) and (b) of this section must address the following:

- (1) Maintaining or promoting adequate amounts of vegetative ground cover, including standing plant material and litter, to support infiltration, maintain soil moisture storage, and stabilize soils;
- (2) Maintaining or promoting subsurface soil conditions that support permeability rates appropriate to climate and soils;
- (3) Maintaining improving or restoring riparian-wetland functions including energy dissipation, sediment capture, groundwater recharge, and stream bank stability;
- (4) Maintaining or promoting stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and function appropriate to climate and landform.³³

http://www.fs.fed.us/intro/speech/spjwtsap.html.

^{30.} See, e.g., Lee Blumenthal, Clinton Proposes Permanent Protection for 40 Million Acres of Forests, Fresno Bee, Oct. 14, 1999, at B4; Tom Stienstra, Forest Chief Has Clear-Cut Vision, San Fran. Examiner, May 16, 1999, at C-10; National Agricultural Statistics Service, Department of Agriculture, Agricultural Statistics XII – 7 (1995-1996).

^{31.} See Temporary Suspension of Road Construction in Unroaded Areas, 64 Fed. Reg. 7289, 7290 (1999) (to be codified at 36 C.F.R. § 212).

^{32.} See, e.g., Heather Abel, Grazing Bill Returns for Another Round, HIGH COUNTRY NEWS, Sept. 16, 1996, at 4; Steve Hinchman, Turmoil on the Range, HIGH COUNTRY NEWS, Jan. 24, 1994, at 1.

^{33.} Standards and Guidelines for Grazing Administration, 43 C.F.R. § 4180.2(e)(1)-(4). See generally Bruce M. Pendery, Reforming Livestock Grazing on the Public Domain: Ecosystem Management-Based Standards and Guidelines Blaze a New Path for Management, 27 ENVTL. L. 513 (1997) (BLM's

Another effort to introduce science-based management into public lands is the work of the Committee of Scientists, in which I took part as a member of the Committee. The National Forest Management Act of 1976³⁴ required a committee of scientists to advise the Forest Service on its initial NFMA regulations (the diversity provisions in the Forest Service regulations are based on recommendations by that original committee)³⁵ and in 1997, Secretary Glickman appointed a new committee of scientists to give advice on new regulations. The committee filed its report in March 1999,³⁶ and in October 1999 the Forest Service issued proposed regulations, which have received public comment and are now under final consideration.³⁷ The proposed regulations, which are based in substantial part on the committee's recommendations, provide in the preamble that "sustainability should be the guiding star for stewardship of the national forests" and then set out quite specific procedures to be followed in attempting to achieve sustainability and each of its three components—ecological, economic, and social.³⁹

Sustainability (the committee preferred that term over "sustainable development") has received considerable attention nationally and internationally in recent years, especially since the Brundtland Commission Report of 1987. The goal of sustainability, according to the general definition of the Brundtland Report, is to "meet the needs of the present without compromising the ability of future generations to meet their own needs." Chapter Two of the committee's report discusses the policy of sustainability and much of the rest of the report discusses how sustainability might be implemented in specific and practical ways. This reflects the committee's view that sustainability has importance as a broad social objective, in much the same way that freedom and equality do, but that sustainability also must gather specific, applied meaning by being put to work in actual, on-the-ground situations.

amended regulations innovative in their use of ecosystem management).

- 34. 16 U.S.C. §§ 1600-1614 (1994).
- 35. On the NFMA diversity requirements, see 16 U.S.C. § 1604(g)(3)(B) (1988). On the Forest Service's diversity requirements, see 36 C.F.R. § 219.3 (1991). See generally CHARLES F. WILKINSON AND H. MICHAEL ANDERSON, LAND AND RESOURCE PLANNING IN THE NATIONAL FORESTS, 288-96 (1987).
- 36. See THE COMMITTEE OF SCIENTISTS, DEPARTMENT OF AGRICULTURE, SUSTAINING THE PEOPLE'S LANDS: RECOMMENDATIONS FOR STEWARDSHIP OF THE NATIONAL FORESTS AND GRASSLANDS INTO THE NEXT CENTURY (1999), available online at http://www.fs.fed.us/news/science [hereinafter COMM. OF SCIENTISTS REPORT].
- 37. See National Forest System Land and Resource Management Planning, 64 Fed. Reg. 54074 (1999) (proposed Oct. 5, 1999), available online at http://www.fs.fed.us/forum/nepa/rule.
 - 38. See id. at § 219.1; COMM. OF SCIENTISTS REPORT, supra note 36, at xiv.
 - 39. See COMM. OF SCIENTISTS REPORT, supra note 36, at 19-82, 149-152.
- 40. See Brundtland Report, World Commission on Environment and Development, Our Common Future U.N. GAOR. 42nd Sess., Agenda Item 82(e), U.N. Doc. A/C.2/42/L.81 (1987) [hereinafter Brundtland Report]; Luthar Gundling, What Obligation Does Our Generation Owe the Next?: An Approach To Global Environmental Responsibility, 84 A.J.I.L. 207, 208 (1990).
 - 41. See BRUNDTLAND REPORT, supra note 40, at 1.
 - 42. See COMM. OF SCIENTISTS REPORT, supra note 36, at 13-14.

A cornerstone of any sustainability analysis is the question, "What are we trying to sustain?" One formulation, used by the committee, is that the objective is to sustain ecological, economic, and social values. Importantly, the social objectives can include intangible values such as beauty and wonder.⁴³

The Committee of Scientists' report goes beyond most statements of sustainability in that it gives primacy to one of the three components—ecological sustainability.⁴⁴ This "ranking" is due, not to a sense that the ecological component is somehow more important than the economic and social components (obviously, economic and social well being is of great importance to people). Rather, the reasoning is that, in order for social and economic benefits to be sustainable, they must necessarily depend upon the integrity of the water, soil, vegetation, and air that healthy ecosystems provide. Put differently, the Committee of Scientists clearly expects that the national forests will continue to provide economic goods and services, but it also believes that an environmental baseline should first be established to ensure that such economic benefits can be provided over time. Refining the idea of sustainability in this way gives an edge to the doctrine and offers guidance to land managers in a way that a policy like multiple use-sustained yield management does not.

This primacy of ecological sustainability has been controversial, a flash point in discussions of the Committee of Scientists' report.⁴⁵ In addition to believing that this approach is the right one for the national forests, committee members several times expressed their hope that—even if the committee's approach toward sustainability is not adopted by the Forest Service in the final regulations—the report's formulation of this critical issue would serve the function of placing it on the table for debates over sustainability, not just in the national forests but in future decisionmaking over natural resources generally.

I'd like to finish this summary of the extraordinary activities on the public lands by briefly mentioning what may be the most profound movement of all. The past several years has brought not just the continued protection of the grizzly bear but also the return of the sleek, shadowy wolf, first to Yellowstone then to the rough, dry country of Arizona and New Mexico, with more locales to follow.⁴⁶ The justification is often based on scientific grounds, on the need to replace organic parts and functions of natural systems. But what

^{43.} See id. at 175.

^{44.} For a discussion of ecological sustainability, see id. at 19-40, 145-52.

^{45.} See id. at 183 (separate view of one committee member). See also Dan Quinn, The U.S. Forest Service at a Crossroads, 137 RESOURCES 12, Fall 1999; Greg D. Corbin, The United States Forest Service's Response To Biodiversity Science, 29 ENVIL. L. 377, 380 (1999).

^{46.} See 59 Fed. Reg. at 60, 252 (wolf reintroduction program); 50 C.F.R. § 17.40(b)(1)(i) (1980) (forbids killing of grizzly bear except in certain limited situations). See generally Holly Doremus, Restoring Endangered Species: The Importance of Being Wild, 23 HARV. ENVIL. L. REV. 1 (1999). The wolf reintroduction program at Yellowstone has been upheld in Wyoming Farm Bureau v. Babbitt, 199 F.3d 1224 (10th Cir. 2000).

a powerful moral statement wolf reintroduction is, what a vibrant symbol of what a great and good people can do.

B. State Lands

The eleven western states own other major blocs of government lands, totaling 41 million acres, about the size of Washington in all. Most of these lands were granted at the time of statehood and most are "school trust lands," 47 that is, any proceeds for the sale or development of these lands must be dedicated to the public schools. It is less clear whether the state has a duty to maximize income from these lands. Indeed, the lands have considerable potential for extractive development. 48 In some years, the west-wide return to the states has approached \$1 billion.⁴⁹

The state lands will continue to raise controversial issues. It is generally accepted that the lands should be managed sustainably, but it is a matter of debate as to how conservative an approach should be taken. Another issue is whether these lands, instead of being used to provide maximum revenues for school, can be managed under a multiple-use regime that includes recreation, hunting and fishing, and even preservation. Montana, Washington, Oregon, Idaho, and Colorado all allow some fashion of multiple-use on these lands.⁵⁰ Colorado has gone a step farther in a citizen initiative, which has been upheld by the courts, that allows preservation as a trust purpose and includes a 300,000 acre preserve that will be managed to protect its beauty, open space, and wildlife habitat.⁵¹ Given the stresses on western lands, proposals will continue to be made for a broader range of uses of these lands.

^{47.} See generally Wade R. Budge, Changing the Focus: Managing State Trust Lands In the Twenty-First Century, 19 J. LAND RESOURCES & ENVIL. L. 223, 223-224 (1999) [hereinafter Budge]; JON SOUDER & Sally Fairfax, State Trust Lands: History, Management, and Sustainable Use, 24-25 (1996) [hereinafter SOUDER & FAIRFAX].

^{48.} See SOUDER & FAIRFAX, supra note 47, at 58-64.

^{49.} See id.; Jon Souder & Sally Fairfax, The State Trust Lands, Revenues from Trust Lands, http://www.teleport.com/~rot/statetrusts.html (visited June 2, 2000). In many years, the largest returns have been in Washington and New Mexico. Id.

^{50.} See Budge, supra note 47, at 237-247. For a discussion of Washington's school trust lands, see Gregory A. Hicks, Managing State Trust Lands for Ecosystem Health: The Case of Washington State's Range and Agricultural Lands, 6 HASTINGS W-N.W. J. ENVTL. L. & POL'Y 1 (1999). For a treatment of Montana's school trust lands, see Michael J. Mortimer, Condemnation Without Compensation: How Environmental Eminent Domain Diminishes the Value of Montana's School Trust Lands, 8 DICK. J. ENVTL. L. & Pol'y 243 (1999).

^{51.} Among other changes, the ballot initiative changed the previous requirement that the land board manage the state trust land "in such a manner as will secure the maximum possible amount" to a different standard: "to produce reasonable and consistent income over time." Amendment 16, 1997 Colo. Sess. Laws 2399. School districts challenged the amendment to management of school trust lands. The Tenth Circuit Court of Appeals upheld the changes, finding that the new provisions are not facially in conflict with Colorado's fiduciary duty to manage school lands for the benefit of schools. Branson School District RE-82 v. Romer, 161 F.3d 619 (10th Cir. 1998).

C. Tribal Lands

Management of the third kind of government land, tribal land, is undergoing deep change. Two generations ago, Indian country was dispirited, locked in poverty, under the thumb of the Bureau of Indian Affairs, and facing congressional termination.⁵² Since then, in a stirring revival, tribal governments have taken back sovereign authority over their reservations and have significantly improved economic and social conditions, though many problems remain.⁵³ In exercising sovereignty, tribes, as land-based peoples, have emphasized natural resources management. Beginning with what one tribal leader described as "mom and pop operations" twenty-five years ago, 54 tribal governments have developed professional on-reservation natural resources agencies. Dozens of tribes now have natural resources offices with one hundred employees or more.⁵⁵ They have organized intertribal organizations, including the Intertribal Timber Commission, the Council of Energy Resource Tribes, the Columbia River Intertribal Fish Commission, and the Northwest Indian Fisheries Commission.⁵⁶ Several reservations, including White Mountain Apache, Wind River and Flathead, have created tribal wilderness areas.⁵⁷ After decades of high-yield timber harvesting under BIA control, most tribes have now

^{52.} See DAVID H. GETCHES ET AL., CASES AND MATERIALS ON FEDERAL INDIAN LAW 204-224 (4th ed., 1998).

^{53.} The activism of Indian leaders and their advocates in recent decades has produced significant legislation benefitting tribes. Examples of such legislation include the Indian Self-Determination and Education Assistance Act of 1975, 25 U.S.C. §§ 450a-450n (Secretary of Interior can contract with tribes for delivery of federal services); the Indian Child Welfare Act of 1978, 25 U.S.C. §§ 1901-1963 (deference to tribal governments in Indian child custody cases); the American Indian Religious Freedom Act of 1978, section 2, codified at 42 U.S.C. § 1996 (policy statement on the protection of Indian religion); National Indian Forest Resources Management Act of 1990, 25 U.S.C. §§ 3101-3120; Native American Graves Protection and Repatriation Act of 1990, 25 U.S.C. §§ 3001-3013; and Tribal Self-Governance Act of 1994, 25 U.S.C. § 450n, 450aa note, 450aa-450gg. See generally GETCHES ET Al., supra note 52, at 230-33.

^{54.} Telephone Interview with Del White, Nez Perce Tribal Executive Committee member and longtime Nez Perce Tribe employee (Apr. 27, 1998).

^{55.} See, e.g., Hopi Indian Tribe, Department of Natural Resources, http://www.hopi.nsn.us/Pages/H3Natrl.htm (visited July 4, 2000); Confederated Salish and Kootenai Tribes of Flathead Reservation, Natural Resources, http://warmsprings.com/community/govt/natres.htm (visited July 4, 2000); White Mountain Apache, Wildlife & Outdoor Division, http://www.wmoutdoors.com (visited July 4, 2000); Menominee Indian Tribe, Sustainable Development Institute, http://www.menominee.edu/sdi/home1.htm (visited July 4, 2000).

^{56.} See The Intertribal Timber Council, Homepage, http://www.itcnet.org/ (visited June 1, 2000); Council of Energy Resource Tribes, Energy Tribes, http://www.marxmail.org/ mydocs/indian/energy_tribes.htm> (visited June 1, 2000); Columbia River Intertribal Fish Commission, Homepage, http://www.critfc.org/ (visited June 1, 2000); Northwest Indian Fisheries Commission, Homepage, http://www.nwifc.wa.gov (visited June 1, 2000).

^{57.} See, e.g., White Mountain Apache, Wildlife & Outdoor Division, http://www.wmatoutdoors.com/wmatmap.shtml (visited June 2, 2000); Telephone Interview with William Foust, Flathead Reservation Natural Resources Division of Water Manager (July 5, 2000) (Mission Mountains Wilderness Area); Telephone Interview with Don Mitchell, Wind River Forestry Division Fire Dispatcher (July 6, 2000) (Wind River Roadless Area).

assumed management of forest resources on their reservations and have established more conservative harvesting regimes based on ecosystem management.⁵⁸ In Idaho, after the state declined to participate, the Nez Perce Tribe contracted with the U.S. Fish and Wildlife Service and is now administering the federal wolf reintroduction program in Idaho—with notable success.⁵⁹

In addition to establishing formal resource management agencies and engaging in more entrepreneurial activities, including gaming on about one-third of the reservations, ⁶⁰ the modern era in Indian country has also seen a revival in tribal traditions. ⁶¹ This affects land management in various ways. Tribal people can promote better land practices on the reservations and outside of Indian country, in cooperative watershed efforts through their deep knowledge of the land and a sophisticated worldview that for millennia has been based on notions that we now call biocentrism and sustainability. ⁶²

The Indian worldview is infused by a spirituality toward the land that can and has influenced policy beyond reservations boundaries. During the 1990s, we saw significant public lands decisions that were driven by Indian spirituality. On December 27, 1999, Interior Solicitor John Leshy issued a major memorandum opinion on hardrock mining. In it, he concluded that the Glamis Mine, a proposed cyanide heap-leaching operation in the southeastern Califor-

^{58.} See Gary S. Morishima, Indian Forestry: From Paternalism to Self-Determination, J. FORESTRY 4, Nov. 1997; Darla J. Mandou, Our Land Is What Makes Us Who We Are: Timber Harvesting on Tribal Reservations After the NIFRMA, 21 AMER. IND. L. REV. 259 (1997).

^{59.} See Nez Perce Tribal Wolf Recovery and Management Plan for Idaho, Fish and Wildlife Service, No. 14-48-0001-95-538 (Aug. 8, 1995); Cate Montana, Nez Perce and Grey Wolf: Both Banished, They Recover Together, INDIAN COUNTRY TODAY, Feb. 15-22, 1999, at B1-B2; Sani B. Zellmer, Conserving Ecosystems Through the Secretarial Order on Tribal Rights, 14 NAT. RESOURCES & ENV'T 162, 212 (2000).

^{60.} In all, gaming has been the most profitable business venture for tribes, generating an estimated six billion dollars a year for the one-third of the nation's 554 tribes that engage in gaming. William Claiborne, *Tribes' Big Step: From Casinos to Conglomerates*, WASH. POST, Aug. 14, 1998, at A1. *See also* ROBERT GOODMAN, THE LUCK OF THE BUSINESS: THE DEVASTATING CONSEQUENCES AND BROKEN PROMISES OF AMERICA'S GAMBLING EXPLOSION 104 (1995).

^{61.} See, e.g., John Rice, After Columbus Indians Try to Revive Culture Despite Pressures to Assimilate, L.A. TIMES, Oct. 11, 1992, at A2; Mary Nolan, Native Americans Revive Ties to Past, SEATTLE TIMES, Nov. 29, 1990, at F2. On the revival of tribal languages, see, e.g., John Flinn, State's Native Tongue at Brink, SAN FRAN. EXAMINER, Apr. 3, 1994, at A1; Sue Anne Pressley, Students Return to Language Roots in Oklahoma, WASH. POST, Nov. 7, 1993, at A3; Felicity Barringer, Faded but Vibrant, Indian Languages Struggle to Keep Their Voices, N.Y. TIMES, Jan. 8, 1991, at A14. On the revival of tribal dances, see, e.g., Louis T. Corsaletti, Powwow on Prairie Will Revive Ancient Tradition, SEATTLE TIMES, Sept. 23, 1994, at B3; A Seasonal Time of Giving for American Indians, L.A. TIMES, Dec. 17, 1992, at J2.

^{62.} A good example is Pacific salmon and tribal fisheries management in the Pacific Northwest. Prior to colonization, tribes practiced conservation and established systems for allocating the harvest. See ARTHUR F. MCEVOY, THE FISHERMAN'S PROBLEM: ECOLOGY AND LAW IN THE CALIFORNIA FISHERIES 1850-1980 19-40 (1986); CHUCK WILLIAMS, BRIDGE OF THE GODS, MOUNTAINS OF FIRE: A RETURN TO THE COLUMBIA GORGE 73 (1980); EDWARD E. WALKER, MUTUAL CROSS-UTILIZATION OF ECONOMIC RESOURCES IN THE PLATEAU: AN EXAMPLE FROM ABORIGINAL NEZ PERCE FISHING PRACTICES 14-15 (1967). The traditional approach to conservation can be seen in the purposes and goals of the Columbia River Intertribal Fish Commission and the Northwest Indian Fisheries Commission. See supra note 56.

nia desert, might "unduly impair" resources within the meaning of the California Desert Conservation Area provisions of FLPMA.⁶³ The objector to the proposal was the Quechan Tribe and the opinion found that multiple-use management in the area must be made with the goal of preserving archaeological and paleontological values and "must give full consideration to the Quechan's religious, cultural, and educational values in the area, and must consider how important and unique the resources are that might be destroyed by the Glamis proposal." The opinion then remanded the matter to the BLM with the pointed observation that the existing record would support a denial of a plan of operations by the BLM.⁶⁵ If the BLM does deny the plan, and many observers believe that it may, it will apparently be the first BLM denial ever of a proposed mine.

Traditional Indian spirituality has also influenced Park Service and Forest Service decisions. At Rainbow Bridge in northern Arizona, the Park Service has asked visitors not to walk under the dramatic redrock natural bridge, which would be offensive to Indian practitioners. At Devil's Tower in northern Wyoming, the Park Service has requested that visitors voluntarily refrain from rockclimbing on the sheer walls during the month of June, when many northern Great Plains tribes conduct ceremonies at the edifice they call Bear's Lodge. At both Rainbow Bridge and Devil's Tower, the Park Service's urging has met with broad, although not complete, compliance from other park patrons. The Tenth Circuit Court of Appeals found that commercial climbing companies lacked standing to challenge the voluntary ban at Devil's Tower but suggested in dictum that Congress has recognized the Park Service's right to make, not just voluntary requests, but temporary closures as well to protect Indian religious practices. Another major example of the

^{63.} See Leshy Regulation Memo, supra note 15. The opinion relied in substantial part on California Desert Construction Area provisions of the 1976 Federal Land Policy and Management Act, 43 U.S.C. § 1781, in concluding, on the basis of the existing record, that the Bureau of Land Management can deny mining permits on mine's environmental and cultural impact. Id.

^{64.} Id. at 5.

^{65.} See id. at 19.

^{66.} See Jim Woolf, Lawsuit: Park Service Promotes Religion at Rainbow Bridge Monument, SALT LAKE TRIBUNE, March 7, 2000 at A1. For a lawsuit challenging the Park Service's action at Rainbow Bridge, see Natural Arch and Bridge Soc'y v. National Park Serv., No. 2:00CV-0191J, (D. Utah. 2000).

^{67.} George Linge, Ensuring the Full Freedom of Religion on Public Lands: Devil's Tower and the Protection of Indian Sacred Sites, 7 B.C. ENVTL. AFF. L. REV. 307 (2000); Lloyd Burton and David Ruppert, Bear's Lodge or Devil's Tower: Intercultural Relations, Legal Pluralism, and the Management of Sacred Sites on Public Lands, 8 CORNELL J.L. & Pub. Pol'Y 201 (1999).

^{68.} In the first year of the ban at Devil's Tower, only 193 people climbed the tower in the month of June compared to 1, 293 the previous year. Charles Levendosky, *Group Sues To Stamp Out Tolerance and Diversity*, HIGH COUNTRY NEWS, April 15, 1996, at 17; Diane Kelly, *Hotline: Saying Please at Devil's Tower*, HIGH COUNTRY NEWS, Oct. 16, 1995, at 2.

^{69.} See Bear Lodge Multiple Use Ass'n v. Babbitt, 175 F.3d 814 (10th Cir. 1999), cert. denied, 120 S. Ct. 1530 (2000).

^{70.} See id. at 820-821.

determination of traditional people to protect their spiritual values took place in Montana in 1999, when Chief Mike Dombeck and Lewis and Clark National Forest Supervisor Gloria Flora, at the urging of Blackfeet elders, achieved the withdrawal of nearly half a million acres of land along the Rocky Mountain Front from mining.⁷¹

One thing seems sure. Given the determination of the tribes, Indian contributions to western land issues will continue to increase.

III. LAND TRUSTS

Another broad area of western land policy, in addition to management of government lands, involves the work of land trusts. These non-profit groups, including both private organizations and government agencies, are dedicated to protecting natural resources and open space through various land transactions, including conservation easements. Private land trusts were first established in the late nineteenth century in New England. Yet the real emergence of land trusts as a major force for conservation did not begin until the 1950s in response to increasing urbanization; the primary activity, however, continued to take place in New England which, even today, accounts for more than a third of the nation's land trusts. The movement become truly national in the 1970s (the 1976 Tax Reform Act recognized conservation easements as tax deductible donations) and 1980s, when land trust acquisitions began to make a mark in western land policy. It had become apparent to westerners, in other words, that not even the magnificent public lands estate would provide sufficient land preservation.

There is no doubting the accomplishments of the land trust movement today. Among the national groups, The Nature Conservancy has protected 11 million acres, the Conservation Fund 2 million, and the Trust for Public Lands 1 million, all with substantial holdings in the West.⁷⁴ Regionally, the Rocky Moun

^{71.} See Sherry Devlin, 429,000 Acres Closed to Hardrock Mining, MISSOULIAN, Feb. 4, 1999, at A1; Sherry Devlin, Mining Association Blasts 'Short-Sighted' Policy, MISSOULIAN, Feb. 5, 1999, at B1.

^{72.} See generally SUSAN L. ROAKES, THE LAND TRUST AS A CONSERVATION TOOL (1995); Itzchak E. Kornfield, Conserving Natural Resources and Open Spaces: A Primer on Individual Giving Options, 23 ENVTL. L. 185 (1993); Randee G. Fenner, Land Trusts: An Alternative Method of Preserving Open Space, 33 VAND. L. REV. 1039 (1980); TERRY BREMER, PORTRAIT OF LAND TRUST IN LAND SAVING ACTION: A WRITTEN SYMPOSIUM BY 29 EXPERTS ON PRIVATE LAND CONSERVATION IN THE 1980s 17 (Russell L. Brenneman and Sarah M. Bates eds., 1984).

^{73.} The Tax Reform Act of 1976 can be found at Pub. L. No 94-455, 90 Stat. 1520 (codified in scattered sections of 26 U.S.C.); see also John L. Hollingshead, Conservation Easements: A Flexible Tool for Land Preservation, 3 ENVTL. LAW. 319, 337 (1997). For a complete commentary on federal income tax and conservation easements, see generally STEPHEN J. SMALL, THE FEDERAL LAW OF CONSERVATION EASEMENTS (1986).

^{74.} See Conservation Fund, Land Preservation, (visited June 1, 2000)

http://www.conservationfund.org/conservation/landpreservation/; Trust for Public Land, About TPL, http://www.tpl.org/aboutpl.html (visited June 1, 2000); Nature Conservancy, Home Page of the Nature Conservancy -Help Protect Endangered Species, http://www.tpc.org/welcome/index.html

tain Elk Foundation is a success story in the extreme.⁷⁵ Just founded in 1984, it now has no less than 3 million acres under protection.⁷⁶ Land trust activity has been intense in Montana, which now leads the nation in protected acreage.⁷⁷ The Montana Land Reliance, founded in 1978 has been one of the country's most effective state trusts.⁷⁸ The state-wide work has been complemented by three major local groups, the Bitter Root Land Trust, the Five Valleys Land Trust, and the Gallatin Valley Land Trust.⁷⁹ Cities, counties, and states have also become active in acquiring conservation easements.⁸⁰

The land trusts are keenly aware that they cannot go it alone. A critical function of these organizations, now fixtures in the western scene, in the years ahead will be to use their leverage as landowners and market participants to achieve cooperation with other private and public owners to achieve watershed protection.⁸¹ Important also, intangible though it may be, will be the moral suasion of land trusts as community leaders to help build a broadly-accepted land ethic. For the rise of these organizations reflects deep changes in the public's view toward land and now, with their successes and stature, these trusts can fuel that progression even further.

(visited June 1, 2000).

^{75.} See The Rocky Mountain Elk Foundation, All About Elk,

http://www.rmef.org/stats.php3 (visited June 1, 2000); see, e.g., Karl Licis, Grant Helps South Valley Easement Join Protected Habitat, GAZETTE (Colorado Springs, Colo.), Feb. 17, 2000, at 4; Group Pitches in to Help Elk Near Mt. Saint Helens, MORNING NEWS TRIBUNE (Tacoma, Wash.), June 29, 1999, at C2.

^{76.} See Rocky Mountain Elk Foundation, Cool Stats, http://www.rmef.org/stats.php3 (visited June 1, 2000).

^{77.} See In the West, Preserving Land a Matter of Trusts, THE SPOKESMAN REVIEW (Spokane, Wash.), May 9, 1999, at H1; Spotlight Story Land Trusts: Local Preservation Efforts Grow, AMERICAN POLITICAL NETWORK, GREENWIRE, Oct. 1, 1998, at 4.

^{78.} See Loss of Open Space and Environmental Quality: Hearing Before the Senate Committee on Environment and Public Works, 106th Cong., 1st Sess. 105 (1999) (statement of Chris Montague, Eastern Manager of Montana Land Reliance).

^{79.} See, e.g., Bitter Root Land Trust, BRLT – What Is the BRLT?, http://www.bitterrootlandtrust.org/what.htm (visited June 6, 2000); Five Valleys Land Trust, Home, http://www.fvlt.org/ (visited June 6, 2000); Gallatin Valley Land Trust, http://www.mcn.net/~gvlt/aboutframe.html. (visited June 6, 2000).

^{80.} For examples of such agencies in California, see California Tahoe Conservancy, Homepage, http://www.tahoecon.gov/ (visited July 4, 2000); California State Coastal Conservancy, Homepage, http://ceres.ca.gov/wetlands/agencies/coastal_con.html (visited July 4, 2000); see, e.g., The Purchase of Scenic Easements, 66 J. Am. Plan. A. 177188 (April 4, 2000) ("Public money to acquire conservation easements was included in many of the programs approved by voters across the U.S. in November 1998 as part of a 'grassroots rebellion against sprawl."). See also EVE ENDICOTT, LAND CONSERVATION THROUGH PUBLIC/PRIVATE PARTNERSHIPS 4 (Eve Endicott ed., 1993).

^{81.} See generally THE NATURE CONSERVANCY, RIVERS OF LIFE: CRITICAL WATERSHEDS FOR PROTECTING BIODIVERSITY (1998), available online at http://www.tnc.org/frames/index.htm.

IV. RIVER POLICY

If anything can be more magical than a broad sweep of western land, it would have to be a free western river. Still, keeping and bringing back the life in our waters has been hard because the prior appropriation doctrine has been so effective. For more than a century, the law of our rivers was: open for the taking; first come, first served; no charge but vested property rights.⁸²

Yet look what westerners have done in just a generation. Wide-open dambuilding has given way to a building sentiment toward dam removal that may surge if the four lower Snake River dams are breached in the name of wild salmon, Indian treaties, and free rivers.⁸³ In 1998, in the most noticed of the many alterations we have made to dam operations, Secretary Babbitt ordered a large release out of Glen Canyon Dam to mimic more closely the high spring runoff down through the Grand Canyon.⁸⁴ Nearly every western town and city has brought back the river within its limits through greenways and parks.⁸⁵ We take seriously riparian zones, water conservation, the Endangered Species Act, acid mine drainage, and TMDLs.⁸⁶ The still-young instream-flow programs are gradually taking hold, some of the land trusts and the even newer water trusts are purchasing senior rights, stream access is increasing, and public-interest water organizations now monitor the state systems in Oregon, Washington, Colorado, and Montana.⁸⁷ Montana, like the Quechan Tribe of

^{82.} See, e.g., PHILIP L. FRADKIN, A RIVER NO MORE: THE COLORADO RIVER AND THE WEST (1981); DONALD J. WORSTER, RIVERS OF EMPIRE: WATER, ARIDITY, AND GROWTH OF THE AMERICAN WEST (1986); MARC REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER (1987).

^{83.} On dam removal generally, see, e.g., AMERICAN RIVERS REPORT, DAM REMOVAL SUCCESS STORIES: RESTORING RIVERS THROUGH SELECTIVE REMOVAL OF DAMS THAT DON'T MAKE SENSE (1999), available online at

<http://www.amrivers.org/successstories.html>. On the Snake River dams, see Michael C. Blumm et al., Saving Snake River Water and Salmon Simultaneously: The Biological, Economic, and Legal Case for Breaching the Lower Snake River Dams, Lowering the John Day Reservoir, and Restoring Natural River Flows, 28 ENVTL. L. 997 (1998); Libby Quaid, Snake Said Top Most Endangered River, COLUMBIAN, Apr. 10, 2000, at B2.

^{84.} See, e.g., Frank Clifford, Controlled Flood to Replenish Grand Canyon, L.A. TIMES, March 24, 1996, at 1.

^{85.} See, e.g., Denise D. Fort, Restoring the Rio Grande: A Case Study in Environmental Federalism 28 ENVTL. L. 15, 38, 31-33 (1998); Joanne Ditmer, Protecting Our Legacy, DENV. POST, June 4, 2000, at 2D (on restoring the Platte River); Brad Hem, Easement Helps St. Antony Greenway Take Another Step, IDAHO FALLS POST REGISTER, Jan. 22, 2000, at B1; Michael Coit, Rescuing the L.A. River; Studio City Residents Debate Plan for Greenway, DAILY NEWS OF LOS ANGELES, May 9, 1999, at N4.

^{86.} For a comprehensive discussion of current issues in western water, see REPORT OF THE WESTERN WATER POLICY REVIEW COMMISSION, WATER IN THE WEST: CHALLENGE FOR THE NEXT CENTURY (1998).

^{87.} On instream-flow programs, see, e.g., Jack Sterne, Instream Rights & Invisible Hands: Prospects for Private Instream Water Rights in the Northwest, 27 ENVTL. L. 203 (1997). For a treatment of water trusts, see Janet C. Neuman & Cheyenne Capman, Wading Into the Water Market: The First Five Years of the Oregon Water Trust, 14 ENVTL. L. & LIT. 135, 138-139 (1999). For state public interest water organizations, see, e.g., Waterwatch of Oregon, Homepage,

http://www.waterwatch.org/index.html (visited June 3, 2000); Center for Environmental Law & Policy in Washington, *Homepage*, http://www.celp.org/> (visited June 3, 2000); Trout Unlimited,

California, is determined to bring a halt to cyanide heap-leach mining.⁸⁸ In a brand new movement that may or may not take hold, but that surely shows our citizenry's willingness to volunteer time to the waters we love so, local watershed councils have sprung up in every western state.⁸⁹ The progress on our rivers is coming achingly slow—the old legal doctrines are deeply entrenched—but it is determined, creative, and real.

V. LOCAL LAND-USE PLANNING

Looking back years from now, people will view this as the time when local land-use planning in the West was in its infancy. To be sure, Oregon has adopted a strong planning law, Washington a less rigorous but still progressive one. A number of communities, many of them in California, have placed restrictions on growth, some by time-limited moratoriums on construction, some by annual caps on building permits. Yet the larger truth is that the West is still feeling its way, trying to sort out loss of community from loss of the right to do what you want with your land, the evils of government bureaucracy from the ability of government, when it does it right, to identify and fulfill the common good. One threshold has been crossed: most westerners are fed up with sprawl, noise, pollution, and impersonalization. Another threshold

Streamflow News, Western Water Project Up and Running in Montana, http://www.tu.org/western/articles.html (visited July 4, 2000); Trout Unlimited, Streamflow News, Colorado Staff Will Monitor State Water Allocation and Instream Flow Program, http://www.tu.org/western/articles.html (visited July 7, 2000).

- 88. A state ballot initiative banned new mines from using cyanide to leach gold or silver out of ore obtained from open pit mines. MONT. CODE ANN. § 82-4-90 (1998) (initiative no. 137). See also Steve Raabe, Gold-Mining Firm Sues Montana Over Cyanide Ban, DENV. POST, Apr. 21, 2000, at CO1.
- 89. See DOUGLAS S. KENNEY, ET AL., NATURAL RESOURCE LAW CENTER, UNIVERSITY OF COLORADO SCHOOL OF LAW, THE NEW WATERSHED SOURCE BOOK: A DIRECTORY AND REVIEW OF WATERSHED INITIATIVES IN THE WESTERN UNITED STATES (2000); NATURAL RESOURCES LAW CENTER, UNIVERSITY OF COLORADO SCHOOL OF LAW, State Utilization of Watershed Groups, in The State Role in Western Watershed Initiatives 55-63 (1998).
- 90. For Oregon's land use planning system, see OR. REV. STAT. ANN. §§ 197.005-20 (1995) (comprehensive land use planning coordination); Henry R. Richmond, Does Oregon's Land Use Program Provide Enough Desirable Land to Attract Needed Industry to Oregon?, 14 ENVIL. L. 693 (1984). On Washington's planning programs, see REV. CODE WASH. §§ 36.70A.200, 36.70A.800, 43.31.210, 43.21.220.
- 91. See Construction Industry Association of Sonoma County v. City of Petaluma, 522 F.2d 897 (9th Cir. 1975); William Trombley, Heated Debate Slow-Growth Sentiment Builds Fast, L.A. TIMES, July 31, 1988, at 1. ("In the last three years there have been 76 growth control measures in the state [of California], and 70% of these have passed.") See also Steve Yozwiak, Scottsdale to Ban New Homes, ARIZONA REPUBLIC, June 20, 1995, at A1; Frank Manning, Building Moratorium Sought, L.A. TIMES, April 15, 1995, at B14; Howard Blume, Whittier Approves 45-Day Extension on Moratoriums, L.A. TIMES, June 21, 1990, at J1; Susan Besze Wallace, Elbert Enacts Moratorium on Growth, DENVER POST, June 23, 2000, at B1; Kathie Durlan, Act Marks Decade of Growth Control, THE COLUMBIAN, April 26, 2000, at A1; City is Expected to Extend Moratorium on Building, SEATTLE POST-INTELLIGENCER, Feb. 16, 2000; M.E. Sprengelmeyer, Parker Officials Impose Growth Moratorium, ROCKY MOUNTAIN NEWS, Feb. 8, 2000, at 20A.

has not been crossed: what do we do now?

Yet, although we are still very new at this, our approaches are likely to mature fairly quickly. Attitudes are changing as we face new stresses and acquire new and more laments.

Unless I miss my guess, we will see an increasingly vigorous movement toward comprehensive planning at the local and, in the case of metropolitan areas, regional levels. This kind of government begins with its people opening up their minds, looking out twenty or thirty years to imagine what they want their community to look like then, and taking reasonable steps to move toward that future. This kind of approach, tailored to a particular place, binds rather than divides people.

I don't mean to make this sound easy, for it is not. But, given the circumstances, it does seem likely that the tendency of western communities to address growth will expand.

Communities who decide to take action will do so out of these general kinds of concerns: stresses to natural systems evidenced by events such as water shortages, air and water pollution, loss of species and habitat, and loss of space for waste disposal; stresses to humans from causes such as noise, crowding, and traffic delays; and a loss of abstract values, such as beauty, solitude, spirituality, and community. Each by itself is a good reason to act. Several or all of them makes action nearly an imperative.

Communities facing such circumstances should be confident in their ability to adopt slow-growth or even no-growth policies. The key to surmounting legal challenges is developing a full and accurate record of the concerns, tangible and intangible, objective and subjective, scientific and spiritual. As a policy matter, since the core concern of communities is that they are losing important benefits that should be perpetual, the problem should probably be cast in terms of sustainability, which I expect to be the way we articulate the overarching natural resources policy objective for many years into the future.⁹³

Courts, given a solid record of public concerns, are highly likely to uphold growth-related ordinances designed to assure sustainability. In 1979, Florida, a state appeals court struck down a slow-growth ordinance when it was enacted by a citizen initiative without much of a record. In 1983, the same court upheld a no-growth ordinance adopted by a city council upon an extensive record. In 1995, the Sixth Circuit Court of Appeals upheld a city ordinance that would allow the City of Hudson, Ohio, with a population of 17,000, to grow at a prescribed annual rate up to a population of 30,000, at which

^{92.} See Charles F. Wilkinson, The Eagle Bird: Mapping a New West 181-198 (rev. ed., 1999).

^{93.} See id. at 108-116.

^{94.} City of Boca Raton v. Boca Villas Corp., 371 So.2d 154 (Fla. Dist. Ct. App. 1979), cert. denied, 381 So.2d 765 (Fla. 1980).

^{95.} City of Hollywood v. Hollywood, Inc., 432 So.2d 1332 (Fla. Dist. Ct. App. 1983), petition for rev. denied, 441 So.2d 632 (Fla. 1983).

point growth would be capped.⁹⁶ The court found that this approach "unquestionably bears a rational relationship" to demonstrated and legitimate land-use concerns.⁹⁷

Opponents to growth measures often raise generalized claims based on the right to travel and on asserted takings of vested property rights, but these arguments dissipate when placed in a specific situation where a real community is wrestling with serious, well-documented concerns. In the *Village of Belle Terre* case in 1974, 98 the United States Supreme Court addressed a claimed violation of the right to travel. Finding that the ordinance in question responded to serious land-use problems and that it was not aimed at non-residents, the Court concluded that strict scrutiny of the ordinance was therefore not required and upheld the Village's decision. In the same year, the California Supreme Court explained why, so long as a municipality is not singling out non-residents, the right to travel does not bar cities from adopting restrictive land-use ordinances:

Were a court to hold... that an inferred right of any group to live wherever it chooses might not be abridged without some compelling state interest, the law of zoning would be literally turned upside down; presumptions of validity would become presumptions of invalidity and traditional police powers of a state would be severely circumscribed.⁹⁹

The takings doctrine, for all the trumpeting, remains a narrow, sharply-circumscribed basis for objecting to the expansive authority of governments to regulate private property in the name of the larger community good. Remember, the starting point for analysis—and almost always the ending point as well—is that a taking does not arise unless the government action eliminates substantially all the land's value. ¹⁰⁰ Total "wipe-outs" of property value are very rare in real-world land-use planning. If all value is eliminated, even then the government action will be allowed if it falls within the nuisance exception. ¹⁰¹ For communities that face severe stresses from growth, and that take care to document them, the takings doctrine will hardly ever prevent them from remedying the ills they face.

^{96.} Schenck v. City of Hudson, 114 F.3d 590 (6th Cir. 1997).

^{97.} Id. at 594.

^{98.} Village of Belle Terre v. Borass, 416 U.S. 1 (1974).

^{99.} Associated Home Builders of Greater Eastbay, Inc. v. City of Livermore, 557 P.2d 473, 485 (Cal. 1976).

^{100.} See Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1019 (1992). For examples of the effects of Lucas, see Hope M. Babcock, Has the U.S. Supreme Court Finally Drained the Swamp of Takings Jurisprudence?: The Impact of Lucas v. South Carolina Coastal Council on Wetlands and Coastal Barrier Beaches, 19 HARV. ENVIL. L. REV. 1 (1995).

^{101.} See Lucas, 505 U.S. at 1020-1028.

The policies guiding the field of government regulatory authority, of which the takings doctrine is a small part, should, however, always be kept in mind. Although the takings constraint is very limited as a constitutional matter, it reminds us that citizens hold property ownership dear. Property is not just property—it is also family, recreation, refuge, the past, and the future. Communities acting in their governmental capacity should, as they almost always do, proceed cautiously and fairly when regulating private property. Growth restrictions, for example, normally should be phased in. Grandfathering should be considered, as should the emerging device of Transfer of Development Rights, or TDRs, which can be employed to allow a landowner on undevelopable land to sell development rights in another, perhaps high-density, zone. Communities, in other words, should be respectful of the policies behind the takings doctrine but should be confident that their well-considered, well-documented responses to growth will likely not be hindered by asserted takings.

VI. CONCLUSION

The current state of western land policy—for government land, land trusts, rivers, and local land-use planning—tells us a number of things. One of the most notable is that we need to make a shift in emphasis from the federal public lands to land use planning at the community level. The long struggle to reconfigure public lands policy to comport with the true social and economic needs of the West, with sustainability, has largely been won. True, the struggle could again be joined and in any event there must always be vigilance toward these lands. They are, after all, one acre of every two out here. They are ours, and they are sacred.

But the more pressing need right now is at the local level. The shift will be difficult. The large environmental groups, so successful on federal policy, will need to find a way, as they gradually are doing, 103 to redirect resources to a much more diffuse arena.

More fundamentally, westerners need to give more time to their communities. We need to understand that our efforts can bear fruits in ways not possible just a few years ago. Let there be no doubt about the size of the task: the American Farmland Trust estimates that nationally we are losing 1 million acres of farmland and open space a year to the subdivisions' blades; in Colo-

^{102.} For descriptions of growth control techniques, including TDRs, see Stanley D. Abrams, Casenotes and Comments on Local Growth Control Management Concepts C750 A.L.I.-A.B.A. COURSE OF STUDY: LAND USE PLANNING 629 (1992); Sierra Club, Managing Growth,

http://www.sierraclub.org/sprawl/resources/challenge/growth.asp (visited June 1, 2000).

^{103.} On the Sierra Club's increased emphasis on local land use planning, see Sierra Club, Land Use Planning, http://sierraclub.org/sprawl/report99/landuse.asp (visited June 1, 2000).

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rado it is ten acres an hour.¹⁰⁴ Yet, daunting though that is, the current pace of development can be changed because it is contrary to society's will. Bruce Babbitt is not some rogue—his deep changes have been possible because the people are behind him. And the same is true with the parallel efforts in the national forests, in the land trust movement, in many city halls, and in Indian country.

In the end it comes down to patient, determined, confident work, place by place, day by day, by individual citizens and citizen groups. I hope, for example, that young people take full note of the many, diverse, and increasing opportunities to employ their energies, both as professionals and volunteers.

The past generation has identified the magnitude of the problem of growth in the West, addressed significant aspects of it, and suggested some ways to resolve it. The job for the next generation is to accomplish the much more daunting task of actually resolving it. Some will say that this is naïve, that the development machine cannot be slowed and stopped. But the real naïveté lies in failing to recognize that an opportunity is actually at hand, in failing to acknowledge and capitalize upon forces powerfully building toward sustainability, and in failing to abide by history's best lesson—that every last movement for justice and progress has been conceived of, and carried out, by plain, determined citizens. The real naïveté is failing to understand that if we do not act we will lose the West.

Lastly, I believe two of the most valuable lessons of this dynamic time have to do with science and spirituality. Like many people, it is not clear to me how much science is the right amount. I don't know, for example, if the Committee of Scientists' report, of which I am proud to have been a part, hit the right balance. Maybe it calls for too much science. Time will tell. But I do believe we must do better at incorporating the science of ecology, with its many branches, and a broad-gauged and rigorous notion of sustainability, into public policy, especially in local planning.

And we should make our natural resources policy in the larger society more compelling, and truer, by learning from Indian spirituality. When you spend time in Indian country, you learn that the Indian worldview has its own integrity, wholly unrelated to romantic, New Age notions. Indian people do not worship the natural world, but they revere it and know that it is integral to and inseparable from their lives. Billy Frank, the great Nisqually leader, who suffered some 50 arrests in the dark days of the 1960s and 1970s in order to exercise his treaty right to fish for salmon on his homeland river and who now is one of the most influential statesmen, Indian or non-Indian, in the Pacific Northwest, once told me this:

^{104.} See A. ANN SORENSON ET AL., AMERICAN FARMLAND TRUST, FARMING ON THE EDGE (1997), available online at http://farmlandinfo.org/cae/foe2/foetoc.html.>

On growth along Colorado's Front Range, see Michael E. Long, Colorado's Front Range, NAT'L GEO-GRAPHIC (Nov. 1996).

I don't believe in magic. I believe in the sun and the stars, the water, the tides, the floods, the owls, the hawks flyin', the river runnin', the wind talkin'. They're measurements. They tell us how healthy things are. How healthy we are. Because we and them are the same. That's what I believe in. 105

That kind of thinking and believing, incorporated into our land-use plans along with the science, can help us find a way. For traditional Indian spirituality really does reflect how much non-Indians also love this land and-based as it is on the idea that human beings are part of, and ultimately depend upon, the natural world—it also has the advantage of being scientifically accurate.