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Robert H. Nelson*

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HOW TO REFORM GRAZING POLICY: CREATING FORAGE RIGHTS ON FEDERAL RANGELANDS

*Robert H. Nelson**

INTRODUCTION

Since ancient times property rights have been recognized as an essential element of a well ordered society. Rejecting Plato's communal designs, Aristotle wrote "how immeasurably greater is the pleasure, when a man feels a thing to be his own."[1] When property rights are defined, an owner will exercise a careful stewardship. When property rights are undefined, however, "there is much more quarreling among those who have all things in common."[2]

Thomas Aquinas agreed with Aristotle's emphasis on the importance of property.[3] Aquinas argued that there are three reasons that property rights are essential. First, they provide important incentives for individuals to not "shirk the labour and leave to another that which concerns the community, as happens where there is a great number of servants."[4] Second, Aquinas contended that the clear assignment of responsibility for property results in "human affairs [are] conducted in [a] more orderly fashion if each man is charged with taking care of some particular things himself."[5] Finally, Aquinas observed that "quar-

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* Robert H. Nelson is a professor of environmental policy at the School of Public Affairs of the University of Maryland and a Senior Fellow of the Competitive Enterprise Institute.

1. ARISTOTLE, THE POLITICS 34 (B. Jowett trans., 1885). *See also* ROBERT H. NELSON, REACHING FOR HEAVEN ON EARTH: THE THEOLOGICAL MEANING OF ECONOMICS 36-39 (1991) [hereinafter NELSON, REACHING FOR HEAVEN]; JOSEPH SCHUMPETER, HISTORY OF ECONOMIC ANALYSIS 59 (1954). *See generally* RICHARD SCHLATTER, PRIVATE PROPERTY: HISTORY OF AN IDEA (1951).

2. ARISTOTLE, *supra* note 1, at 35.

3. *See* NELSON, REACHING FOR HEAVEN, *supra* note 1, at 42-45; GEORGE O'BRIEN, AN ESSAY ON MEDIEVAL ECONOMIC TEACHING (1967); SCHUMPETER, *supra* note 1, at 92.

4. 10 THOMAS AQUINAS, SUMMA THEOLOGICA 224 (Fathers of the English Dominican Province trans., 1927).

5. *Id.*

rels arise more frequently where there is no division of the things possessed."[6]

John Locke affirmed these principles and added that property rights arise when labor creates something of value from a resource.[7] No one owns a deer in the wild, but the moment it is killed, the hunter possesses it.[8] In the nineteenth century the United States would apply a similar concept with the Homestead Act,[9] under which a settler obtained a right to land by its successful farming for five years.[10]

On the Western federal rangelands, ranchers have grazed public lands for a century or more.[11] By Locke's standard they are entitled to the rangelands; yet, many others are entitled to the land by the same reasoning.[12] The hunting of deer, antelope, elk and other animals on public rangelands may have a value equal to or greater than that of the livestock forage obtained.[13] If interpreted broadly, even those who visit the land to enjoy an evening

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6. *Id.*

7. *See* JOHN LOCKE, TWO TREATISES OF GOVERNMENT 288 (Peter Laslett ed., 1988). *See generally* JOYCE OLDHAM APPLEBY, ECONOMIC THOUGHT AND IDEOLOGY IN SEVENTEENTH CENTURY ENGLAND (1978); C.B. MACPHERSON, THE POLITICAL ECONOMY OF POSSESSIVE INDIVIDUALISM: HOBBES TO LOCKE (1962).

8. *See* LOCKE, *supra* note 7, at 289.

9. *See* PAUL WALLACE GATES, HISTORY OF PUBLIC LAND LAW DEVELOPMENT 393-399 (1968). For the history of the public lands in the nineteenth century, see BENJAMIN HORACE HIBBARD, A HISTORY OF THE PUBLIC LAND POLICES (1965). *See generally* ROY MARVIN ROBBINS, OUR LANDED HERITAGE: THE PUBLIC DOMAIN, 1776-1970 (1976).

10. GATES, *supra* note 9, at 395.

11. DAVID A. ADAMS, RENEWABLE RESOURCE POLICY: THE LEGAL-INSTITUTIONAL FOUNDATIONS 90-133 (1993); *see also* SAMUEL TRASK DANA & SALLY K. FAIRFAX, FOREST AND RANGE POLICY: ITS DEVELOPMENT IN THE UNITED STATES 86-89 (1980).

12. E. LOUISE PEFFER, THE CLOSING OF THE PUBLIC DOMAIN: DISPOSAL AND RESERVATIONS POLICES, 1900-1950, at 311 (1951); *see also* ROBERT H. NELSON, PUBLIC LANDS AND PRIVATE RIGHTS: THE FAILURE OF SCIENTIFIC MANAGEMENT 197-98 (1995) [hereinafter NELSON, PUBLIC LANDS].

13. JERRY L. HOLECHEK ET AL., RANGE MANAGEMENT: PRINCIPLES AND PRACTICES 378-79 (2d ed. 1995); *see also* COUNCIL ECON. ADVISORS, ECONOMIC REPORT OF THE PRESIDENT 223 (Feb. 1997).

sunset may have applied labor to the land to create something of beauty and value.

In the twentieth century, the solution to multiple claims has been government ownership of lands throughout the West.[14] This solution was readily adopted, under the banner of European socialist, American progressivism and other political and economic philosophies, as the tides of history shifted once again in this century towards a much greater role for government.[15] When American progressives sought the "scientific management" of society, it was easy to explain public land and resource ownership of as a key part of that design.[16]

Now, however, at the end of the twentieth century, nations are turning away from past government solutions.[17] Many governments are privatizing formerly state owned enterprises.[18] On federal rangelands, potential privatization is complicated by the history of these lands.[19] As noted above, there is already a diversity

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14. *See* PEFFER, *supra* note 12, at 315-41 (summary of the federal government's responses to the conflicting claims of stockmen, conservationists and others through the 1940s).

15. *See generally* DWIGHT WALDO, THE ADMINISTRATIVE STATE: A STUDY OF THE POLITICAL THEORY OF AMERICAN PUBLIC ADMINISTRATION (1948); STEPHEN SKOWRONEK, BUILDING A NEW AMERICAN STATE: THE EXPANSION OF NATIONAL ADMINISTRATIVE CAPACITIES, 1877-1920 (1982).

16. *See* SAMUEL HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT, 1890-1920, at 265-66 (1959); ROBERT NELSON, THE MAKING OF FEDERAL COAL POLICY 15-20 (1983) [hereinafter NELSON, FEDERAL COAL POLICY]; Randy T. Simmons, *The Progressive Ideal and the Columbia Basin Project, in* THE POLITICAL ECONOMY OF THE AMERICAN WEST 95-111 (Terry L. Anderson & Peter J. Hill eds., 1994); A. Dan Tarlock, *The Making of Federal Coal Policy: Lessons for Public Lands Management from a Failed Program, An Essay and Review*, 25 NAT. RESOURCES J. 349 (1985).

17. *See* ROBERT W. POOLE, *Privatization for Economic Development, in* THE PRIVATIZATION PROCESS: A WORLDWIDE PERSPECTIVE 1 (Terry L. Anderson & Peter J. Hill eds., 1996). *See also* REPORT OF THE PRESIDENT'S COMMISSION ON PRIVATIZATION, PRIVATIZATION: TOWARD MORE EFFECTIVE GOVERNMENT (March 1988).

18. *See* POOLE, *supra* note 17, at 1.

19. Professor Robert Ellickson's argument is as follows:

> I urge the Federal Government to consider re-adopting the nation's land policy of the nineteenth century, a presumption that federal lands should be transferred to private

of groups and interests with legitimate claims to the land. Privatization in a typical fashion, consisting of the outright sale of the land by the government, would dispossess these groups of their claims. This may be economically efficient, but such a scheme would also be ethically reprehensible, not unlike that of socialist and other expropriations of private property in the past.[20]

Moreover, the evolution of property rights is almost always gradual and contingent.[21] Except in times of revolutionary excess, it consists of the recognition of the ability of a party to exclude a particular use, to sell access to a resource, and the incremental accumulation of other controls over a resource.[22] Such rights typically evolve informally at first, perhaps grounded in local custom.[23] Formal legal acceptance of a right generally occurs

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ownership.

> Why should the Federal Government still own sixty-one percent of Idaho and forty-five percent of California? Environmentalists should not be blind to the advantages of significantly reducing these percentages. The privatization of federal holdings would result in less abuse, such as overgrazing.

Robert Ellickson, *Panel I: Liberty, Property and Environmental Ethics* 21 ECOLOGY L.Q. 402 (1994). For another proposal to privatize, see Dale A. Oesterle, *Public Land: How Much is Enough?* 23 ECOLOGY L.Q. 521-75 (1996). For criticisms of public land privatization, see SCOTT LEHMANN, PRIVATIZING PUBLIC LANDS (1995).

20. *See* Robert H. Nelson, *Selling Other People's Property: Why the Privatization Movement Failed, in* NELSON, PUBLIC LANDS, *supra* note 12, at 183-99.

21. *See* ARTHUR REED HOGUE, ORIGINS OF THE COMMON LAW 3 (1985); *see also* John R. Umbeck, *Might Makes Rights: A Theory of the Formation and Initial Distribution of Property Rights*, 19 ECON. INQUIRY 38-59 (1981).

22. This pattern has characterized property rights evolution on both urban lands and public lands. For a study of the gradual evolution of property rights to urban lands under zoning, see ROBERT H. NELSON, ZONING AND PROPERTY RIGHTS: AN ANALYSIS OF THE AMERICAN SYSTEM OF LAND USE REGULATION (1977) [hereinafter NELSON, ZONING].

23. The uses of land are often determined outside the formal structures of the law. At some later point, if there is sufficient need, the law may catch up and formally codify practices long existing. For an exploration of a network of informal controls over local livestock grazing, see ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES (1991).

at the end of the process.[24]

The rights to graze livestock on federal lands come under this category.[25] These de facto rights have existed for a long time, and many parties informally recognize them, although they are still officially denied by some.[26] For decades ranchers have pressed for a more formal establishment of their tenure status on federal rangelands.[27] Today some prominent members of the environmental movement are reaching similar conclusions. The delineation of formal rights to use would promote more responsible environmental management and federal rangeland resource use.[28] The lack of any clear rights on federal rangelands has resulted in blurred lines of responsibility which have been as harmful to the environment as they have been to the conduct of the livestock business.[29]

If rangeland rights were defined and made legally transferrable to any new owner, environmental organizations could purchase forage rights to federal lands that are now available only to people engaged in ranching. As owners, such organiza-

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24. *See* FREDERICK POLLOCK, THE LAND LAWS 2-3 (1883).

25. *See* WALTER P. WEBB, THE GREAT PLAINS 398-431 (1931); Terry L. Anderson & Peter J. Hill, *The Evolution of Property Rights: A Study of the American West*, 18 J.L. & ECON. 163 (1975). *See generally* PHILLIP O. FOSS, POLITICS AND GRASS: THE ADMINISTRATION OF GRAZING ON THE PUBLIC DOMAIN (1960).

26. *See* FOSS, *supra* note 25, at 61-63 (discussing the politics of the Taylor Grazing Act). *See also* WAYNE HAGE, STORM OVER THE RANGELANDS: PRIVATE RIGHTS IN FEDERAL LANDS 3-5 (1989); THE WISE USE AGENDA: THE CITIZEN'S POLICY GUIDE TO ENVIRONMENTAL RESOURCE ISSUES 14 (A. Gottlieb ed., 1989).

27. *See* FOSS, *supra* note 25, at 198.

28. *See* FRIENDS OF THE EARTH ET AL., GREEN SCISSORS: CUTTING WASTEFUL AND ENVIRONMENTALLY HARMFUL SPENDING AND SUBSIDIES 23 (Feb. 1996); Karl Hess Jr. & Johanna H. Wald, *Grazing Reform: Here's the Answer*, HIGH COUNTRY NEWS, Oct. 2, 1995, at 14; Andrew Kerr, *Removing Hoofed Locusts from the Public Trough*, WILLOWA COUNTY CHIEFTAIN, Aug. 15, 1996.

29. *See* JEANNE NIENABER CLARKE & DANIEL C. MCCOOL, STAKING OUT THE TERRAIN: POWER AND PERFORMANCE AMONG NATURAL RESOURCE AGENCIES 158-59 (1996); *see also* BUREAUCRACY VERSUS ENVIRONMENT: THE ENVIRONMENTAL COSTS OF BUREAUCRATIC GOVERNANCE (John A. Baden & Richard Stroup eds., 1981).

tions could ensure that riparian habitat is protected, that forage is available for wildlife, and that other key environmental objectives are met. Moreover, a clear delineation of rights would encourage existing ranchers to invest in the long run improvement of the land and its productivity. The establishment of forage rights offers the best means available for resolving the severe gridlock and polarization that have beset federal rangelands for the past quarter century or more.

I. AN ENVIRONMENTAL PLAN FOR FEDERAL LAND FORAGE RIGHTS

Andy Kerr is a fierce partisan of environmental causes.[30] As the chief strategist for the Oregon Natural Resources Coalition, he sought to sharply curtail, if not eliminate, timber harvesting in the federal old growth forests of the Pacific Northwest. Now, Kerr has turned his attention in a new direction arguing that "if we want — and society does want — to restore streams, bring back salmon, unendanger species, restore soil productivity and reduce government spending, then livestock must go from our public lands."[31]

Kerr and other environmental activists fought to cut back timber harvests with the tried-and-true method of the contemporary environmental movement: by persuading the federal government to wield a command-and-control stick to compel compliance with environmental objectives. In the case of the forests of the Pacific Northwest, Kerr and others tried to use the formidable powers of the Endangered Species Act to encourage government compliance.[32] Yet, in seeking to reduce livestock grazing on federal lands, Kerr now favors a much different approach. Instead of government coercion, he believes in giving ranchers the right to sell their access to federal land forage. Environmental and other organizations could then buy out ranchers in voluntary transactions. In Kerr's words, "a permittee should be able to sell the

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30. *See* ALSTON CHASE, IN A DARK WOOD: THE FIGHT OVER FORESTS AND THE RISING TYRANNY OF ECOLOGY 181-82 (1995); SUSAN ZAKIN, COYOTES AND TOWN DOGS: EARTH FIRST AND THE ENVIRONMENTAL MOVEMENT 234-36 (1993).

31. Kerr, *supra* note 28.

32. *See* CHASE, *supra* note 30, at 256-58.

grazing privilege to anyone: another rancher or to an environmental group who could elect to retire the permit in favor of salmon and elk or plenty and poetry."[33]

Kerr thinks that a buy-out approach would be both "easier" and "more just" than traditional command-and-control strategies.[34] A buyout approach is more feasible because livestock ranchers have proven themselves to be powerful political foes. Persuading the government to exercise its powers to significantly curtail livestock grazing in areas of special environmental sensitivity would be a long and difficult political process with uncertain prospects. Moreover, ranchers have the ability to appeal to powerful images in the average American mind of the lone cowboy riding the Western range, in a way that no timber harvester ever could.[35]

At the same time, the federal rangelands have low economic value in grazing use. It takes at least fifteen acres of standard Bureau of Land Management ("BLM") land to support the grazing of one cow (and often a calf) for one month.[36] As shown by market trades that have long occurred among ranchers, it would require an average of only about $2.50 to $2.60 per acre to buy out a BLM grazing permit.[37] At these prices, many environmental groups have sufficient resources to buy out rancher permits cov-

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33. Kerr, *supra* note 28.

34. *Id.*

35. *See* Donald Snow, *The Pristine Silence of Leaving It All Alone, in* A WOLF IN THE GARDEN: THE LAND RIGHTS MOVEMENT AND THE NEW ENVIRONMENTAL DEBATE 29-30 (Philip D. Brick & R. McGreggor Cawley eds., 1996).

36. There are about 9.7 million animal unit months (AUMs) of grazing on about 150 million total acres of BLM grazing land, thus averaging about 15 acres per AUM. *See* BUREAU OF LAND MGMT., U.S. DEP'T INTERIOR, PUBLIC LAND STATISTICS 1993, at 23-25 (1994) [hereinafter PUBLIC LAND STATISTICS 1993].

37. Average 1992 permit values for an AUM of grazing ranged from $36 in Wyoming to $89 per AUM in New Mexico (for about 15 acres per AUM on average). *See* L. Allen Torrell et al., *The Market Value of Public Land Forage Implied from Grazing Permits, in* CURRENT ISSUES IN RANGELAND ECONOMICS - 1994, at 80 (Neil R. Rimbey & Diane E. Isaak eds., 1994). The typical purchase price for a BLM permit thus is about $2.50 to $6.00 per acre.

ering significant acreages of federal grazing lands, including the lands of most environmental interest.[38]

Today, livestock grazing takes place on approximately 260 million acres of federal forests and rangelands.[39] It is not necessary for any environmental purpose to buy out all of this grazing land.[40] Indeed, in many areas, livestock grazing may be necessary to improve rangeland conditions.[41] Nevertheless, assuming that environmentalists did want to buy out all grazing rights and that ranchers were willing to sell, a maximum estimate of cost would be $2 billion for BLM and Forest Service lands.[42]

Besides purchases by environmental groups, the government could also enter the market for grazing rights in selected areas. Environmental activists oppose grazing in wilderness areas and have sought to have the government remove livestock from these and other areas.[43] Negotiated purchases from rancher sellers

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38. *See* DONALD SNOW, CONSERVATION FUND, INSIDE THE ENVIRONMENTAL MOVEMENT: MEETING THE LEADERSHIP CHALLENGE xvii (1992). The major environmental organizations typically each have budgets in the tens of millions of dollars. *See* JONATHAN H. ADLER, ENVIRONMENTALISM AT THE CROSSROADS: GREEN ACTIVISM IN AMERICA, apps. I-XXI (1995).

39. *See* BUREAU OF LAND MGMT., U.S. DEP'T INTERIOR, GRAZING FEE REVIEW AND EVALUATION: UPDATE OF THE 1986 FINAL REPORT 69 (1992) [hereinafter GRAZING FEE REVIEW].

40. *See* Jerry L. Holechek, *Policy Changes on Federal Rangelands: A Perspective*, J. WATER & SOIL CONSERVATION, May-June 1993, at 171-72 (1993).

41. *See* HOLECHEK ET AL., *supra* note 13, at 127-29.

42. Total BLM grazing in 1993 was 9.7 million AUMs. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 24-25. Total Forest Service grazing in 1993 was 8.4 million AUMs. *See* FOREST SERV., DEP'T AGRIC., REPORT OF THE FOREST SERVICE, FISCAL YEAR 1993, at 142 (May 1994). A maximum estimate for the purchase price of an AUM, based on prices in recent years, is $100. *See* Torrell et al., *supra* note 37, at 80. Thus, for total BLM and Forest Service AUMs, an estimate of the maximum purchase cost at market value is $1.81 billion, or allowing some further margin for error, $2 billion.

43. In the early 1990s, many environmentalists adopted the slogan, "cattle free by '93," for the federal rangelands. *See* K.L. Cool, *Seeking Common Ground on Western Rangelands* 14 RANGELANDS 90-92 (1992). A classic statement of environmental opposition to livestock grazing is found in Edward Abbey, *Even the Bad Guys Wear White Hats: Cowboys, Ranchers and the Ruin of the West*, HARPER'S, Jan. 1986, at 51-55.

would be a fairer, less confrontational, and more politically feasible way to accomplish this.

The costs of administering grazing on BLM lands are estimated to be about $200 million per year.[44] The degree of inefficiency is demonstrated by the fact that it would require two to five years of BLM administrative costs to pay the full value for all current livestock grazing on BLM lands.[45] As long as administrative costs are so high, it would pay to abolish the existing grazing regime and buy out all grazing rights. Kerr argues that "since the government spends $10 for every $1 it takes in on grazing, in a few years the [administrative] savings can pay for the compensation [paid to buy out ranchers]. Then the money could go to debt payments or starving kids or heart bypasses."[46] Although it is impossible to defend the status quo, other strategies for change might be adopted, including drastic reductions in government administrative costs.

Departing from the longstanding environmental conventional wisdom, it is fairer and more equitable to pay the rancher.[47] Many ranchers have grazed the same federal lands for a century or more, building expectations of continued federal land access into their private ranching investments and other calculations. When a ranch has been sold, the permit to graze on the con-

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44. In 1981, the full costs (including overhead) of managing BLM grazing were $125 million. *See* ROBERT H. NELSON & GABRIEL JOSEPH, OFF. POL'Y ANALYSIS, U.S. DEP'T INTERIOR, AN ANALYSIS OF REVENUES AND COSTS OF PUBLIC LAND MANAGEMENT BY THE INTERIOR DEPARTMENT IN 13 WESTERN STATES — UPDATE TO 1981 (Sept. 1982). Assuming that grazing continued to represent the same proportion of the BLM budget, and adjusting for the increase in the BLM budget from 1981 to 1992, the estimated 1992 cost of BLM grazing management was $193 million, or about $200 million, in 1995. *See* ROBERT H. NELSON, HOW AND WHY TO TRANSFER BLM LANDS TO THE STATES 10 (Competitive Enterprise Inst., Jan. 1996) [hereinafter NELSON, HOW AND WHY].

45. Grazing takes place on about 150 million acres of BLM lands. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 23. The typical purchase cost of a BLM grazing permit is about $2.50 to $6 per acre. *See supra* note 37. Thus, the estimated total purchase cost for all BLM permits is $400 to $900 million, or about two to five years at $200 million per year in administrative cost savings.

46. Kerr, *supra* note 28.

47. *Id.*

nected federal land, which by long practice automatically accompanies the transfer of ranch ownership, often represents a major portion of the private ranch value.[48] Thus, many purchasers of ranches have in effect paid for their grazing access to federal lands. As Kerr comments, "the market recognizes the value of the permits when ranches are transferred. Grazing reductions reduce the value of the [private] property to which the permits are attached."[49] So, Kerr concludes, it is only fair that the government should compensate the rancher for this loss of value.

As Kerr describes his plan, it is "a solution to an environmental problem that requires less government regulation and lets the free market work. Call it supply-side ecology."[50]

II. RETHINKING THE FEDERAL RANGELANDS

One need not fully agree with Kerr's assessment of the environmental impacts of livestock grazing, or believe that grazing needs to be curtailed on all western lands, to recognize that, if it were to be adopted, the marketing of grazing forage rights to nonranchers would be a milestone in the history of federal land policy.

In the past, the government has sought to resolve issues such as the role of livestock grazing on government lands through "scientific" debate about the ecological, economic and other impacts of grazing.[51] The potential values of competing uses must also be factored in and weighed against the grazing value.[52] The

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48. *See* B. Delworth Gardner, *Transfer Restrictions and Misallocation in Grazing Public Range*, 44 J. FARM ECON. 52 (1962). *See also* B. Delworth Gardner, *The Role of Economic Analysis in Public Range Management* [hereinafter Gardner, *Role of Economic Analysis*], *in* NAT'L RES. COUNCIL/NAT'L ACAD. SCI., DEVELOPING STRATEGIES FOR RANGELAND MANAGEMENT: A REPORT PREPARED BY THE COMMITTEE ON DEVELOPING STRATEGIES FOR RANGELAND MANAGEMENT 1452 (1984) [hereinafter DEVELOPING STRATEGIES].

49. Kerr, *supra* note 28.

50. *Id.*

51. *See* KARL HESS, VISIONS UPON THE LAND: MAN AND NATURE ON THE WESTERN RANGE 80 (1992); Sally K. Fairfax, *Coming of Age in the Bureau of Land Management: Range Management in Search of a Gospel in* DEVELOPING STRATEGIES, *supra* note 48, at 1738-40.

52. *See* PUB. LAND L. REV. COMM'N, ONE THIRD OF THE NATION'S LAND: A REPORT TO THE PRESIDENT AND TO THE CONGRESS 45-47 (1970);

existing federal land system has set levels and seasons of livestock grazing by planning grounded in scientific determinations.[53] It has all been part of the scientific management philosophy that has provided the intellectual foundation for federal land management since the progressive era early in this century.[54]

Now, however, Kerr and others seek to bypass much of that. The question of whether federal land forage should be used for grazing would no longer be resolved by government planners but by the competitive workings of the marketplace, as already occurs on private lands in the West. It would be a question of whether environmentalists, recreationists, or other groups are willing to meet the rancher's selling price. The precise motives or scientific calculations of either party would be irrelevant. Such an approach would involve less conflict than the existing regulatory regime because changes in rangeland use would be achieved through voluntary transactions. It would also require much less involvement by government administrative officers, offering major potential savings in government expenditures.

Kerr is not the only prominent environmentalist these days talking about creating forage markets on federal lands. Johanna Wald has been the leading environmental spokesperson on matters relating to livestock grazing on federal lands for years. In 1974, as an attorney for the Natural Resource Defense Council (where she remains today), Wald was instrumental in winning *NRDC v. Morton* in federal court.[55] As a result of this decision, the Bureau of Land Management was required to prepare almost 150 new land use plans. These proposals reexamined the role of livestock grazing on 170 million acres of federal land, an effort that absorbed large amounts of agency attention and money over 13 years.[56] However, the BLM ended up spending a great deal

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Perry R. Hagenstein, *The Federal Lands Today — Uses and Limits, in* RETHINKING THE FEDERAL LANDS 74, 92-93 (Sterling Brubaker ed., 1984); JAMES MUHN & HANSON R. STUART, OPPORTUNITY AND CHALLENGE: THE STORY OF BLM 104-06 (1988).

53. *See* Fairfax, *supra* note 51, at 1739.

54. *See* HAYS, *supra* note 16, at 265-66.

55. Natural Resources Defense Council (NRDC) v. Morton, 388 F. Supp. 829, 840 (D.C. 1974), *aff'd*, 527 F.2d 1386 (D.C. Cir. 1976).

56. *See* R. MCGREGGOR CAWLEY, FEDERAL LANDS, WESTERN ANGER:

but making few changes in grazing practices. Partly out of disillusionment with that long planning process, Wald has recently suggested that it may be necessary to turn to the market.[57]

Writing in the *High Country News* (with Karl Hess) in the fall of 1995, Wald called for a new approach to federal land grazing based on "incentives and markets."[58] Environmentalists and others "should be free to acquire permits to federal grass and to use the lands to enhance wildlife, stabilize soils, protect endangered species, improve riparian areas or, if they prefer, raise red meat."[59] If the law were to allow this, environmentalists would "have less cause to push for a political end to grazing on ecologically fragile public lands. For the first time, they will have market options, like buying all or a portion of a rancher's permit or simply leasing federal forage."[60]

One might think that Dave Foreman, the founder of the radical environmental group Earth First, would be unlikely to favor linking free markets with environmental objectives.[61] In the 1980s Foreman was willing to break the law, advocating the "monkeywrenching" of timber harvesting and other machinery, to gain his objectives.[62] Solutions grounded in the recognition of private rights were far from his thinking. Yet, recently Foreman has stated that he has had a change of heart. He now proposes an effort to "buy out grazing permittees in Wilderness Areas, National Parks, Wildlife Refuges, and other reserves. The buttinghead battles with ranchers over grazing in Wilderness is bad news for all involved. The most practical and fairest way to end grazing in Wilderness is to buy 'em out," instead of forcing its removal.[63]

Some environmental groups have invested in this approach. In 1995 an environmental organization, Forest Guardians, bid to

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THE SAGEBRUSH REBELLION AND ENVIRONMENTAL POLITICS 50 (1993).

57. *See* Hess & Wald, *supra* note 28.

58. *Id.*

59. *Id.*

60. *Id.*

61. *See* DAVE FOREMAN, CONFESSIONS OF AN ECO-WARRIOR 18 (1991).

62. *Id.* at 117.

63. Dave Foreman, *Around the Campfire*, WILD EARTH, Fall 1995, at 2-3.

lease grazing lands owned by the state of New Mexico.[64] Unlike the federal government, most states regularly put their grazing lands up for auction. New Mexico State Lands Commissioner, Ray Powell, initially refused bids for nongrazing uses. Facing growing environmental protests and threats of legal action for failure to exercise a proper trust responsibility (state trust lands are to be managed to raise revenues for schools and other state purposes), Powell altered his stance. In October 1996, the Forest Guardians entered a bid for a New Mexico grazing lease including an environmentally sensitive riparian area along the Rio Puerco River, and the state accepted the bid. This was the first time an environmental group has purchased grazing rights in a state competitive lease sale.[65]

Local governments in the Las Vegas area have paid more than $1 million to purchase five federal grazing allotments, water rights, range improvements, and the base property from existing ranchers, involving more than 900,000 acres.[66] This purchase was intended to eliminate grazing over the allotments, a key part of a broader agreement between the local governments and the Fish and Wildlife Service to implement a habitat conservation plan for the desert tortoise, which is listed under the Endangered Species Act.[67] Rather than forcibly removing the ranchers, which might have been possible under existing law, the Las Vegas plan paid compensation through a voluntary buyout of the affected parties. This approach should be extended to resolve other endangered species conflicts. The plan also provides for spending an additional $1 million in order to "purchase [further] grazing privileges from willing sellers."[68]

In September 1996 the Nature Conservancy of Utah announced that it had obtained an option, and planned later to purchase for $4.6 million, the Dugout ranch at the entrance to

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64. *See* Katie Fesus, *New Mexico Environmentalists Lease State Lands*, HIGH COUNTRY NEWS, Nov. 25, 1996, at 4.

65. *See id.*

66. *See* Clark County (Nev.) Desert Conservation Plan 82 (Aug. 1995) [hereinafter Desert Conservation Plan].

67. *See id.*

68. *Id.* at 94.

the Needles District of Canyonlands National Park.[69] The purchase covered 5,167 acres of private property and associated control over the grazing use of 250,000 acres of BLM and Forest Service allotments.[70] The Nature Conservancy plans to continue the livestock business, while taking steps to ensure that the presence of cattle is compatible with the high biodiversity, scenic and other environmental assets of the allotments. The purchase was partly designed to prevent the sale of the private lands for second homes and other developments.

Dave Livermore, the Utah State Director for Nature Conservancy, commented that the organization increasingly sought to move "beyond the rangeland conflict" and enter into "collaborative efforts with livestock operators."[71] For one thing, "cows are better than condos. Increasingly in the West, this is the only choice we face."[72] Moreover, "for biodiversity to be preserved, local people must prosper . . . We have to offer models which, by embracing progressive grazing practices, also make economic sense."[73] In the Dugout ranch case, the Nature Conservancy concluded that a direct purchase was the best route, but in other cases subleasing, purchase of easements, and other transactions might be appropriate.

This shift in strategy by some environmentalists is long overdue. In *Sand County Almanac*, Aldo Leopold argued that fundamental environmental improvements would only come about when people changed their thinking.[74] Government could be useful, but at some point it would become a "mastodon . . . handicapped by its own dimensions."[75] If government asks a property owner to "perform some unprofitable act for the good of the community," costing the owner directly, it would only be

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69. *See Option Signed To Protect Dugout Ranch*, BASIN, RANGE & RIMROCK (Nature Conservancy of Utah), Fall 1996, at 1.

70. *See id.*

71. Dave Livermore, *Director's Report: Cows vs. Condos*, BASIN, RANGE & RIMROCK (Nature Conservancy of Utah), Fall 1996, at 2.

72. *Id.*

73. *Id.*

74. ALDO LEOPOLD, A SAND COUNTY ALMANAC 228 (1949).

75. *Id.* at 250.

"fair and proper" to pay for this.[76] Leopold also suggests that, if livestock must be excluded from certain areas to protect the grizzly bears, then "buying out scattered livestock ranches is the only way to create such areas."[77]

In the long run, "the answer, if there is any, seems to be in a land ethic, or some other force which assigns more obligation to the private land owner."[78] In short, if the land owner, or the grazer on the public rangelands, is to behave according to a land ethic, it will not result from government compulsion but from that person's freedom to experiment and manage the land in accordance with his or her own vision of what is ethical. That requires personal independence and the ability to control use that only a private ownership regime can offer.

III. THE EXISTING GRAZING SYSTEM

Establishing a new rights regime for federal forests and rangelands would help resolve the most controversial and bitterly fought issue in federal lands history. Fierce disputes over livestock grazing date back to the late nineteenth century.[79] Until then, the settlement of the United States' western territories had taken place only where there was enough rain for crop farming. But when settlement moved beyond the 100th meridian (going westward, approximately one-half of the way through the Dakotas, Nebraska and Kansas), there was no longer sufficient moisture for traditional farming.[80] Absent irrigation, the only feasible agricultural use of the land was grazing.[81]

The principal law for the disposal of federal land was the Homestead Act of 1862,[82] enabling a settler who farmed 160 acres for five years to acquire free ownership. This worked well in the Midwest, but it was ill suited to the arid grazing lands fur-

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76. *Id.*

77. *Id.* at 277.

78. *Id.* at 250.

79. *See* FOSS, *supra* note 25, at 28-36.

80. *See* WALLACE STEGNER, BEYOND THE HUNDREDTH MERIDIAN: JOHN WESLEY POWELL AND THE SECOND OPENING OF THE WEST 214 (1954).

81. *See* PEFFER, *supra* note 12, at 13, 23; *see also* HESS, *supra* note 51, at 68.

82. Law of May 20, 1862, ch. 75, 12 Stat. 392 (repealed 1976).

ther west.[83] On these lands, the productivity of the land was so low that a small family ranch of 50 head of cattle often required more than 5,000 acres for grazing.[84] In the most arid lands, such as were found over parts of New Mexico and Arizona, such a ranch might require considerably more acreage.

Congress refused to modify the Homestead Act, however, and other public land laws with similar acreage limits, for many years,[85] partly because by eastern standards owning thousands of acres seemed a virtual landed estate.[86] Others hoped, against all evidence, that small family farms growing crops on the Midwest model would eventually extend all over the West.[87]

The Homestead Act itself formally codified practices that had developed over a long history of squatters' rights on public lands.[88] From the early settlement days, when the government did not make land available at times and under acceptable terms, settlers simply defied the law and moved onto the land. At some point what began as an unlawful occupancy was recognized by Congress in an ownership grant.[89]

In the late nineteenth century, when the Homestead Act proved unsuited to their circumstances, ranchers also followed the practices of the early settlers. They installed barbed wire fences over portions of the public rangelands to stake out "their" rangeland.[90] This time, however, the federal government refused to recognize the squatters' actions.[91] The government was not prepared to convey large acreages for such a low value land use

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83. *See* WALTER P. WEBB, THE GREAT PLAINS 411-12 (1981).

84. Typical Bureau of Land Management rangeland requires about 15 acres per animal unit month (AUM). *See supra* note 36. If they engaged in grazing for two thirds of the year (perhaps being fed hay in the winter), a ranch of 50 cattle might require 800 AUMs of grazing, requiring an area of 6,000 acres of rangeland.

85. *See* PEFFER, *supra* note 12, at 13.

86. *See* WEBB, *supra* note 82, at 408-09.

87. *See* HESS, *supra* note 51, at 67.

88. *See* GATES, *supra* note 9, at 387.

89. *See id.* at 222-23.

90. *See* CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER AND THE FUTURE OF THE WEST 86-87 (1992).

91. *See* GATES, *supra* note 9, at 466-68.

as livestock grazing.[92]

Therefore, ranchers turned to other ways of asserting control over the public range.[93] They recognized that uncontrolled commons prove disastrous for range conditions.[94] Using the Homestead Act and other existing legislation, ranchers acquired private ownership of key properties controlling access to the nearby public range.[95] Such property might then be used to control access to public grazing lands through a canyon or it might contain a spring with the area's only available water. A rancher might obtain land along a river or stream to irrigate lands and grow hay for winter feed supplies, a ranching necessity in northern climates. Ranchers also arranged among themselves for individual access to the federal rangeland in particular areas.[96]

All this created a de facto division of range rights among competing livestock users.[97] However, the periodic eruption of range wars involving cattlemen, sheep herders and homesteaders testified to the instability and unsatisfactory nature of these efforts to deal with a classic commons situation.[98]

Following the enactment of the Forest Reserve Act of 1891,[99] existing allocations of federal land grazing were given a more secure legal status in the national forest system.[100] Under the Act, exclusive permits were issued to ranchers for grazing in certain areas.[101] Then, grazing on the remaining public domain lands was brought under government control by the Taylor Grazing

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92. *See id.*

93. *See* WILKINSON, *supra* note 90, at 88-89.

94. *See* HESS, *supra* note 51, at 61-64; *see also* Hardin, *The Tragedy of the Commons*, 162 SCI. 1243-48 (1968).

95. *See* WILKINSON, *supra* note 90, at 83.

96. *See* GARY D. LIBECAP, LOCKING UP THE RANGE: FEDERAL LAND CONTROLS AND GRAZING 15-23 (1981).

97. *See id.* at 15.

98. *See* WILKINSON, *supra* note 90, at 85-86; *see also* FOSS, *supra* note 25, at 30-32.

99. Law of Mar. 3, 1891, ch. 561, 26 Stat. 1095 (codified as amended in scattered sections of 16 U.S.C. and 43 U.S.C.).

100. *See id.* § 8 (current version at 16 U.S.C. §§ 608-611a).

101. *See* ADAMS, *supra* note 11, at 92-94; *see also* DANA & FAIRFAX, *supra* note 11, at 88-89.

Act of 1934.[102] Under the Act, ranchers were eligible to graze on federal lands if they met two conditions: (1) ownership of nearby private "base" ranch property that was complementary with livestock grazing on federal lands, and (2) demonstration of a recent history of grazing on federal rangelands.[103] The practical effect was to give force of law to existing informal grazing arrangements.[104] The one major exception — an important reason many cattlemen favored the law – was that it excluded the migratory sheep herders who had never been part of the local range allocation system.[105]

The Taylor Grazing Act was a kind of retroactive homestead act for federal rangelands. A new agency, the Grazing Service, was created to administer the new system of rangeland allocations.[106] In 1946, the Grazing Service was merged with the old General Land Office, whose mission was greatly reduced once the disposal era had ended, thereby creating the current Bureau of Land Management ("BLM").[107] The BLM was originally formed to police the grazing arrangements established by the Taylor Grazing Act.[108] Livestock grazing still accounts for a major portion of the time and effort of BLM personnel. The BLM currently has a total budget of about $600 million per year for the management of all types of lands and resources,[109] an estimated 28 percent of which is attributable to the existence of the grazing program.[110]

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102. Law of June 28, 1934, ch. 865, 48 Stat. 1269 (current version at 43 U.S.C. §§ 315 to 315o-1); *see* FOSS, *supra* note 25, at 59.

103. *See* 43 U.S.C. § 315; *see also* FOSS, *supra* note 25, at 62-63.

104. *See* FOSS, *supra* note 25, at 70-71; *see also* WESLEY CARR CALEF, PRIVATE GRAZING AND PUBLIC LANDS: STUDIES OF THE LAND MANAGEMENT OF THE TAYLOR GRAZING ACT (1960).

105. *See* FOSS, *supra* note 25, at 72.

106. *See* MUHN & STUART, *supra* note 52, at 37-41.

107. *See id.* at 48-49; MARION CLAWSON, THE BUREAU OF LAND MANAGEMENT 31 (1971).

108. *See* Robert H. Nelson, *The Federal Land Management Agencies, in* A NEW CENTURY FOR NATURAL RESOURCES MANAGEMENT 52 (Richard L. Knight & Sarah F. Bates eds., 1995).

109. *See* BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 1998, Appendix, at 549 (1997).

110. *See* NELSON, HOW AND WHY, *supra* note 44, at ll.

Under the provisions of the Taylor Grazing Act affecting BLM lands, each eligible rancher is permitted to graze cattle (or sheep) on a designated portion of federal land, called an "allotment."[111] Most ranchers are the sole grazing users of this land area, although some graze their livestock together with other ranchers in common allotments. The BLM may grant the rancher up to a ten year permit to use the allotment.[112] Although not explicitly required by law, the BLM and Forest Service have almost always renewed the existing rancher's permit.[113] When the "base" ranch to which the permit is attached has been sold, the BLM has almost always transferred the permit to the new owner, although the agency is not legally required to do so.[114]

As a result, the assurance of future access to federal lands connected to a particular private ranch property has taken on the character of a property right. This right has "permit value," which often represents a significant portion of the ranch's total value.[115] The public land agencies insist that the rancher does not have an actual property right,[116] but at the same time the levels of federal capital gains and estate tax calculations reflect the permit value.[117] Banks collateralize loans to ranchers on the basis of ranch values partly attributable to permit value.[118]

The rancher's permit specifies how many livestock are allowed to graze the allotment and the precise times the livestock can be on the federal rangeland. For example, a rancher in a northern state might have a permit to graze 200 head of cattle on a partic-

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111. *Law: Public Grazing Laws and Regulations*, DIFFERENT DRUMMER, Spring 1994, at 21 [hereinafter *Public Grazing Laws*].

112. *See* Karl Hess Jr. & Jerry L. Holechek, *Beyond the Grazing Fee: An Agenda for Rangeland Reform*, POL'Y ANALYSIS (Cato Inst.), July 13, 1995, at 13.

113. *See* PUB. LAND L. REV. COMM'N, *supra* note 52, at 109.

114. *See id.* at 118.

115. *See* Gardner, *Role of Economic Analysis*, *supra* note 48, at 59-61.

116. *See* BUREAU LAND MGMT., U.S. DEP'T INTERIOR, RANGELAND REFORM '94: DRAFT ENVIRONMENTAL IMPACT STATEMENT 3-71 (1994) [hereinafter RANGELAND REFORM '94]; *see also* DANA & FAIRFAX, *supra* note 11, at 89.

117. *See* L. Allen Torell & John P. Doll, *Public Land Policy and the Value of Grazing Permits*, 16 W. J. AGRIC. ECON. 174-84 (1991).

118. *See* PUB. LAND L. REV. COMM'N, *supra* note 52, at 118.

ular allotment of BLM land between June 1 and July 15.[119] After that, the cattle might move for several months to a higher elevation on Forest Service lands, perhaps returning to the BLM lands for a portion of the fall. In the winter, the rancher may feed the cattle from his private lands, including hay grown during the summer and stored for that purpose. In the warmer southwest, it is common for a rancher to keep livestock on BLM and/or Forest Service land for the entire year, known as "yearlong grazing".[120]

A person must be a livestock operator to hold a permit for forage in a federal land allotment. This requirement partly reflects the need for the permit holder to own a base private ranch property.[121] More fundamentally, the federal lands grazing system, similar to western water law, follows a use-it-or-lose-it philosophy.[122] If a rancher does not use the allotment for livestock grazing, the government considers the rancher to be in violation of the provisions of the Taylor Grazing Act and will reallocate the permit to another livestock operator. This feature of the system has prevented hunting, fishing, environmental and other nonranching groups from bidding to purchase grazing permits from ranchers and then dedicating the forage to some other type of nongrazing use.

One of the major sources of grazing conflict has been the grazing fee. The Forest Service began charging a fee in 1906. In 1934, the Taylor Act authorized a fee on BLM lands.[123] The fee is charged based on the number of months that each cow (sometimes with a calf) or other domestic animal spends grazing on public rangelands — the "animal unit months" ("AUMs"). In 1993, there were 9.7 million AUMs of livestock grazing on BLM lands and 8.4 million AUMs on Forest Service lands.[124] The 1993 grazing fee was $1.86 per AUM.[125] Thus, total government graz-

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119. *See* HOLECHEK ET AL., *supra* note 13, at 227.

120. *Id.* at 228, 231-32.

121. *See Public Grazing Laws*, *supra* note 111, at 21.

122. *See id.* at 44.

123. *See* 43 U.S.C. § 315b; *see also* GRAZING FEE REVIEW, *supra* note 39, at 65.

124. *See supra* note 42.

125. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 23.

ing revenues for BLM and Forest Service lands were less than $35 million. This small amount of money was the government's main source of revenue from surface lands extending over more than 10 percent of the land area of the United States. This figure reflected the low economic value of the grazing activity.

Since the 1970s, environmental groups have sought greater recognition of wildlife, watershed, and other nonranching uses of the public rangelands.[126] In order to accommodate these uses, these groups have pressured federal land agencies to make reductions in livestock grazing. In the mid-1970s, the Natural Resource Defense Council won a major court case requiring BLM to undertake a brand new round of land use planning.[127] The Federal Land Policy and Management Act of 1976 gave a Congressional blessing to this effort, mandating that land use plans form the basis of BLM's future management actions.[128] Yet, land use planning has more often yielded gridlock and polarization than decisive and effective management.[129] A top BLM official

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126. *See* CAWLEY, *supra* note 56, at 48-53; C. BRACT SHORT, RONALD REAGAN AND THE PUBLIC LANDS: AMERICA'S CONSERVATION DEBATE, 1979-1984 12 (1989); D. Michael Harvey, *Public Land Politics in the 1980s, in* PUBLIC LANDS AND THE U.S. ECONOMY: BALANCING CONSERVATION AND DEVELOPMENT 86-87 (George M. Johnston & Peter M. Emerson ed., 1984).

127. *NRDC v. Morton*, 388 F. Supp. 829 (D.D.C. 1974).

128. 43 U.S.C. §§ 1701-84 (1994). Language in FLPMA directs that "The Secretary shall . . . develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands." 43 U.S.C. § 1712. For a comprehensive treatment of FLPMA and other aspects of the legal regime for the management of BLM lands, see George C. Coggins et al., *The Law of Public Rangeland Management I: The Extent and Distribution of Federal Power*, 12 ENVTL. L. 535 (1982); George C. Coggins & Margaret Lindeberg-Johnson, *The Law of Public Rangeland Management II: The Commons and the Taylor Act*, 13 ENVTL. L. 1 (1982); George C. Coggins, *The Law of Public Rangeland Management III: A Survey of Creeping Regulation at the Periphery, 1934-1982*, 13 ENVTL. L. 295 (1983); George C. Coggins, *The Law of Public Rangeland Management IV: FLPMA, PRIA, and the Multiple Use Mandate*, 14 ENVTL. L. 1 (1983); George C. Coggins, *The Law of Public Rangeland Management V: Prescriptions for Reform*, 14 ENVTL. L. 497 (1984).

129. Discussing the land use planning and other decision making procedures set in place in the 1970s, Frank Gregg (former Director of the BLM in the Carter Administration) recently observed that "we have

commented at a 1994 public land conference, "we recognize that our planning systems have been a pretty bad failure."[130]

More powerful pressure for change in livestock grazing practices may come from the budget plan. The BLM lands' main outputs are livestock grazing, recreation, wildlife, timber harvests, energy minerals, and "hardrock" minerals.[131] If all BLM costs are assigned to one particular type of output factoring in overhead costs as well, the management costs for livestock grazing are estimated at $200 million.[132] Yet, government revenues earned from livestock grazing on BLM lands in 1993 yielded less than $20 million.[133]

The federal grazing fee may not reflect grazing activity's true market value; however, even using government estimates, the total economic value of livestock grazing on BLM land is below $70 million, about one third of the administrative cost.[134] By any accepted economic and budgetary criteria, there are strong incentives to search for alternatives to the current livestock grazing system.[135]

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now amassed a considerable history in participating in and judging the revised system, and we agree that we are in another generation of dissatisfaction. We have characterized the present as gridlock, polarization, so extreme as to suggest extraordinary urgency in pondering what needs to be done." Frank Gregg, *Summary, in* MULTIPLE USE AND SUSTAINED YIELD: CHANGING PHILOSOPHIES FOR FEDERAL LAND MANAGEMENT 311 (Committee Print No. 11, Comm. Interior & Insular Aff., U.S. House of Representatives, 1992).

130. Mike Penfold, Remarks at the Second Annual Western Public Lands Conference on "Who Governs the Public Lands: Washington? The West? The Community?," Sch. L., Univ. Colo., Boulder, Colo. (Sept. 28, 1994).

131. *See* NELSON, HOW AND WHY, *supra* note 44, at 11.

132. *See supra* note 44.

133. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 23.

134. The government estimate of the market value of federal land grazing is $6.53 per AUM. *See* GRAZING FEE REVIEW, *supra* note 39, at 14. There are about 10 million AUMs of grazing on BLM land. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 24-25.

135. *See* Oesterle, *supra* note 19, at 530-31. *See also* Robert H. Nelson, Economic Issues in the Multiple-Use Management of Public Rangeland, paper presented to the Annual Meeting of the Western Economic Association, Coeur d'Alene, Idaho, July 9-12, 1989, *reprinted in*

Any significant changes would affect the lives of many ranchers. The federal grazing system presently serves about 17,800 livestock operators on BLM lands and 9,100 on Forest Service lands.[136] The size of allotments ranges from less than 40 acres to more than 1,000,000 acres.[137] The forage obtained from federal lands supplies about seven percent of the total rangeland forage consumed in the United States and two percent of the total feed consumed by cattle.[138] Although federal forage does not contribute much to the national feed supply for livestock, it does play a significant role in the Western ranching industry. In Idaho 88 percent of cattle spend part of the year grazing on federal rangelands; in Wyoming the figure is 64 percent; and in Arizona 63 percent.[139]

IV. A BRIEF HISTORY OF FORAGE RIGHTS

Although environmentalists such as Andy Kerr have recently proposed buying out the grazing permits of ranchers who are willing to sell, this idea has existed for many years.[140] The original proponents were economists concerned with the economic problems associated with the process of allocating access to grazing on government-owned lands. Although ranchers face little risk of being displaced altogether from allotments, the terms of their status on the rangelands are subject to the winds of political change and lack security. Economists have long recognized

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WESTERN ECONOMIC ASSOCIATION, PAPERS OF THE 1989 ANNUAL MEETING, Western Economic Ass'n (1989).

136. *See* GRAZING FEE REVIEW, *supra* note 39, at 4.

137. Donald D. Waite, Economic Efficiency and Equity Issues in Federal Land Grazing 1 (Paper presented at the Annual Meeting of the Eastern Economic Association, April 1986).

138. *See* GRAZING FEE REVIEW, *supra* note 39, at 2.

139. *See id.* at 3.

140. *See* B. Delworth Gardner, *A Proposal to Reduce Misallocation of Livestock Grazing Permits*, 45 J. FARM ECON. 109, 115-17 (1963) [hereinafter Gardner, *Grazing Permits*]; *see also* Gardner, *Role of Economic Analysis*, *supra* note 48, at 1453-54; William E. Martin, *Mitigating the Economic Impacts of Agency Programs for Public Rangelands*, *in* DEVELOPING STRATEGIES, *supra* note 48, at 1677-78; Robert H. Nelson, *Private Rights to Government Actions: How Modern Property Rights Evolve* 1986 U. ILL. L. REV. 361 (1986) [hereinafter Nelson, *Private Rights*].

that where public ownership reduces the ability to capture individual gains there will be less incentive to make long run investments and pursue high quality management.[141] In 1952, a leading western land economist observed that "as long as the public land manager insists on absolute liberty to alter the use to which grazing land is committed or to change the user to which it is rationed, the private firm user . . . will distort his inputs toward short-run returns, including deterioration of the resource."[142]

Existing arrangements also misallocate access to the federal rangelands among different types of users.[143] The requirement of base property ownership means that many ranchers who do not own such property, who in turn may place a higher value on the federal land forage, are denied the opportunity to gain access to this forage. The federal land agencies have also acted to place tight limitations on subleasing federal land forage, thus further ensuring that some ranchers who might value the forage less, will use it in place of other ranchers who might value it more.[144]

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141. Adam Smith was of the opinion that:

> In all the great monarchies of Europe, there are still many large tracts of land which belong to the crown. They are generally forest; and sometimes forest where, after traveling miles, you will scarce find a single tree . . . When the crown lands had become private property, they would, in the course of a few years, become well improved and well cultivated. The increase of their produce would . . . augment the revenue and consumption of the people . . . [and] the revenue which the crown derives from the duties of customs and excise . . .
>
> It would, in all cases, be for the interest of society to replace this revenue to the crown by some other equal revenue, and to divide the lands among the people, which could not well be done better, perhaps, than by exposing them to public sale.

ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 775-76 (Edwin Cannon ed., Random House 1937) (1776).

142. M.M. Kelso, *Economic Analysis of Land Use on the Western Ranges*, 281 ANNALS AM. ACAD. POL. & SOC. SCI. 143 (May 1954), *quoted in* Robert K. Davis, *Which Direction Rangeland Reform?*, *in* CURRENT ISSUES IN RANGELAND ECONOMICS, *supra* note 37, at 8.

143. *See* LIBECAP, *supra* note 96, at 100-01.

144. The Forest Service prohibits subleasing. *See* Johanna H. Wald,

Finally, those who might value the use of the livestock forage more highly for nongrazing purposes such as hunting, watershed protection, or simple aesthetics have been denied the opportunity to purchase it altogether.[145]

One early economist to criticize these features was Delworth Gardner, long a leading U.S. agricultural economist and now professor emeritus at Brigham Young University. In a 1962 article in the *Journal of Farm Economics*, Gardner concluded that "the inability of the [forage] resources to move to their highest economic use impedes economic development by diminishing the product that might have been taken from the resource."[146] In a 1963 followup article in the same journal, Gardner examined how this problem might be resolved.[147]

Gardner observed that greater security of tenure would be desirable, a goal that could be achieved if the grazing "permit were a 'right' to graze a given number of AUMs . . . in perpetuity."[148] Gardner specifically proposed that government should

> create perpetual permits covering redesignated allotments . . . and issue them to ranchers who presently hold permits in exchange for those now in use. These permits would be similar to any other piece of property that can be bought and sold in a free market. These permittees would be completely free to retain or to dispose of the new permits to whomever they wished, for whatever price they could agree on.[149]

If the government were to decide to reduce grazing, it would still have this prerogative, but it "would be required to compensate the permittee for his loss."[150]

Gardner conceded that "if many small operators should decide to discontinue ranching because they choose to sell their public grazing, then local, rural communities may suffer somewhat

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Beleaguered Rangelands Signify Policy Failure, 11 FORUM 36 (1996). The Bureau of Land Management allows subleasing but imposes a surcharge on the difference between the government grazing fee and the sublease rate. *See* RANGELAND REFORM '94, *supra* note 116, at 2-3.

145. *See Public Grazing Laws*, *supra* note 111, at 44.

146. Gardner, *Role of Economic Analysis*, *supra* note 48, at 50.

147. *See* Gardner, *Grazing Permits*, *supra* note 140.

148. *Id.* at 115.

149. *Id.* at 117.

150. *Id.* at 116.

through these 'neighborhood' effects."[151] However, he considered that improvements in the operation of the grazing market "would almost certainly more than offset" any negative impacts.[152] In any case, new economic forces would win out, whether ranchers approved or not. It would be better to have a fair and orderly process, one that compensated ranchers as they made way for potentially new and more valuable uses, as would happen if the changes occurred through voluntary transactions. Absent this outlet, recreational and other groups would have no choice but to attain their goals in a zero-sum-game effort in the political process, using command-and-control devices.

Gardner's proposal to formally establish forage rights circulated for many years in the academic world but otherwise generated little interest.[153] By the early 1990s, however, it received new attention as a practical way of addressing public rangeland problems. Writing for the *Journal of Range and Water Conservation*, Professor Jerry Holechek of New Mexico State University observed that "the effect of livestock grazing on riparian habitats is a major [environmental] concern."[154] He estimated that grazing might need to be eliminated over 10 percent of federal rangelands, as well as other areas where grazing was problematic.[155] To accomplish this, Holechek suggested, "the most practical and equitable solution when major conflicts develop between recreation and livestock grazing may be for the government to purchase the grazing permit from the rancher at fair market value on a willing seller/willing buyer basis."[156] Holechek estimated that the purchase price would be $70 to $90 per AUM, requiring total spending of up to $80 million to acquire the federal rangelands' permits with highest environmental priority.[157] Given the deep public concern over the quality of the rangeland environment,

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151. *Id.* at 120.

152. *Id.*

153. *See* sources cited *supra* note 140. *See also* Robert H. Nelson, *Improving Market Mechanisms in U.S. Forestry, in* REDIRECTING THE RPA: PROCEEDINGS OF THE 1987 AIRLIE HOUSE CONFERENCE ON THE RESOURCES PLANNING ACT 90-91 (C. Binkley et al. eds., 1988).

154. Holechek, *supra* note 40, at 171.

155. *See id.*

156. *Id.* at 172. *See also* Hess & Holechek, *supra* note 112, at 22-24; Jerry Holechek & Karl Hess, Jr., *Market Forces Would Benefit U.S. Rangelands* 11 FORUM 5-15 (Winter 1996).

157. *See* Holechek, *supra* note 40, at 172.

and the magnitude of government expenditures devoted to resolving rangeland environmental controversies, spending $80 million would be a reasonable cost.

Robert K. Davis served in the Office of Policy Analysis in the Interior Department from 1976 to 1984 as director of the economics staff, the chief economist serving the Secretary of the Interior.[158] By the 1990s, having left Interior for the University of Colorado, Davis publicly advocated an approach similar to Holechek's proposal. At a grazing conference he proposed a new regime of "free-choice environmentalism."[159] The existing restrictions on holding a grazing permit would be eliminated, making it possible for environmental, hunting and other groups to purchase permits. If they chose to retain their permits, ranchers would obtain the greater security of tenure. Such a system, Davis argued, would mean that "the need for a command and control bureaucracy armed with a heavy regulatory fist would disappear along with the clamor for increasingly byzantine procedural entanglement and unproductive public participation."[160] Market forces would determine the future uses of federal rangeland forage, rather than a failing BLM planning system.

Professor David Lambert of the University of Nevada expressed similar views at the 1994 annual meeting of the Western Economic Association. Although he was skeptical about complete privatization through "transferring title of western U.S. public rangelands," he concluded that "the property rights' literature does suggest that delimitation of property rights is a precursor for efficient exchange."[161] As he stated:

> What appears to be missing in the public rangeland debate is the establishment of clear rules of the game. Without well-defined property rights, transaction costs are high. Efficient exchange would seem to require that all users clearly understand their rights in current and future public land grazing decisions regardless of the outcome of the current legislative debates over grazing policy.[162]

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158. My own exposure to grazing issues began in this office, where I served from 1975 to 1993.

159. Davis, *supra* note 142, at 4.

160. *Id.* at 5.

161. David K. Lambert, *Grazing on Public Rangelands: An Evolving Problem of Property Rights*, 13 CONTEMP. ECON. POL'Y 127 (1995).

162. *Id.*

The *Different Drummer*, a leading voice for market-based environmental policies, picked up on the same theme. In a 1994 issue devoted to "Reforming the Western Range," the editors, Karl Hess, Jr. and Randal O'Toole, proposed creating "forage rights"[163] that could be "openly bought and sold by environmental groups, ranchers, state wildlife agencies, and other public land users."[164]

Most recently, the 1997 *Economic Report of the President* reflected the influence of such thinking among economists. The report, prepared by President Clinton's Council of Economic Advisors, proposed making grazing rights freely saleable and transferrable.[165] As the report commented, grazing and other extractive "resources from Federal public land often have exclusive rights in a given area for the activity in which they are engaged; this is one sense in which public lands have already been partially privatized."[166] The Economic Report also suggested that privatization could be extended further:

> Some rights to extract resources from public lands are currently tradeable in a limited sense. For example, Federal grazing permits are often transferred with the sale of a ranch to other qualified ranchers. One possibly beneficial reform would be to allow conservation interests to compete for extraction rights on an equal basis with other interests. For example, environmental groups could acquire grazing permits and use the land to introduce native plant species and improve wildlife habitat, or acquire permits for the use of timberland and permanently retire that land from commercial harvesting. Such voluntary transactions can provide value to the seller as well as to the buyer, and thereby maximize the value received by all elements of society from the stock of public land.[167]

By the mid 1990s there was a considerable body of writings, reflecting varying political outlooks, favoring the creation of a new rights regime on the federal rangelands. As environmental groups have also become interested, the discussion has moved into the political arena and implementation has become a possibility.

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163. *Public Grazing Laws*, *supra* note 111, at 24.

164. *Id.* at 54.

165. *See* ECONOMIC REPORT OF THE PRESIDENT 226 (Council Econ. Advisors, Feb. 1997).

166. *Id.* at 220.

167. *Id.* at 224.

V. How to Establish Forage Rights on Federal Forests and Rangelands

In order to implement a regime of rights to the forage on federal rangelands, a number of key changes from the current rangeland system are necessary. The starting point would be a recognition that the existing rancher holding a grazing permit on federal lands would continue to hold this permit. Existing grazing permits would be grandfathered and newly recognized as a formal matter of right. In the process, the actions allowed under the permit, the provisions for transferring it, the types of parties eligible to hold it, and the character of the permit itself would be changed.

A. *Eliminate the Use-It-Or-Lose-It Requirement*

The BLM has interpreted the Taylor Grazing Act in governing access to federal rangelands for the grazing of domestic livestock.[168] The law does not, the BLM states, convey any rights, formal or informal, to control the type of use, or to decide not to use the forage at all in order to serve some nongrazing purpose.[169] Rather, the rancher receives a temporary permit to use the federal lands for the specific purpose intended by the government, grazing livestock. Such a decision, the BLM and Forest Service have insisted, should be based on land use planning grounded in scientific calculations of rancher livestock needs, grazing capacity, levels of public demand for alternative uses, degrees of conflict among uses, and various other considerations.[170]

Ranchers have been able to "take non-use," meaning they do not graze as much as their government permit allows.[171] They may cut back on grazing because of drought or other temporary climatic conditions; because they regard BLM's permitted level of grazing as greater than the actual grazing capacity of the land; because they do not need the forage in a particular year under their grazing plan; or for a host of other possible reasons. In 1993, the actual use of BLM grazing lands was approximately 25

168. *See* Gardner, *Role of Economic Analysis*, *supra* note 48, at 110.
169. *See* Rangeland Reform '94, *supra* note 116, at 71.
170. *See* Pub. Land L. Rev. Comm'n, *supra* note 52, at 45-48.
171. Rangeland Reform '94, *supra* note 116, at 5.

percent less than the amount formally authorized by the government.[172]

However, a rancher can not end grazing altogether, or abandon grazing a major part of an allotment, where there is forage available for livestock consumption. If a rancher were to do so, the BLM would consider itself under a legal obligation to transfer the permit to a rancher willing to use the allotment land for the grazing of livestock.[173]

In 1994, as part of his overall rangeland reform package, Interior Secretary Bruce Babbitt proposed revising the traditional BLM policy, allowing "conservation use" of the allotment.[174] Under the new policy, a rancher could remove livestock for an extended period of time, conceivably the full duration of the permit. However, this action was of uncertain legality under traditional interpretations of the Taylor Grazing Act. Indeed, in the summer of 1996, a Wyoming federal judge ruled that several key provisions of the Babbitt regulations, including the new allowance of conservation use, violated the provisions of the Taylor Act.[175] Even without such a ruling, conservation use would still be an option limited to grazing permit holders in the livestock business.

To resolve this matter, Congress would have to eliminate the use-it-or-lose-it requirement. That would put all parties on an equal footing in seeking to control the forage resources of the federal lands.

B. *Eliminate the Base Property Requirement*

Under the Taylor Grazing Act, ranchers have been required to own nearby private property, which sometimes consists of water rights alone, complementary to grazing.[176] As noted above, this

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172. The total grazing privileges allocated by BLM to ranchers in 1993 were 13.3 million AUMs. The amount of actual grazing use authorized by BLM in 1993 was 9.8 million AUMs. *See* PUBLIC LAND STATISTICS 1993, *supra* note 36, at 24-27.

173. *See Public Grazing Laws*, *supra* note 111, at 24.

174. RANGELAND REFORM '94, *supra* note 116, at 15.

175. *See* Public Lands Council et al. v. Babbitt, 929 F. Supp. 1436, 1440 (D. Wyo. 1996).

176. FOSS, *supra* note 25, at 62-63.

"base property" requirement was designed to ensure that when the public rangelands were initially carved up into allotments, only local ranchers would be eligible.

The base property requirement does not prevent an environmental or other nonranching group from purchasing the grazing permit for an allotment. However, it means that the group, like a rancher, would have to buy private base property. This would significantly increase permit costs. Moreover, the nonranching buyer would be required to maintain the base property in the ranching business to retain the permit. That might not be feasible in some cases and in others it would be a significant complication.

In many instances, a nonranching group may be interested in only a portion of the grazing permit. It may want to buy the forage rights in a riparian area to exclude livestock from the area and to improve the fishing. The group may want to buy the forage rights to an upland meadow to provide feed for big horn sheep or some other species. However, there may not be any local ranchers interested in selling off adequate base property. Thus, transfers of forage rights beneficial to all the parties involved could be easily blocked by the base property requirement.

The complications posed by the use-it-or-lose-it and base property requirements of the current system were illustrated in the Las Vegas case noted above. Government officials sought to eliminate the grazing over certain areas as part of a habitat conservation plan for the desert tortoise. The Clark County Desert Conservation Plan commented that grazing privileges "may not simply be retired . . . If not utilized by the owner, another grazing operator may apply for and utilize the land for grazing purposes, unless the BLM has agreed in advance that the owner may hold them in 'nonuse.' In order to hold the privileges in nonuse, the holder must operate a grazing business."[177]

Since the counties that had actually purchased the grazing rights were not in the grazing business, a solution was devised wherein the grazing permits would be assigned to the Nature Conservancy in trust.[178] Since the Nature Conservancy owned

177. Desert Conversation Plan, *supra* note 66, at 97.

178. *See id.*

grazing operations within Nevada, the BLM agreed to accept this special arrangement as meeting the base property requirement, even though this meant stretching the letter of the law. The Nature Conservancy could only obtain a commitment from the BLM to accept nonuse status for the first two years, with new applications for nonuse requiring annual approval thereafter. Because of the significant uncertainties associated with the nonuse status, the tortoise conservation plan found it necessary to provide additional funding "to protect and defend those privileges in nonuse until such time, if ever, that grazing is prohibited by the Stateline RMP."[179]

Eliminating the base property requirement would also allow livestock operations without base property to purchase such permits. The resulting increase in demands for permits and higher selling prices would benefit ranchers. It would promote the efficiency of the overall livestock industry by ensuring that access to grazing on federal lands is obtained by the parties that place the highest value on grazing.

C. *Eliminate the Requirement that the Holder of a Grazing Permit Must Be a Livestock Operator*

Another restrictive element of the existing system is the requirement that the holder of a grazing permit must be a qualified livestock operator.[180] This requirement, like the active use and base property requirements, reflects the implicit assumption of the Taylor Act that the only legitimate use of the forage resource is for direct productive or consumptive purposes. It is an outgrowth of the general utilitarian philosophy of the conservation movement early in this century. Gifford Pinchot, the founder of the Forest Service, often said that the purpose of national forests was to supply wood, water and other outputs to meet the productive needs of the nation.[181] Pinchot opposed cre-

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179. *Id.*

180. *See* RANGELAND REFORM '94, *supra* note 116, at 2-3.

181. Pinchot argued that "The object of our forest policy is not to preserve the forests because they are beautiful. . . or because they are refuges for the wild creatures of the wilderness. . . but the making of prosperous homes. . . . Every other consideration comes as secondary."

ating national parks as leading to a waste of valuable timber and other resources.[182] Other leaders showed similar attitudes towards the development of the federal land system with respect to the forage resources.[183]

D. *Eliminate Restrictions on Subleasing*

Historically, the Forest Service has prohibited subleasing of grazing rights to an allotment.[184] The BLM has allowed subleasing, but with significant limitations, including a recent requirement that the rancher turn over to the BLM a share of any subleasing revenues that exceed the federal grazing fee.[185] These restrictions on subleasing reflect the difficulty of reconciling a scientific management philosophy with the workings of a market process. Scientific management says that the full details of the allotment use should be carefully planned by the government, a process likely to be disrupted by frequent changes in the operator's identity and grazing plan.

Opposition of federal officials to subleasing has also been significantly increased by the fact that ranchers often charge their sublessees much higher prices per AUM than the grazing fee collected by the government. At typical sublease rate is in the range of $5 to $7 per AUM (and sometimes much higher), while the federal government in recent years has collected less than $2 per AUM from its own grazing fee.[186] Critics charge that ranchers who sublease are profiting unfairly from the resale of public resources.[187]

However, the existence of subleasing does not in any way diminish the government return; it merely illustrates that the gov-

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HAYS, *supra* note 16, at 41-42.

182. *Id.* at 40, 127, 195-96.

183. A long time leading range textbook defined the task of rangeland management as "the science and art of planning and directing range use so as to obtain the maximum livestock production consistent with conservation of the range resources." LAURENCE STODDARD & ARTHUR D. SMITH, RANGE MANAGEMENT 2 (1943).

184. *See* Wald, *supra* note 144, at 36.

185. *See id.*

186. *See* GRAZING FEE REVIEW, *supra* note 39, at 14, 67-68.

187. *See* Wald, *supra* note 144, at 36.

ernment is getting less than the private rate. Fairness is not the real issue to the government; rather, federal officials seek to avoid public embarrassment. The actual market value of the sublease may be difficult to determine, because ranchers who sublease public land forage often provide services to sublessees and make improvements on the land that the government does not provide in its own grazing lands management.[188]

Despite historic agency attitudes, subleasing should be an integral part of a market regime for public land forage. It offers flexibility to devise innovative arrangements among ranchers and other groups that otherwise would be precluded. For example, during drought conditions a hunting club may want to sublease an area to maintain all the forage there for wildlife on a temporary basis. This may also work to the advantage of the rancher if the sublease payment is enough to purchase livestock feed supplies from alternative sources, perhaps leaving something left over for profit.

Long run subleasing would allow environmental groups to control grazing activity in an area at less than the full cost, possibly phasing it out altogether. Ranchers and environmental groups might attempt a joint working relationship, or experiment with a resource management concept, without the permanency of outright sale and purchase. In some cases, a lease may lead to purchase, after the effectiveness of the new arrangements has been demonstrated.

In the future environmental organizations that have purchased public land forage rights might find that they want to sublease to a livestock operator. By purchasing the grazing permit outright, the environmental group would obtain full control over the forage. It could then set the precise terms and conditions of any livestock grazing. With this assurance, grazing might be a useful element in a resource management plan to improve rangeland conditions.[189] Additionally, the environmental groups' revenues might be an important contribution to the financial viability of the overall acquisition, effectively reducing the net cost.

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188. *See* RANGELAND REFORM '94, *supra* note 116, at 2-3.

189. *See* HOLECHEK ET AL., *supra* note 13, at 127-29, 356-62.

Subleasing is one example of a broader category of financial arrangements short of outright purchase. Environmental organizations could purchase easements or stipulations from ranchers concerning the operation of the livestock business. For example, they might negotiate an agreement to compensate a rancher for taking cattle off a pasture earlier in the year. This could benefit elk habitat, even while raising the costs of ranching. The environmental organization might compensate a rancher for changing the grazing system to remove cattle permanently from a particular section of an allotment. They might reach an agreement to pay all or part of the costs for the installation of fences to keep cattle out of riparian areas or for constructing water facilities that would also benefit wildlife.

E. *Shift From a Permit System to a Leasing System for Forage Rights*

As discussed above, ranchers operating on federal rangelands at present hold a permit issued by the government to graze a certain number of livestock during certain periods of the year on a particular area of public land. If the rancher sells the permit to an environmental organization, however, the new owner will probably not be interested mainly in grazing livestock. Indeed, the objective in some cases may be to remove the grazing activity altogether. In this new circumstance, the form of the legal agreement between the government and the forage user should be revised. Instead of a permit to graze, the agreement should take the form of a lease to the forage resource.

A shift to a leasing approach would recognize that it will no longer be possible for the government to charge for the use of the land based upon the amount of livestock grazing. The current grazing fee is assessed per month of grazing per animal. Hence, if an environmental organization were to purchase the permit and retire the grazing, it would not pay any fee under the current arrangements. In a real sense, however, the environmental group would still be making use of the forage. In addition, an efficient process of market competition, one that ensured that the highest value user would win out, would require that each party face the same future payment obligations. Otherwise, the rancher might be unfairly disadvantaged, because he would be

required to pay for use of the same forage that another party might receive for free.

As part of a new regime of forage rights, the government should no longer charge based upon the amount of livestock grazed. The lease rate should be set as a flat dollar payment per acre. Preferably, the lease charge may vary with the forage productivity of the land. One simple procedure would be to take the current grazing permit, calculate the amount of forage available under that permit, apply a reasonable grazing fee (say $2 to $4 per AUM) and fix the annual lease payment at that dollar amount. For example, if the current grazing permit allowed 500 AUMs per year, the annual lease payment would then be set at $1,000 to $2,000 per year, independent of whether there was any grazing on the allotment. Such a payment should also be adjusted over time for inflation.

The current duration of a grazing permit is ten years.[190] However, this period is too short given the slow response of vegetation in arid western climates and the need for long term tenure to create strong incentives to improve and maintain the land. The term of forage leases ought to be in the range of 25 to 50 years. There is a strong case for issuing leases for an indefinite period.

If leases are not of indefinite duration, lease renewals should be renegotiated well before the end of the lease term, perhaps five or ten years before. This would avoid any negative incentives that might arise near the end of the term due to uncertainty over renewal. The existing lease holder should have priority for renewal.[191] Similarly, under existing federal mineral leases, the terms are renegotiated at the end of the 10 to 20 year term, and changes can be made, although the operator retains the basic right to continue the mineral operation.[192]

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190. *See* RANGELAND REFORM '94, *supra* note 116, at 4.

191. There might, however, be some opportunity to reconsider the specific environmental and other terms of the lease.

192. Federal coal leases are for 20 years and are then renegotiated, as long as production is still occurring. *See* NELSON, FEDERAL COAL POLICY, *supra* note 16, at 21. Oil and gas leases on the Outer Continental Shelf typically have a term of 5 or 10 years and are then negotiated. *See* R. SCOTT FARROW, MANAGING THE OUTER CONTINENTAL SHELF LANDS 5

VI. DEFINING A FORAGE RIGHT

As proposed here, the leased forage rights would be a part of the bundle of rights associated with federal lands. Just as land rights are sometimes divided into surface and mineral components, so to is possible to subdivide surface rights. Leases to the forage portion of surface rights could be issued to ranchers or other parties in the same way that the government issues leases to the subsurface oil, gas, or coal rights. Of essential importance is the specification of the full dimension of the forage right when the lease is first issued.

The core right would be the control over the use of the forage resources in the allotment. This right of use would not be absolute, however, and it must reflect the fact that there exist other de facto rights in holders' bundles of rights. These existing rights holders, based on long historic presence on the land, can include hunters and fishermen, hikers, birdwatchers, miners, off road vehicle users, to name a few. The flexibility of the forage lessee would be limited by the requirement that the pre-existing rights of other parties must not be infringed upon. The same standard is applied in nuisance law: the forage rights holder is free to take any action so long as it does not result in significant harm to another party. The easy transference of nuisance law principles to the resolution of the appropriate boundaries between individual forage and other rights holders on federal rangelands makes the application of nuisance theory even more compelling.[193]

In order to protect nonranching rights, it is likely that an amount of forage would have to be made available for wildlife every year, reflecting the historic levels of availability of such forage. Forage amounts might have to be specified by plant type, as well as wildlife, as each have differing requirements.[194] Adverse impacts on fishing and downstream water quality must also be minimized by the lessee. This might be determined by the practi-

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(1990).

193. *See* DENNIS COYLE, PROPERTY RIGHTS AND THE CONSTITUTION: SHAPING SOCIETY THROUGH LAND USE REGULATION 17-18 (1993).

194. *See* HOLECHEK ET AL., *supra* note 13, at 373-75.

cal application of the Clean Water Act to the operational use of the forage.

Forage rights holders would be expected to provide protection for the streambanks and the water quality of riparian areas. If cattle damage these areas, their removal, or the adoption of tighter rancher controls over animal movements, would be mandated. Application of the Endangered Species Act with its limitation on the rights of private land owners would be appropriate to the exercise of forage rights. Thus, if cattle grazing adversely impacted the desert tortoise by damaging its burrows, competing for forage, etc., mitigating actions would be essential.

If these actions create excessive burdens on forage rights holders, the requirements of the Endangered Species Act could prove counter-productive.[195] An effective system of species protection must create positive incentives for land and other rights holders to assist with species preservation. Current property law may penalize a land owner for providing habitat protection or otherwise assisting with species preservation.

In practice, it requires considerable negotiation to fully define the limits on the future exercise of a forage right. Much as grazing levels and the boundaries of allotments were set by local rancher groups following the enactment in 1934 of the Taylor Grazing Act,[196] such a negotiation is most effective on a local level. However, membership must be expanded to reflect the full diversity of current users and de facto rights holders. One possibility is to assign the task to the Resource Advisory Councils that have been established under the new Babbitt rangeland program.[197] Subsequent monitoring which ensures that the lease provisions are being observed is also essential. The Resource Advisory Councils could play an important role in this matter as well.

This monitoring effort could be contracted out to private parties. Third-party certification is currently widely employed in timber management and in other natural resource fields.[198] Outside

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195. *See* Ike C. Sugg, *Caught in the Act: Evaluating the Endangered Species Act, Its Effects on Man and Prospects for Reform*, 24 CUMB. L. REV. 46 (1993).

196. *See* FOSS, *supra* note 25, at 64.

197. *See* RANGELAND REFORM '94, *supra* note 116, at 16-17.

198. *See* CERTIFICATION OF FOREST PRODUCTS: ISSUES AND PERSPEC-

private firms that specialize in this field often certify to the manufacturers of furniture or other wood products that the timber used has been harvested in an environmentally sensitive way. A similar process could be used to certify that the holders of federal land forage rights are acting consistent with their lease obligations and the rights of others.

A. *A Full Private Property Rights Regime: An Outline for a Condominium Approach*

Another option is to put the entire matter into the hands of the private sector. If the historical rights such as hunting, mining, and recreation were formally recognized, governmental ownership of public lands would become superfluous, and one would no longer speak of leasing forage rights. In place of federal rangelands, a new system of private property rights in which the newly defined private rights would include a complex blend of individual and collective rights, would be appropriate.

One of the difficulties in such an approach is that, unlike a rancher's forage rights, there is no one well-defined party to whom the recreational and other nonranching rights can be appropriately assigned. Who speaks for "hunters" or "fishermen"?

New institutional mechanisms may be necessary in the future, if recreational and other nonranching rights are to be transferred more directly to the beneficiaries.[199] An appropriate model might be a residential community association, typically organized with a condominium.[200] In a traditional condominium,

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TIVES 5-6 (Virgilio M. Viana et al. eds., 1996).

199. For a similar proposal in the context of urban land use, see NELSON, ZONING, *supra* note 22. *See also* Robert H. Nelson, *Private Neighborhoods: A New Direction for the Neighborhood Movement, in* LAND REFORM, AMERICAN STYLE (Charles C. Geisler & Frank J. Popper eds., 1984); Robert H. Nelson, *A Private Property Right Theory of Zoning*, 11 URB. LAW. 713 (1979); Robert H. Nelson, *Zoning Myth and Practice — From Euclid into the Future, in* ZONING AND THE AMERICAN DREAM: PROMISES STILL TO KEEP 299-318 (Charles Haar & Jerold Kayden eds., 1989).

200. *See RCA Characteristics and Issues, in* RESIDENTIAL COMMUNITY ASSOCIATIONS: PRIVATE GOVERNMENTS IN THE INTERGOVERNMENTAL SYSTEM? 9-23 (Papers from a Policy Conference Sponsored by the U.S. Advisory Commission on Intergovernmental Relations, May 1989); *see also*

the rights to the property are separated into the individual rights of the unit owners and the communal rights to control the common areas, a right exercised through a collective decision making instrument. In a rangeland condominium, the individually held rights would be the forage rights, which grant control over the use of the grazing forage resources. The common elements would consist of the collective rights to oversee nonranching uses of the total allotment area. This might consist, for example, of a large block of land containing say 625 square miles (25 mile by 25 miles), within which there might also be found 30 allotments, each with its own individual forage rights.

The decision making mechanism for such a condominium would be more complex than a standard urban condominium. There would not be significant problems for holders of forage rights to individual grazing allotments, who could be given representation on the condominium board of directors. However, there would be a greater challenge for groups such as hunters and fishermen. Perhaps two positions for hunters, and two positions for fishermen, would be set aside on the rangeland condominium board of directors. There might similarly be two representatives for hikers, and two for all other forms of dispersed recreation. The problem would be determining an appropriate method for selecting such representation.

One possibility would be to specify that each hunter wishing to use the lands within the total area encompassed by the condominium boundaries might be required to pay a nominal annual fee. All hunters who paid the fee would then be eligible to vote on the hunter representation to the condominium board of directors. A similar approach could be applied to fishermen, and possibly as well for people who have a potential interest in mineral exploration.

There might also be representation for the set of people that are simply interested in the general environmental quality of the lands within the condominium boundaries. Again, members of this group might be charged a nominal annual fee (smaller than hunters, since there would be no direct benefit expected), and

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GEORGE W. LIEBMANN, THE LITTLE PLATOONS: SUBLOCAL GOVERNMENTS IN MODERN HISTORY 53-90 (1995).

elect its appointed representatives by vote of all those who have paid this amount. Members might be able to assign their vote by proxy, as shareholders in a corporation do. In some areas of special environmental interest, many of the proxy votes might be assigned to environmental groups such as the Sierra Club or Wilderness Society.

Under such a structure of condominium ownership, decisions with respect to the use of grazing forage in particular allotments would be made exclusively by the individual holders of the forage rights there. Collective decisions involving issues of management of the common rangeland area for recreation, wildlife protection or other joint purposes would be made through the collective decision making mechanisms of the condominium. The collective responsibilities would include matters such as arrangements for access to the lands for hunting, fishing, and other activities, as well as any charges imposed by the condominium for public entry for these purposes.

In order to implement a full condominium privatization, more details beyond the brief sketch offered here would have to be provided. Until a privatization of the public rangelands can occur through establishing a condominium arrangement, the individual rights to grazing forage would be defined in the context of continuing government ownership of the rangelands.

The best form of government ownership may be state or local, rather than federal.[201] The ownership of the Forest Service and

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201. Jon Souder and Sally Fairfax conclude that the management practices on state owned "trust lands" in a number of cases yield superior results to federal land management:

> For far too long we have proceeded as if the multiple-use concept — most particularly as practiced by the U.S. Forest Service — were the only feasible approach to resource development. . . . As the Forest Service model becomes more and more widely recognized as a failure, or as falling apart, or both, the quest for new visions of public resource management grows increasingly urgent. As we begin to recognize that sustainable use, rather than destructive use or abstinent nonuse, is the most pressing challenge, the utility of the [state] trusts lands model becomes increasingly apparent.

JON A. SOUDER & SALLY K. FAIRFAX, STATE TRUST LANDS: HISTORY, MANAGEMENT, AND SUSTAINABLE USE 293 (1996).

BLM lands involves the federal government in a wide range of issues of essentially state and local significance. Applying traditional American concepts of federalism, responsibility for these matters should lie at the state and local levels of government.[202] There are many political obstacles to a transfer of federal lands to the states.[203] One of the more important is the uncertainty many ranchers would feel about their future tenure status under new state ownership of the lands and related matters such as permitted livestock numbers and grazing fees. A clearer resolution and formal codification of rancher rights on the federal lands, as proposed in this paper, may be a necessary first step, before any transfer of lands to the states could become politically viable.[204]

B. *Some Precedents*

There are a number of precedents for creating a market in federal forage rights. Consider the communications spectrum consisting of numerous frequencies suitable to many types of uses.[205] The communications spectrum might be regarded as another form of public domain. Much as Forest Service and BLM have allocated grazing privileges for public lands, the Federal Communications Commission ("FCC") has long issued licenses to use spectrum suitable to radio and television to applicants who agree to meet certain public service obligations.[206] Over time it became a recognized practice that selling the station would mean the automatic transfer of the spectrum rights to the new owner.[207] The spectrum rights have had a substantial value of

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202. *See Federal Forest Management: Hearings before the Subcomm. on Forests and Public Land Management of the Senate Comm. on Energy and Natural Resources*, 104th Cong., 2d Sess. 361-70 (1995) (Statement of Robert H. Nelson, Professor Envtl. Pol'y, Sch. Pub. Aff., U. Md.). *See generally* ROBERT H. NELSON, HOW TO DISMANTLE THE INTERIOR DEPARTMENT (Competitive Enterprise Inst., June 1995).

203. *See* MARION CLAWSON, THE FEDERAL LANDS REVISITED 188-89 (1983).

204. *See* NELSON, HOW AND WHY, *supra* note 44, at 36-37.

205. *See* BRUCE M. OWEN & STEPHEN S. WILDMAN, VIDEO ECONOMICS 15 (1992).

206. *See id.* at 16-17.

207. *See id.* at 16.

their own, independent of the capital value of the building and station facilities. Also, when they have come up for renewal, the FCC has almost always reissued these rights to the same station which held them.[208] Yet, like forage rights to public grazing lands, the FCC has never officially recognized control over the spectrum as separable from the existence of an actual operating station.[209]

In recent years, advances in communications technology have meant that parts of the spectrum not previously in use have now become valuable. In cases where no prior use exists, the FCC has begun auctioning spectrum rights directly, yielding more than $20 billion in revenues.[210] In effect, the FCC has now recognized a spectrum right as existing independent of any particular use or physical facility, equivalent to abandoning the base property requirement on public grazing lands and issuing a lease of indefinite duration. Similarly it would be possible to auction off the forage lease rights on vacant grazing allotments to the highest bidder.

While FCC chairman Reed Hundt spoke out in favor of a new concept, "spectrum flexibility," which he described as "the complete opposite of the original FCC approach."[211] Traditionally, the holder of an FCC license has been required to use it for the purpose identified by the license, whether for television, radio, cellular telephones, paging, or some other use. Under the new concept, the license holder would be free to convert the licensed spectrum from one use to another without FCC approval. Spectrum now used for an existing radio station might be converted to use for cellular telephones, if the licensee believed it would be more profitable.[212] The market, rather than the FCC, would determine the uses of the spectrum. This concept is directly analogous to the proposal made in this paper with respect to the for-

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208. *See* ROGER G. NOLL ET AL., ECONOMIC ASPECTS OF TELEVISION REGULATION 115 (1973).

209. FTC never formally recognized transfer "right."

210. *See* ECONOMIC REPORT OF THE PRESIDENT, *supra* note 161, at 214.

211. James K. Glassman, *Reed Hundt's Revolution*, WASH. POST, Mar. 15, 1997, at A15.

212. *See id.*

age use rights of the federal rangelands, and it is currently attracting attention at the highest levels in telecommunications policy.

The definition of new types of rights is also being discussed for fisheries, involving creation of "individual transferrable quotas" ("ITQs"), in hopes of resolving the commons situation that has resulted in severe depletion of the Grand Banks and a number of other major American fisheries.[213] Wherever a scarce physical resource is currently controlled by government regulation, it may well be possible to shift to establishing a system of property rights as a means of allocating resource use.[214]

VII. MOVING PAST SCIENTIFIC MANAGEMENT

In economic terms, federal land forage is not an especially valuable resource, in comparison with many other natural resources. However, the treatment of livestock grazing on western rangelands has great symbolic significance nationally. Americans define their basic values partly by reference to the policies they adopt for forests, rangelands and other natural resources. The progressive era early in this century marked a shift to a paradigm of scientific management in administering the federal forests and rangelands of the United States. Today, the nation is searching for new institutions and values to replace a failing progressive design.[215]

In moving past scientific management, the policies adopted for federal rangelands will be an important arena for exploring new

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213. *See* Terry L. Anderson & Donald R. Leal, *Fishing for Property Rights to Fish, in* TAKING THE ENVIRONMENT SERIOUSLY 167 (Roger E. Meiners & Bruce Yandle eds., 1993).

214. *See* Nelson, *Private Rights, supra* note 140, at 381.

215. *See* Sterling Brubaker, *Issues and Summary of Federal Land Tenure, in* RETHINKING THE FEDERAL LANDS, *supra* note 52, at 1, 2-3; NELSON, PUBLIC LANDS, *supra* note 12; RANDAL O'TOOLE, REFORMING THE FOREST SERVICE (1988); John Baden & Andrew Dana, *Toward an Ideological Synthesis in Public Land Policy: The New Resource Economics, in* FEDERAL LANDS POLICY 1-20 (Phillip O. Foss ed., 1987); WESTERN PUBLIC LANDS: THE MANAGEMENT OF NATURAL RESOURCES IN A TIME OF DECLINING FEDERALISM (John G. Francis & Richard Ganzel eds., 1984).

visions.[216] If scientific management offered the prospect of the one best scientific answer, in the future there is likely to be a pluralism of visions for the federal lands.[217] Each answer will mix technical and value considerations. Without greater agreement in American society, to impose one solution would mean imposing of one set of values on others. It is better to leave such decisions to local people who resolve their problems in a cooperative and voluntary manner, in many cases through private transactions among willing buyers and sellers. A system of property rights provides an institutional setting that minimizes the frictions and transactions costs of such procedures.

As the economist and environmental philosopher Kenneth Boulding frequently emphasized, the market is a voluntary "exchange system" that is a "positive-sum-game in which all parties can be better off," while politics is a "threat system" focussed on redistribution.[218] Relying on the use of coercive powers, politics is too likely to yield the gridlock and polarization that have plagued the public rangelands for years. Attempts by the government to impose solutions on people who do not regard them as legitimate will generate bitterness and resentment. In contrast, a market exchange system provides a set of arrangements that are reached by mutual consent among the affected parties. Such a decentralized process, freed from the tight constraints of bureaucratic management, will give birth to a host of innovative methods and approaches to the federal rangelands and forests of the West.

Although he was not a libertarian himself, Boulding looked with favor on an "economic libertarianism [that] quite rightly emphasizes the benevolent and developmental qualities of exchange."[219] As I have argued, this outlook is moving past the state of philosophical discussions and making some significant inroads among key groups in the federal land policy debate, offer-

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216. *See* NELSON, REACHING FOR HEAVEN, *supra* note 1, at 257-332.

217. *See* Robert H. Nelson, *Government as Theatre: Toward a New Paradigm for the Public Lands* 65 U. COLO. L. REV. 335 (1994).

218. KENNETH E. BOULDING, BEYOND ECONOMICS: ESSAYS ON SOCIETY, RELIGION, AND ETHICS 103-105 (1968).

219. *Id.* at 44.

ing the intriguing prospect of a confluence in certain areas of libertarian and environmental theorizing and activism.

CONCLUSION

If forage rights were defined and made legally transferable to any new owner, environmental organizations could purchase the forage rights to federal lands that are now available only to ranchers. Environmental groups seeking to reduce livestock grazing on federal lands would have a realistic way to accomplish their goals, other than by seeking to influence the exercise of government commands-and-controls. A clear delineation of rights would also encourage existing ranchers to invest in long-run improvement and productivity of the federal rangeland. Equally important, the debate over western land use would no longer be resolved by government regulators and planners, but by the competitive workings of the marketplace. Changes in rangeland use would be made through voluntary transactions among existing rights holders and those who wish to see future changes in the federal lands use.