University of Arkansas
System Division of Agriculture
NatAgLaw@uark.edu • (479) 575-7646

Sustainable Resources Management and State School Lands: The Quest For Guiding Principles

by

Jon A. Souder, Sally K. Fairfax, and Larry Ruth

Originally published in NATURAL RESOURCES JOURNAL
34 NAT. RESOURCES J. 271 (1994)

JON A. SOUDER*, SALLY K. FAIRFAX**, LARRY RUTH***

Sustainable Resources Management and State School Lands: The Quest For Guiding Principles

I. INTRODUCTION

The goal of this paper is to demonstrate that state trust land management is instructive for contemporary discussions of sustainability. We juxtapose states' experience managing school trust lands with elementary definitions of sustainability to focus and diversify debate about sustainable resource management. The school lands were given by Congress to the states for a clear purpose—to support public schools and institutions—beginning with grants to Ohio in 1803 and ending with Alaska in 1959.[1] The lands and funds resulting from their management are generally viewed as a trust, with the states as trustees and the schools and institutions as beneficiaries.[2] Exploring key aspects of school lands management and examples of how trust principles play out in actual disputes provides vocabulary and comparative examples to enrich conversations about moving current land management institutions toward

---

* Assistant Professor, Department of Forestry, Northern Arizona University, Flagstaff.

** Professor and Associate Dean, College of Natural Resources, University of California, Berkeley.

*** Policy Analyst, Wildland Resources Center, and Lecturer, Department of Forestry and Resource Mangement, University of California, Berkeley;

1. For a history of the grants of land and their trust nature, see S. Fairfax, et al., *The School Trust Lands: A Fresh Look at Conventional Wisdom*, 22 Envtl. L. 797 (1992) [hereinafter *Conventional Wisdom*].

2. Elsewhere we have elaborated exceptions in nauseating detail. See *id.* at 803 *passim*. The trust of which we speak is not the public trust doctrine, that ancient notion of sovereign limits and public rights in coastal/riparian areas, but the less exotic trust of "trusts and estates" fame. The public trust defines public rights to lands obtained by the state as sovereign: generally, the beds and banks of navigable waterways, embayments, and the inner coastal shore. *See* 1 W. Hutchins, Water Rights in the Nineteen Westerns States 102 *passim* (1971). Those lands are to be managed for the benefit of the public at large. *See* J. Sax, *Liberating the Public Trust Doctrine from Its Historical Shackles*, 14 U.C. Davis L. Rev. 185 (1980); R. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 Iowa L. Rev. 631 (1986); C. Wilkinson, *The Public Trust Doctrine in Public Land Law, 14 U.C. Davis L. Rev. 269 (1980); and J. Stephens, The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right*, 14 U.C. Davis L.Rev. 195 (1980). The lands we're concerned with here fall under a beneficial trust theory. Beneficial trust is not a standard term but we rely on it to distinguish the school lands from the sovereign lands and the public trust doctrine.

sustainability. Most particularly the discussion suggests that simultaneous with debating what sustainability does or could mean, attention must be paid to the institutions that will implement and enforce the concept.

Our argument proceeds in three sections. The first section defines the two central components of our analysis: sustainability and trust principles. Current theories of sustainability are summarized under four standard headings—physical, biological, economic and social. Basic aspects of trust law are also condensed around four themes: clarity, accountability, enforceability, and perpetuity. Sustainability and trust principles are linked in the section by a summary of standard literature critiquing federal sustained yield forestry. That discussion suggests both (1) the partial and problematic approach to sustainability in a familiar forestry application and (2) some foreseeable problems in sustainable resource management which state trust land management experience addresses. It also asserts that a key problem in sustainable resource management is to be clear about what is being sustained.

Section two uses the four trust themes to structure an analysis of state trust land management. Clarity about the beneficiary—what is being sustained—is presented as the *sine qua non* of accountability. Accountability is presented in the context of detailed analyses of trust land personnel and management investment. The discussion demonstrates the utility of the trust commitment in preventing diversion of trust assets to three potential claimants other than the beneficiary: the general public, the lessee, and the manager of the trust. Preventing leaks in the system is, we argue, critical to achieving a sustainable management regime. Enforceability is discussed in terms of another apparently narrow issue: obtaining fair market value. The discussion focuses on differences between administrative review and review of trustees activities, and argues that even so relentlessly an economic priority as fair market value provides lessons for advocates of sustainability. Finally, the discussion of perpetuity pushes beyond discussions of economic efficiency and revenues. Although a trust need not be designed to maximize economic returns, the lessons for sustainability from a trust that is so constrained are important. Here we argue both that financially conservative management is beneficial to broader definitions of sustainability, and that the state lands examples are relevant to more than just revenue maximization.

The final section emphasizes three major points in summarizing the utility of trust land experience for sustainable resource management. First, institutional structure matters. We regard the role the beneficiary plays in clarifying and enforcing the management mandate, and in monitoring of agency budgets, as particularly important. Second, we note that the nature of the enforcement achieved under the trust mandate is substantive rather than merely procedural. Finally, the trust's insistence

on protection of the productive capabilities, in concert with the perpetual nature of the trust responsibility, provides a working concept of sustainable resource management.

The school trust lands are not a perfect example, in theory or in practice, of everything advocates of sustainability might desire.[3] However, they provide diverse examples of what key aspects of sustainable resource management might look like and a valuable starting point for discussion of both basic principles and on-the-ground problem solving.

II. SUSTAINABILITY AND TRUST PRINCIPLES IN THEORY

This section introduces a spectrum of sustainability definitions, standard critiques of the most familiar attempts to achieve a small part of that spectrum, and trust principles. Much of this is familiar ground and we retrace it in abbreviated form in order to establish context and structure for drawing parallels between school lands and sustainability.[4]

Definitions of Sustainability

Definitions of sustainability come in four general flavors, each emphasizing different aspects of the problem. These are: (1) continuing *physical production* of resources; (2) continuing *economic productivity* of resource production; (3) maintaining diverse *biological systems;* and (4) maintaining social sustainability in communities dependent upon resource-based economies.[5] The first two are time-honored notions long familiar in resource management debates. Although the second two are clearly related to the first two, they have emerged as central components of the discussion in the last decade.[6]

Physical. Traditional definitions of sustainability emphasized continuing physical production of renewable resources, generally in terms of volumes or amounts of goods or services of renewable resources.[7] As in

---

3. School lands management is not even, we readily concede, a consistent example of implementing a trust for the exclusive benefit of the beneficiaries. Much of what we have learned is about mal-, mis-, and non-feasance. But, we continue to believe, and will argue below, that one peculiar advantage of the trust as a management concept is that it is possible to be minutely clear in defining chicanery and fairly successful in locating and correcting it.

4. Those wishing a more thorough discussion should refer to G. Bogert, Trusts (6th ed. 1987). *See* Fairfax, *supra* note 1, at 803-31.

5. For a more exhaustive survey, see L. Dixon and J. Fallon, *The Concept of Sustainability: Origins, Extensions, and Usefulness for Policy,* 2 Soct'y and Nat. Resources 73 (1989).

6. *Id.*

7. R. Behan, *Political Popularity and Conceptual Nonsense: The Strange Case of Sustained Yield*

the federal forestry context to be discussed below, this is normally termed sustained yield, and means harvesting annual or periodic growth of trees in perpetuity.[8] However, the traditional definition makes no explicit reference to the underlying factors enabling production. Nor is there typically any mention of results expected in terms of production levels or of any consequent effects on users that result from its adoption.

Economic. Strict economic definitions of sustainability imply that the resource base infinitely provides an annual flow of benefits having the same value in real terms.[9] Economists vigorously criticize physical sustainability concepts because they focus on volume and do not consider efficiency.[10] For example, maximizing physical yields of timber does not preordain maximum revenues. Yet the focus on economic sustainability does not specify whom or what benefits from the activity.[11] Again using a timber example, maximizing revenue is not the same thing as maximizing jobs, because fewer workers are required per unit of smaller logs processed in newer mills.[12]

Biological. Biological concepts of sustainability are of more recent origin and are rooted in ecology.[13] Ecosystem sustainability is defined in terms of *stability* in the numbers and amounts of species present, and their *resilience* to natural and manmade perturbations.[14] Within small areas, the expecta-

---

Forestry, 8 Envtl. L. 309, 321-23 (1978).

8. For a brief, insightful, history of the concept of sustained yield in forestry, see R. Behan, *id.*

9. *Id.* at 322. Behan cites Samuelson's article, *Economics of Forestry in an Evolving Society*, 14 Econ. Inquiry 466-91 (1976), but discounts its importance, originality, and generality.

10. See Behan, *id.* at 321-32 and references cited therein.

11. Our burden here is to demonstrate that the state school lands have more to offer than just what the economic definition of sustainability would suggest. *See infra* note 125 and accompanying text.

12. Examples are found in D. Wall and B. Oswald, A Technique and Relationships for Projections of Employment in the Pacific Coast Forest Products Industries (U.S.D.A. For. Serv. Res. Pap. PNW-189, 1975); and Cal. Dept. of Forestry and Fire Protection, California's Forests and Rangeland: Growing Conflict Over Changing Uses 195 (1988) [hereinafter *FRRAP Report*].

13. The ecological origins of sustainability could be considered to result from the Clementsian concept of succession to a climax D. Worster, *Nature's Economy: a History of Ecological Ideas* 205 *passim* (1977). The climax theory of ecological succession was surpassed, staring in the late 1960s, by the dynamic disturbance theories of the population ecologists. M. Begon et al., *Ecology: Individuals, Populations and Communities* 752-767 (2d ed. 1990) and references therein. More recently, GAIA and Deep Ecology hypotheses conceive the Earth as an organism whose health and stability are governed by feedback mechanisms with humans having no primacy over other plants and animals. C. Merchant, *Radical Ecology: The Search for a Livable World* 85-109 (1992).

14. FRRAP Report, *supra* note 12, at 286.

tion that natural areas will maintain their composition over long periods of time is unrealistic.[15] Over larger areas, sustainability of biological systems is a function of their ability to recover from disturbances.[16]

Social. Social sustainability is closely connected to economic sustainability, adding to it consideration of the beneficiaries and consequences of economic activity. It is more difficult to define, however, because the concept has been expanded beyond the customary emphasis on jobs.[17] Discussions typically include an emphasis on some or all of the following: (1) human development; (2) local control of resources; (3) increased internal investment capacity; and (4) economic and social structures to increase opportunity and reduce dependency.[18]

Summary. The central argument of this paper is that school trust lands experiences provide tools useful for integrating sustainability concepts with administrative structures needed to implement them. Over the last decades, the definitions of sustainability have become more elaborate, complex and demanding of managers. Each of the four basic sustainability elements has diverse permutations and subparts, and each affects and is effected by the others. Therefore, it is important to be specific about what sustainable management is trying to sustain. Stated in the trust terms we will outline below, who or what is the specific beneficiary of sustainable management? A brief exploration into critiques of sustained yield forestry as practiced by the United States Forest Service will be used to illustrate the links between sustainability and trust principles.

---

15. C. Oliver & B. Larson, *Forest Stand Dynamics* 355-80 (1990). *See also* A. Chase, Playing God in Yellowstone 92-107 (1987).

16. Oliver & Lawson, *id.* at 370-72.

17. The Forest Service relates social sustainability to community stability, calling it "the rate of change with which people can cope without exceeding their capacity to deal with it. 36 CFR 219, Subpart A. *See* C. Schallau, *Sustained Yield Versus Community Stability: An Unfortunate Wedding?* 87 J. Forestry 16, 21 (Sept. 1989).

18. *See,* for example, F. Sargent, et al., *Rural Environmental Planning For Sustainable Communities* 184-85 (1991). Race, gender, age, injuries are also much discussed aspects. *See,* L. Fortmann, J. Kusel & S. Fairfax, Community Stability: The Foresters' Fig Leaf, in *Community Stability in Forest-Based Economies* 47-48 (D. LeMaster & J. Beuter eds., 1989). *See also,* J. Kusel, *It's Just Like Baseball: A Study of Forest Community Well-Being* 28-31 (1991) (unpublished Ph.D. dissertation, University of California (Berkeley)).

Sustained Yield

Efforts to include sustainability in federal public resource management have been spotty. Cooperative Sustained Yield Timber Units [19] managed by the United States Forest Service are probably the most familiar federal attempt at sustainable resource management. Established under the Sustained Yield Forest Management Act of 1944, the units are clearly based in the physical volume approach:

> In order to promote the stability of forest industries, of employment, of communities, and of taxable forest wealth, *through continuous supplies of timber;* in order to provide for a continuous and ample supply of forest products; and in order to secure the benefits of forests in maintenance of water supply, regulation of stream flow, prevention of soil erosion, amelioration of climate, and preservation of wildlife . . . .[20] (emphasis added)

The physical approach was extended from timber to other forest resources by the Multiple-Use Sustained Yield Act of 1960:

> 'Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land.[21]

Critics of Forest Service programs have long argued that this mandate has not been translated into criteria that are meaningfully applied to the broad range of decisions necessary for management of lands and resources.[22] A major theme of the critique is that its goals are not clearly defined. Lawyers discuss this flaccid multiple use direction in terms of excessive discretion, no "law to apply";[23] foresters refer to it as

---

19. In almost all instances, these units were unsuccessful. *See* H. Steen, *The U.S. Forest Service: A History* 251-52 & nn.8,9 (1976), and references cited therein. *See also,* S. Dana & S. Fairfax, *Forest and Range Policy, Its Development in the United States* 167-68 (2d ed. 1980); Schallau, *supra* note 17, at 16, 20; and D. Wear, et al., *Even-Flow Timber Harvests and Community Stability,* 87 J. Forestry 24, 27 (Sept. 1989).

20. Sustained Yield Forest Management Act of 1944, §58 Stat. 132 (current version at 16 U.S.C. 583, §1).

21. Multiple Use - Sustained Yield Act of 1960, 74 Stat. 215 (currnet versin at 16 U.S.C. 531, §4(b)). Multiple use is defined in §4(a) of the Act as ". . . the management of all the various renewable surface resources of the national forest so that they are utilized in the combination that will best meet the needs of the American people . . . without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output."

22. Behan, *supra* note 7, at 336-42.

23. Coggins and Wilkinson note that "no lower court struck down any important Forest

the "succotash syndrome."[24] Economists note the absence of clear directives and tools for monitoring.[25] Confronted with a mushy directive, the Forest Service, according to the standard critique, acts rationally and then is accused of maximizing to its own internal benefit.[26] Standard explanations of how this happens can be separated into three related categories.

First, the Forest Service does not value all of the products of its lands at a fair market price.[27] Such is typically seen in its undervaluation of grazing, water and recreation.[28] A second criticism is that the Forest Service subsidizes certain activities, such as road construction and insect and disease control, with the proceeds from other activities, notably timber production.[29] This is customarily done by using revenues from an income-producing activity to subsidize non-monetary, non-priced activities.[30] Alternatively, the agency balances costs for commodity production programs against non-quantifiable or non-monetary benefits, such as recreation or "community stability." This cross-subsidization can occur because of inadequate cost accounting, the third major criticism of Forest Service sustained yield management.[31]

Our argument depends in part on associating the managerial requirements to achieve sustainability—whatever its definition—and those found in trust management. Current problems in sustained yield

---

Service action until a district court in 1970 enjoined issuance of a timber contract for violations of the Wilderness Act (*Parker v. United States*, 309 F.Supp. 593 (D. Colo. 1070))." They attribute the recent "boom in public land litigation" to several factors, including the fact that Congress began to enact "hard statutory law" rather than the "vague, discretionary mandate" of the Multiple-Use, Sustained-Yield Act." G. Coggins and C. Wilkinson, Federal Public Land and Resources Law 279 (2d ed. 1987). See also, J. McCloskey, *Natural Resources – National Forests – The Multiple Use-Sustained Yield Act of 1960*, 41 Or. L. Rev. 49 (1961).

24. Behan, *The Succotash Syndrome, or Multiple Use: A Heartfelt Approach to Forest Land Management*, 7 Nat. Res. J. 473 (1967).

25. R. O'Toole, *Reforming the Forest Service* 185-188 (1987)

26. *Id. passim* (1987) is the most prominent critic of the Forest Service. Others have also made the budget-maximization case. See R. Johnson, *The Budget Maximization Hypothesis and the USDA Forest Service*, 1 Renewable Resources J. 8 (1983) and Off. of Tech. Assessment, Forest Service Planning: Accommodating Uses, Producing Outputs, and Sustaining Ecosystems 43-49 passim (1992) [hereinafter *OTA Report*]. *See also* Reich, *The Public and the Nation's Forests*, 50 Calif. L. Rev. 381 (1962).

27. O'Toole, *id.* at xii, 82-86, 72. OTA Report, *id.* at 42, 147.

28. O'Toole, *id.* at 72. OTA Report, *id.* at 147. *See also*, H.R. Rep. No. 593, 99th Cong., 2nd Sess., Federal Grazing Program: All Is Not Well on the Range 5-10 (1986).

29. O'Toole, *id.* at 72, 89, 90-92. *See also*, OTA Report, *id.* at 148-50, 154-57.

30. O'Toole, *id.* at 119-22, 127-30, 187.

31. O'Toole, *id.* at 28 *passim*. The OTA Report, *supra* note 26, at 154 discusses this in terms of "off-budget" funding. *See also*, R. Wolf, *National Forest Timber Sales and the Legacy of Gifford Pinchot: Managing a Forest and Making It Pay*, 60 U. Colo. L. Rev. 1037, *passim* (1989) for a detailed history.

forestry are not the only ones which confront managers attempting to manage sustainability, nor are all the problems of traditional sustained yield forestry resolved by lessons from the school trusts. However, the trust mandate is a broadly understood and widely applied working model that can provide useful insight into overcoming the obstacles identified in critiques of Forest Service management. The next section will introduce trust principles using the structure of our conceptual mantra—clarity, accountability, enforceability, perpetuity—to emphasize the relationship between trust principles and sustainable resource management, most particularly in the area of institutional arrangements for achieving sustainability.

Trust Principles

A trust is a fiduciary relationship in which the trustee is required to manage the trust asset for the exclusive benefit of the beneficiaries.[32] The primary duty of the trustee is to act with undivided loyalty to the specified beneficiary.[33] Other trust duties are elaborated in ancient common law principles, state statute, and case law.

Clarity. A key characteristic of trust principles is clarity of the goal: manage the trust resources for the benefit of the beneficiary. Clarity is potentiated by the principle of undivided loyalty: the trustee is strictly forbidden from diverting trust resources to others.[34] The trustee can tolerate uncompensated use only if it does not impose costs on the beneficiary.[35]

Accountability. Clarity of goals facilitates accountability. The trustee must exercise prudence, skill, and diligence in making the trust productive for

---

32. Conventional Wisdom, *supra* note 1, at 883-87. See also Restatement (Second) of Trusts §§ 2, 3, & 4 (1959).

33. Although the existence of a trust can be implied in the absence of a specific statement or document, the normal route to establishing one involves a trust "instrument." The instrument identifies the trustee and the beneficiary, and it allows the trustor to specify terms and conditions for implementation of the trust.

34. Undivided loyalty does not mean that an investment or activity is disallowed if it coincidentally benefits someone other than the beneficiary, but it does bar programs that impose costs or reduce benefits in order to achieve a collateral or general benefit. *See, Oklahoma Educ. Assoc. v. Nigh*, 642 P.2d 230 (Okla. 1982); *County of Skamania v. State*, 685 P.2d 576 (Wash. 1984); and *Ervien v. United States*, 251 U.S. 41 (1919).

35. Richard Pederson, consultant to the state land board of Colorado, notes that managers of private trusts routinely make charitable donations when they have reason to believe that the status of the trust will be enhanced by the good community relations that putatively accrue to such donations. Personal communication, St. George, Utah, winter 1992 meeting of the Western State Land Commissioners' Assocation.

the specified beneficiary.[36] The trustee must hold trust property separate from other property owned or managed by the trustee, and must also deal with the beneficiary with fairness, openness, and honesty.[37] In order to meet that standard, the trustee is specifically and comprehensively accountable to the beneficiary. The trustee must keep property records, accounts of receipts and disbursements, and must furnish this information to the beneficiary on demand.[38]

Enforceability. Trust doctrine allows the beneficiary[39] to sue to enforce the terms of the trust. Trust obligations are fully elaborated in common law, and statutes and many centuries of judicial experience in enforcing the trust doctrine.

Perpetuity. Preserving the corpus of the trust is one of any trustee's fundamental obligations. Ordinarily, beneficial trusts are not necessarily perpetual: a trust might be liquidated, for example, at the instruction of the trustor, when a beneficiary reaches a certain age or when the purposes for which the trust was established are achieved.[40] The trust purposes can also be changed or the trust terminated if the purpose for which the trust was established is no longer reasonable.[41] The school land trusts peculiar emphasis on perpetuity will be elaborated in the next section.

Summary. Sustainability concepts have become more complex in the past several decades. Increasingly sophisticated biological and social definitions will be more and more difficult to specify and achieve. The Forest Service experience with sustained yield forestry provides a starting point

---

36. Restatement (Second) of Trusts §§ 170-83 (1959).

37. *Id. See also,* Conventional Wisdom, *supra* note 1, at 853-55.

38. Restatement (Second) of Trusts §§ 172, 173, 179.1-.2 (1959).

39. Or others with an identifiable interest. Restatement (Second) Trusts §172. *See,* the Arizona and New Mexico situation. "Nothing herein contained shall be taken as in limitation of the power of the State or of any citizen thereof to enforce the provisions of this Act." New Mexico-Arizona Enabling Act §28, 36 Stat. 557, ch. 310 (1910). Cited in *Lassen v. Arizona Highway Dep't.*, 385 U.S. 458, 472 app. to opinion (1967), reversing *State of Arizona ex. rel Arizona Highway Department v. Lassen*, 407 P.2d 747 (1965). Other states are more problematical, *see* Conventional Wisdom, *supra* note 1, at n.194 and accompanying text. Most recently, *see* Plaintiffs' Brief in Opposition to Motion for Summary Judgment at 26-47, *Selkirk-Priest Basin Assoc. v. Idaho*, (1st. Dist, Idaho, 1992) (No. CV-92-0037).

40. "If by the terms of the trust, the trust is to continue only until the expiration of a certain period or until the happening of a certain event, the trust will be terminated upon the expiration of the period or the happening of the event." Restatement (Second) of Trusts § 334 (1959).

41. This is the *cy pres* doctrine of charitable trusts. Conventional Wisdom, supra note 1, at 875-77 and references therein.

for identifying problems in implementing even simple notions of sustainability: unclear goals, undervaluing some outputs and subsidizing others, and inadequate accounting.

Trust principles embody a clear goal and an elaborate mechanism for monitoring and enforcing adherence to goals. The next section introduces state experience managing school trust lands and analyzes ways in which clarity, accountability, enforceability and perpetuity concepts enhance sustainable resource management discussions.

III. Trust Management Systems and Sustainability

This section begins with a brief overview of the state school land resources and organizational structures--just enough information to render the subsequent analysis penetrable.[42] We then use our four trust themes of clarity, accountability, enforceability and perpetuity to analyze trust land management in the context of sustainability.

Overview of the Lands, Resources, and State Lands Organization

The school lands were granted at or near statehood as part of the accession process and preliminary rules for their management are found in the state Constitutions and, less frequently and in considerably less detail, in the state's Enabling Act.[43]

Trust Corpus: State Lands and Resources.[44] The corpus of the state school lands trust refers to three kinds of assets: (1) the lands granted to the states by the Federal government, (2) the proceeds from the sale and use of the lands, and (3) the permanent funds that hold the proceeds not distributed on an annual basis. Although every state joining the Union since 1803 has received lands, only twenty-five states presently manage

---

42. The economic models and the analysis of the case study states are based on material found in J. Souder, Economic Strategies for the Management of School and Institutional Trust Lands: A Comparative Study of Ten Western States (1990) (unpublished Ph.D. dissertation, University of California (Berkeley)) [hereinafter *Economic Strategies*].

43. Fairfax, *supra* note 1, at 854-55. Although Congress—the putative trustor in the present example—had relatively little to say until the very end of the state-making process about trust or school land management, in nearly a century of constitution drafting, states were increasingly specific. State constitutions detailed parameters for leasing and selling school lands, the contents of and priorities for investing the resulting permanent school funds, and myriad other trust management conditions. *Id.* at 877-83. *See also*, K. Bradley, *Land Grants and the Western States: The Significance of Admissions Histories and National Politics* (1992) (unpublished manuscript on file with the authors); and S. Fairfax and J. Souder, State Accession Documents Provisions Relating to Grants of School and Related Lands, Working Paper 90-94 (1990) (on file with the authors).

44. Fairfax, *supra* note 1, at 818-20.

trust lands.[45] Current surface land holdings range from less than three thousand acres in Nevada to eighty-five million acres in Alaska.[46] Grazing is the largest surface use in all states, occupying a low of about thirteen percent (but still the most extensive use) of the trust land in California to one-hundred percent in Wyoming.[47] The other most common surface use is timber production: Washington uses seventy percent of its land for timber, Oregon, fifty-five percent,[48] and Idaho, twenty-five percent.[49] Commercial leasing and development—warehouses to condos—are attracting attention in some states, but the revenues produced are not yet significant. The largest sub-surface use is oil and gas leasing. The only other extensive sub-surface land leases are for strip mining coal production, primarily in Montana, New Mexico, and Wyoming.[50]

Revenues. Revenues produced from trust lands uses fluctuate widely from year to year, especially for those resources that produce large amounts of revenues for the states: timber and oil and gas.[51] Although grazing is the largest land use, oil and gas revenues are generally the states largest money-earner, although in Washington, Idaho, and Oregon timber provides a major portion of trust revenues. Land, when sold for cash as opposed to under a sales contract, constitutes another area where year-to-year revenue variance is extreme. Traditional cropland and grazing uses provide a stable—albeit relatively low—level of funds. Only in Colorado and Montana do these uses provide more than five percent of the revenues arising from the trust lands, even though cropland and grazing management is often the major focus of the land offices.

---

45. Based on the membership of the Western States Land Commissioners Association (WSLCA) and four eastern states. States with trust lands are Alabama (AL), Alaska (AK), Arizona (AZ), California (CA), Colorado (CO), Hawaii (HI), Idaho (ID), Louisiana (LA), Minnesota (MN), Montana (MT), Nebraska (NB), Nevada (NV), New Mexico (NM), North Dakota (ND), Oklahoma (OK), Oregon (OR), South Dakota (SD), Texas (TX), Utah (UT), Washington (WA), Wisconsin (WI), and Wyoming (WY). Arkansas is a member of the WSLCA but manages no trust lands. Western States Land Comm'rs Ass'n, *Directory*, (1988-89) [hereinafter *WSLCA Directory*].

46. *Id. passim.*

47. Souder, *supra* note 42, tbl. 2-2b at 25.

48. This figure includes land managed by the Oregon Department of Forestry under the trust doctrine with the counties as beneficiaries, Or. Rev. Stat. § 530.030 (1992 Supp.).

49. Souder, *supra* note 42, tbl. 2-2b at 25.

50. *Id.* Colorado and Utah also produce coal from trust lands, but their mines are subsurface so require less land.

51. We have compiled comparative data on revenues and leased acreage for the period from 1970 to the present, and on employment allocated to the various trust land management programs for the period from 1986 to 1990 for most of the states with trust lands. The ebbs and flows in revenues are evident from examination of this data.

Some revenues produced from the trust lands are distributed directly to the beneficiaries, while others are deposited into the permanent school fund with only the dividends disbursed.[52] Typically, revenues produced from renewable resources are distributed, while those from non-renewable sources—including land sales—are put in the beneficiaries' permanent fund. Timber revenues are handled differently depending upon the state. For example, in Arizona and Oregon these revenues are placed in the permanent fund, while in the other states timber proceeds are distributed.[53] Oregon is also different from other states: all its trust lands revenues are placed in its permanent fund.[54]

Organizational Structure and Funding. State land offices are delegated to act as the trustees to manage these lands and their resources for the beneficiaries. Two general organizational structures are used. Five states have elected land commissioners who have considerable power.[55] Other states have a board of land commissioners composed of either elected officials or citizens or both.[56]

Funding mechanisms used to manage trust lands and assets also vary among the states.[57] Some states designate a percentage of receipts for management: this percentage varies from a low of 2.5 percent in Montana to a high of 36 1/4 percent in Oregon.[58] Other states allow only the net revenues, after management expenses are deducted, to go to the beneficiaries.[59] The remaining states are dependent upon the legislature to provide adequate funding. Even in the states where a percentage of revenues is designated for management expenses, the legislature appropriates funds for land office expenditures.[60]

---

52. *See,* Fairfax, *supra* note 1, at 836-41, 879-83; Souder, *supra note 42, at 28-34, respectively, for a fuller description of the historical evolution and current practices in revenues distribution.*

53. Souder, *supra* note 42, at 29.

54. *Id.*

55. These states are Arkansas, New Mexico, South Dakota, Texas, and Washington. WSLCA Directory, *supra* note 45, *passim.*

56. *Id.* Practically every state is different, even states that came in under the same Enabling Act. The directory lists the members of the Commissions where they exist. A discussion of the organizational structures in the ten case states is provided in J. Souder and S. Fairfax, *The State School Trust Lands,* Working Paper 90-1, 28-32 & fig. 3 at 29 (1990) (on file with the authors).

57. Souder, *supra* note 42, tbl. 2-5 at 37.

58. *Id.* In Oregon's case, this is the percentage retained by the Department of Forestry for management of school trust timber lands, Or. Rev. Stat. § 530.520 (1992 Supp.).

59. Souder, *supra* note 42, tbl. 2-5 at 37. New Mexico can retain—but doesn't—up to 100 percent of revenues not required to be placed in the permanent fund, subject to appropriation by the legislature (N.M.Stat. Ann. § 19-1-11, -18 (1991 Supp.), as passed in 1989 N.M. Laws ch. 15, § 1. California and Oregon allow this from all revenues.

60. *Id.*

State school lands, resources and management structures are very diverse. Many interesting lessons can be found in comparisons between and among the twenty-two state's programs. But what they have in common is most relevant to our arguments about sustainability. We turn, therefore, to a discussion of how the trust mandate plays out in actual issues relevant to sustainable resource management, structuring our discussion around the four parts of the trust mandate, beginning with clarity.

Analysis of Trust Land Management

Clarity. The defining characteristic of school trust land management is specificity regarding goals.[61] Unlike the very vague "multiple-use" mandate which guides management of Forest Service and BLM lands[62]—"the management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people"[63]—the state trust lands are managed to meet fairly specific needs of clearly identified beneficiaries.

Clarity arises from two major factors: the first is the brevity and consistency with which the purpose of the grants, and their acceptance, is stated throughout the accession process. Typically, the basic language describing the purpose of the grants is contained in a single sentence or paragraph.[64] The wordiest basic documents do not exceed a page or

---

61. This is a significant distinction between trust land management and federal lands management. Compare the description of the problems of multiple-use problems on federal lands described in M. Clawson, Forests for Whom and For What? (1975) with state trust lands management described herein.

62. *See,* Multiple-Use Sustained-Yield Act, 16 U.S.C. §§ 528-51 (1988); National Forest Management Act, 16 U.S.C. §§ 1600-47 (1988); Federal Land Policy and Management Act, 43 U.S.C. §§ 1701-84 (1988). *Supra* notes 20-21 and accompanying text.

63. Multiple-Use Sustained Yield Act of 1960, 16 U.S.C. 531 §4(a) (emphasis added). George Coggins has tried to say that multiple use means something, imposes some enforceable standards, but other commentators and the courts demur. *See,* G. Coggins, *Of Succotash Syndromes and Vacuous Platitudes: The Meaning of "Multiple Use, Sustained Yield" For Public Land Management,* 53 U. Colo. L. Rev. 229 (1982); *see also,* J. McCloskey, *supra* note 23; and Dorothy Thomas Found v. Hardin, 317 F. Supp. 1072 (W.D. N.C. 1970).

64. We are still struck by the wisdom of a comment made many years ago by Ron Sandoe, now director of the Minnesota Department of Natural Resources. He observed that the federal agencies were burdened by reams of statute and regulation telling them in enormous and conflicting detail how to do their job, but had nothing to which they could turn to tell them what to do. He compared that to the state trust land managers' mandate, which contains little procedural guidance but strict priorities about what to produce and for whom.

two.[65] The dominant theme of grant program—to raise money for the support of schools—never changed.[66]

Equally important to our argument, clarity arises because the trustee's duty to produce revenues for the beneficiary is not unconstrained: it does not overrule the clear commitment to protecting the corpus and productive capacity of the trust. Furthermore, recent cases have made clear that it does not preclude non-use where there is a possibility that future productivity will be thereby enhanced.[67] We will argue below that this clarity about goals and constraints—although it emphasizes revenue production—tends toward conservative management. In this section, we seek merely to underscore the peculiar clarity of the mandate for sustainability and show how it plays out in specific disputes.

This clarity of the mandate is controlling without reliance, it is worth noting, on trust language or principles. Soon after statehood the New Mexico legislature authorized the Commissioner of Public Lands to spend up to three per cent of the annual income from sale and lease of lands to advertise the advantages of all of the lands available for sale in the state of New Mexico. The United States Supreme Court held that dedication of the lands to purposes specified in the Enabling Act was "special and exact" and the purposes of the grant were "necessarily exclusive of any other purpose."[68] The Court specifically refused to discuss a "breach of trust." The phrase ". . . means no more in the present case than that the United States, being the grantor of the lands, could impose conditions upon their use . . . ."[69] Trust resources would not be diverted to an alleged general public benefit.

However, the mandate's clarity is, as noted above, potentiated by the trust principle of undivided loyalty. In *Lassen v. Arizona Highway Department*,[70] some fifty years later, the Court interpreted the same Arizona–New Mexico Enabling Act to determine whether and how the state

---

65. From state to state, and even within states, in the several key documents, there is slight variation in the specific language used as describing the purpose for which the land was granted and accepted: the lands were to be used to support schools. The differences observed in the phrases used at different times and places—between "for educational purposes," "for the support of common schools," or "for the support of schools"—could be decisive in the context of allocating a specific resource in a particular factual situation. Fairfax, *supra* note 1, at 818-20 and accompanying references. Oregon has tried to find additional flexibility in the most flexible of all mandates, *see* 46 Op. Att'y Gen. ____ No. 8223, slip op. at 7-22 (July 24, 1992).

66. Although the specific language did vary with some arguable import for management priorities. *See*, Fairfax, *supra* note 1, at 801.

67. *See*, Havasu Heights Ranch and Dev. Corp. v. State Land Dep't., 764 P.2d 37 (Ariz. App. 1988), discussed below, notes 126-28 and accompanying text.

68. Ervien v. United States, *supra* note 34, at 47.

69. *Id.* at 48.

70. Lassen, *supra* note 39.

might gain access to school lands for highway purposes without going through the auction procedures specified in the grant. In *Lassen*, the founding mandate is supplemented by discussion of basic trust principles. The Court rejected the highway department's assertion, and the Arizona Supreme Court's holding, that any enhancement in trust value stemming from the highway construction should be deducted from the amount owed to the trust for the easements across school lands.[71] "Words more clearly designed . . . to create definite and specific trusts . . . could hardly have been chosen," noted the court, citing the State Appeals Court decision in the earlier *Ervien* case.[72]

Trust principles are also applied to prevent the legislature from diverting trust resources to the lessee through management directives. In *ASARCO v. Kadish*,[73] for example, the court held that the legislature could not establish a maximum, or flat, royalty fee for production of minerals from trust lands outside the competitive bidding process. The Court disallowed the legislatively set maximums even though the state Constitution clearly states that the school lands shall be managed "as the State legislature may direct." If "the blanket authority" in the Constitution authorizes the legislature to allow below market leasing, the Court reasoned, "it would allow minerals to be leased for little or no royalty, and thus would leave room for all the abuses that the establishment of a school trust was designed to prevent."[74]

Clarity is, according to the standard political science text on policy implementation, the key and pervasive pre-condition of "effective implementation".[75] It is impossible to evaluate compliance with and

---

71. *Id.* at 466.

72. Ervien, *supra* note 34, at 279.

73. ASARCO v. Kadish, 109 S. Ct. 2037, 2052 (1989). *See also*, Kadish v. Arizona State Land Dept., 155 Ariz. 484, 747 P.2d 1183 (1987) for the Arizona Supreme Court's original decision overruling the existing Arizona minerals leasing statute.

74. *Kadish, id.*, at 2052, citing § 1(b) of the Jones Act, 44 Stat. 1026 (**19**__). This is based on the procedural requirements for leases under § 28 of the New Mexico - Arizona Enabling Act of June 20, 1910, 36 Stat. 557 (**19**__). Arizona's minerals leasing regulations were overturned because, even after the Jones Act, they were not in conformity with § 28; by comparison, soon after passage of the Jones Act, New Mexico successfully petitioned Congress to allow it to change its mineral leasing procedures so that advertisement, appraisal, and bidding procedures, required under general leases were not required for mineral leases. *Id.* at 2052 n.5 (citing Joint Resolution No. 7, ch. 28, 45 Stat. 58 (1927). Thus, New Mexico, by changing its Enabling Act and Constitution, was able to legally lease minerals under terms equivalent to those found to violate the original Enabling Act that brought both states into the Union. In fact, Arizona revised its Enabling Act in 1936 and 1951 to remove the original leasing requirements from hydrocarbon minerals. However, this revision did not effect hardrock minerals. Act of June 5, 1936, ch. 517, 49 Stat. 1477 (1936) and Act of June 2, 1951, 65 Stat. 51 (1951) *id.* at 2050, 2053.

75. D. Mazmanian and P. Sabatier, *Implementation and Public Policy* 41 (1983). See *also*, P.

progress toward goals, or even to proceed toward them, unless the goals are clearly stated. Our argument linking trust principles and sustainability parallels that general frame: clarity, we assert, permits tying resource management to the achievement of objectives. This linkage is particularly crucial when dealing with potentially imprecise concepts such as sustainability.

Accountability. Accountability in school trust land management is an intersection of two factors. The first is clarity—one clear implication of the previous discussion is that we know specifically what we are accounting for and how to measure it.[76] The second is the trustee's duty to fully disclose. Disclosure requires the trustee to retain trust documents and vouchers, and to keep records,[77] to furnish information to the beneficiary,[78] and to hold trust assets separate from others under his or her control.[79]

Records are required specifically because they permit evaluation of managers' compliance with the trust mandate to benefit the beneficiary. The crucial question continues to be: who is benefiting from management of the trust. *Lassen, Ervien and Kadish*[80] demonstrate the utility of the clarity of the trust mandate in assuring that the beneficiary enjoys the benefits, specifically by preventing diversion of resources to putative general public benefits and the lessees.[81] Accountability is also central in pursuing an

---

Sabatier, *Top-Down and Bottom-Up Approaches to Implementation Research: a Critical Analysis and Suggested Synthesis*, 6 J. Public Policy 21 (1986).

76. To those who argue that dollars are not a good output indicator, we say yes, absolutely, but these are data representing tradeoffs that we all understand. The difficulty in measuring management performance is at the heart of why revenues are commonly defended as a standard. We will broaden this approach somewhat when we talk about efficient personnel allocation. *See also*, Office. of Legis. Auditor Gen., State of Utah, A Performance Audit of the Division of State Lands and Forestry 13-24 (November, 1992) for an indication of the difficulties one state had in estimating personnel efficiencies.

77. Restatement (second) of Trusts §172 (1959).

78. *Id.* at §173.

79. *Id.* at §179.1-.2.

80. *Supra* notes 68-74 and accompanying text.

81. Many legal cases interpreting accountability in the state trust land management context are tangential to our argument, tending to deal with who can sign payment vouchers, and timeliness of agency actions. For example, a series of cases from Idaho dealt with the operations of the state land department and the state investment council, specifically their relationship to the State Treasurer's office, including what type of accounting procedures would be used and how maintenance funds are to be handled. Moon v. Investment Board, 525 P.2d 335, 338-339, 96 Idaho 140, 143-44 (1974); State ex rel. Moon v. State Bd. of Examiners, 662 P.2d 221, 223 (Idaho 1983); and Moon v. State Bd. of Land Com'rs., 724 P.2d 125, 129-30 (Idaho 1986). A case from Montana allows agency discretion in refusing to renew a lease when rentals were not paid; the plaintiff had contended that the agency was arbitrary and capricious by not approving a lease assignment within two

even harder target: assessing whether trust assets are being diverted to benefit the manager. The courts have consistently maintained that the trustee must show a direct connection between its actions and undivided loyalty to the beneficiary.[82]

Trust principles cast the issue of compliance with the mandate in terms of undivided loyalty to the beneficiary. Because of the accountability requirements of the trust mandate we have data to examine the efficacy of state land management programs. While not all states provide sufficient information in exactly the right format to permit the kind of cross-state comparisons we would like to make, the states do provide sufficient information to enable useful inquiry. The analyses[83] that follow pursue the issue of undivided loyalty into three specific organizational issues relevant to sustainability:

(1) Allocation of personnel to resource management programs—is the trustee diverting trust resources to employees by over investing in management or failing to invest adequately to make the trust fully productive?
(2) Funding mechanisms—does the way the trustee obtains operating funds affect its ability to pursue trust purposes?
(3) Organizational structure—does organizational style and type have any discernible impact of the trustee's ability to achieve trust goals?

---

weeks. Jeppeson v. State, Dep't. of State Lands, 667 P.2d 428, 433 (Mont. 1983).

82. This is no trivial accomplishment. *Supra* at notes 26-32 and accompanying text. The connection between the trustee responsibilities of undivided loyalty and accountability was demonstrated in *Skamania, supra* note 34, where the effects on the beneficiaries of holding state timber purchasers to their contracts was considered: "The Act in this case released valuable contract rights held by the DNR. The primary justification for this action was based on the testimony of a forestry consultant, that is, that the Act was necessary to preserve competition, maintain timber prices in the future, and encourage timely contract performance." *County of Skamania v. State*, 685 P.2d 576 (Wash. 1984). "The testimony of a forestry consultant is simply too speculative and conjectural to justify the Act's provisions. We hold that no prudent trustee could conclude that the unilateral termination of these contracts was in the best interests of the trust." *Id.* at 582, 583. The central issue in the federal "below cost timber sale" issue is that generations of Forest Service critics and analysts cannot use agency data to establish accountability. Wolf, *supra* note 31, at 1072-76. *See also*, H. Rept. No. 171, 100th Cong., 1st Sess. 65-67 (1977). OTA Report, *supra* note 26, at 111-13.

83. School trust lands management was analyzed by incorporating readily available data into production models which describe the processes that yield revenues. Activity, or input-out, analysis, was the type of production model used here. This model shows the amounts of inputs—generally labor, capital, and land—required to produce a unit of output. The input amount—or intensity—is denoted as the coefficient for that factor. For land the intensity coefficient is usually in acres of land of a specific type; for labor the intensity coefficient used here will be the number full-time employees (FTEs) allocated to the management of a specific resource.

To test whether trust assets were being diverted to benefit the manager, we used common measures of performance: (1) the return per employee required to produce a commodity; and (2) the revenues per acre of land dedicated to a specific use.[84] Efficient personnel allocation criterion is that, ceteris paribus, the return per employee should be similar across management programs within a state.[85]

Personnel Expenditures. Once beneficiaries are identified and objectives established, the actual implementation of management programs by necessity should be done efficiently. By far the largest management expenditure in the state land offices is on personnel, costs which could either be used for other activities or passed on to the beneficiaries. Efficient personnel allocation is critical for sustainable resources management.

Table 1 shows how personnel are allocated in relation to revenues received. The percentages in the table represent the amount of revenues returned per employee in one program (the left-hand side) compared to the returns per employee in another program (the right-hand side).[86] Efficient personnel allocation criterion requires that the ratio of labor productivity between any two programs should be approximately equal to one, i.e., that their relative value is equivalent.[87] Significant divergence from one hundred percent indicates potential problem areas.[88] For analytical

---

84. For revenues, gross and net (minus expenditures) receipts are the measures used to indicate returns to the trust. Management efficiency is characterized by: (1) expenditures, (2) expenditures as a percent of revenues, (3) expenditure per acre, and (4) return per employee (the labor factor from the activity analysis, *id.*). Two other factors were examined to control for other possible sources of variation between states. First, land quality was expressed as (1) total acres leased, (2) acres leased by resource use, and (3) gross revenues per acre (both total and by resource use - the land factor, *id.*). Secondly, any effects of state land office organization were tested using a classification of whether the land commissioner is elected (NM, WA), whether the land board is active in the day-to-day management of the office (CA, CO, OR, UT), or whether the land office is highly influenced by the state executive or another state office (ID, MT, WY).

85. Note that we are talking here about the *ceteris paribus* conditions for personnel assignment within a state, and not between states. Within a state, revenues produced per employee should be roughly equivalent across programs, unless—through a planning process—explicit offsets are recognized between current revenues and potential future ones that would result from "investing" personnel to other activities. If all things are not equal, then the state should have a program to rectify the inequalities.

86. Note that the percentages themselves are derived from the ratios of pairs of labor factor returns, and as such are unitless:
($/FTE$_{LHS}$ / $/FTE$_{RHS}$) . 100.
By converting to percentages, the interpretation is than a unit of labor in the left-hand (LHS) use returns X percent of the revenues of a unit of labor allocated to the program on the right-hand (RHS) side.

87. Basic source for this material is Souder, *supra note 42, at 83-92, particularly tbl. 4-6 at 85, revised in form as Table 1.*

88. Two assumptions are required prior to applying this criterion: (1) wage rates must be

purposes, we examined the data on an individual resource basis as well as aggregated into surface, minerals, and land sales programs.

The results in Table 1 show that there are orders of magnitude differences among states in labor factor return ratios at the aggregate program level. Relative contributions from renewable compared to non-renewable program range from 2 percent in New Mexico to 2,600 percent in Montana. This means that New Mexico receives fifty times as much revenue per employee in its mineral leasing programs compared to the return for managing surface resources. The converse is true in Montana: there the return per employee in surface management is twenty-six times as great as those engaged in minerals resources management.

Table 1. Comparative revenue returns from the allocation of personnel among resource programs.[a]

	AZ	CA	CO	ID	MT	NM	OR	UT	WA	WY
PROGRAM LEVEL PERCENTAGES[b]										
Renewable → Non-renewable	18%	3%	24%	234%	2,612%	2%	24%	3%	388%	8%
Lands → Non-renewable	139%	3%	30%	2,084%	312%	25%	487%	134%	6,239%	
Renewable → Lands	13%	89%	80%	11%	836%	10%	5%	2%	6%	
Renewable → Grand Total	30%	10%	59%	80%	179%	5%	24%	10%	99%	12%
Non-renewable → Grand Total	168%	335%	243%	34%	7%	215%	99%	314%	25%	153%
RESOURCE LEVEL PERCENTAGES[b]										
Crop & Grazing → Timber	2,038%	450%	60%	33%	565%		100%	120%	19%	2,346%
Crop & Grazing → Commercial	31%	92%	336%	41%		363%	131%		200%	
Timber → Commercial	02%	20%	561%	124%			130%		1,041%	
Commercial → Land Sales	28%	82%	24%	21%		4%	4,226%		1%	
Commercial → Land Program	74%	144%	31%	10%		4%	4%		1%	

a. Source: Economic Strategies, *supra* note 42, tbl. 4-6 at 85.
b. Percentages are determined from the ratios of the labor factor coefficients. A percentage of 100% means that equivalent revenues per employee (FTE) are received from the program to the left of the arrow compared to the program on the right. Percentages higher than one hundred indicate the relatively greater amount that the program on the right receives compared to the one on the left. The converse is true for percentages less than one hundred.

equal across the programs, or must be adjusted to reflect the differences; and (2) the marginal contribution of labor is the same across the programs. Non-renewable resources staff levels were adjusted downward twenty percent to account for wage differentials between surface versus mineral management personnel as required by the first assumption. This differential is based on data obtained for salaries in the California State Lands Commission, California State Legislature, Regular Session, Govenor's Budget Proposal (1989), and was conceptually concurred with by Mr. Kevin Carter, Unit Manager for Trust & Asset Management, Utah Division of State Lands and Forestry, during an interview in Salt Lake City, Utah (July 24, 1991). We have also used the average contribution, rather than the marginal contribution for the labor factor; and because this violates the second assumption—and the fact that revenues fluctuate much more on an annual basis than personnel levels—a strict interpretation should be avoided. Regardless, the information obtained from this analysis point to some very interesting management problems within the state land offices.

The results on an individual resource management level are also informative, particularly in the surface management programs. The agriculture and grazing, and forestry programs show a better balance than between the aggregate surface and minerals programs. The differences in balances among the states is also interesting. Oregon, Utah and Colorado are relatively well-balanced in personnel allocations between these two programs. Arizona, California, Montana, and Wyoming put many more employees in their forestry programs—when compared to agriculture and grazing—than the revenues appear to justify. In Idaho and Washington, the returns per employee in the agriculture and grazing programs are much less than the revenues per employee managing their forestry programs.[89]

An analysis similar to the above should be able to be applied to sustainable management programs. The major insight from our study supports our contention infra that states should manage those lands that give them the biggest return in terms of the beneficiaries' objectives.[90] Clearly, the magnitude of the differences in revenues produced per employee among the various states' programs is considerable. This imbalance may be a coincidence of fluctuating annual revenues and "sticky" staffing patterns. But states should at least be cognizant of this problem, and how it may be effected by either their past "agency culture," or as a result of funding mechanisms.

Organizational Structure. The land office's organizational structure affects its ability to generate returns to the trust.[91] We found that the percentage

---

89. Efficiency criteria indicate whether the state land office is allocating personnel to produce maximum revenues—an objective at least in the short term. Whether a state is allocating personnel to achieve resource sustainability requires a longitudinal analysis. Sustained production of revenues, the state trust lands management objective, requires that assets—both land and labor—be employed for the best long term benefit. It may be that personnel are engaged in long term management programs that have yet to produce revenues. In these cases, prospective future revenues should be discounted to the present to examine efficiencies, or longer term average revenues could be used as a metric, or other justification provided. What is important is that there is a standard by which the managing agency must justify its personnel allocations to the beneficiary.

90. Unlike the Forest Service, with its cumbersome mandate and unsuitable data system, trust land managers have a clear mandate and clear criteria for getting marginal lands out of production. *See*, Society of American Foresters, Report of the Below-Cost Timber Sales Task Force, Fiscal and Social Responsibility in National Forest Management (1986) and Wolf, *supra* note 31.

91. Spearman rank cross correlation procedures were used to test significance. A moderate level of correlation is significant at the 90 percent level, while a high level of correlation is significant at the 95 percent confidence interval. All statistical tests, unless otherwise cited, are based on the procedures found in S. Siegel & N. Castellan, Nonparametric Statistics for the Behavioral Sciences (2d ed. 1988). Calculations were done using the SYSTAT version 5.0 (SYSTAT, Inc., Evanston, Ill. 1989) statistics package. Significance tests at 90 percent and 95 percent confidence intervals were conducted based on the procedures

of revenues expended on land office management is a better indicator of returns per employee than any other indicator, including the organizational structure or the funding mechanism.[92] Our analysis additionally showed that labor productivity was not statistically different among organizational types, although that finding was not very strong.[93]

The information provided by our correlation analyses confirms that the states are working within a classic production situation. At low levels of leased acreage, the labor return is low due to the fixed minimum number of people required in an office. Labor productivity increases as the amount of leased land increases—at least up to a point—since additional staff are not required to manage more land. Past this point, additional leased land requires additional employees, and at some point, each additional staff members' contribution to revenues decreases because the management is extended to less productive acreage.

One implication of our analyses is that high expenditures per acre of trust land do not necessarily result in high gross revenues. This implies that the link between expenditures and revenues is not direct, but is caused by other factors such as efficiency in operations and/or the quality of the lands and resources managed in the individual states. The results point to a couple of possible causal mechanisms. First, it appears that some states may be skimming the cream off their resources by keeping personnel levels low. This effect is more indicative of cost-constrained management than revenue or profit maximization, a sanctioned objective. Secondly, the possibility that some states achieve efficiencies in the management of trust lands (i.e., returns to scale) was not demonstrated by our data at the program level.[94]

The combination of positive labor and negative land scale efficiencies means that we can discredit two possible relationships: (1) that states with large leased areas enjoy either higher returns per acre from their lands, a greater efficiency in their use of personnel, or larger gross revenues resulting from large leased acreage; and (2) that there is an overall return to scale factor that benefits states with large acreage, which would be seen in the program-level labor factor returns.[95] Once we have established that

---

in Seigal & Castellan, *id.* at 242, app. tbl. Q, using one-tailed probabilities since the sign of the relationship is known. Only statistically significant results are reported unless otherwise noted. See, Souder, *supra* note 42, at 72-77, 79-81 for detailed references.

92. Groups for percent expenditures are -5 percent, 6 percent to 15 percent, 16 percent to 25 percent, and > 25 percent of revenues. Groups for aggregate expenditures are -15 percent; 16 percent to 25 percent; and > 25 percent of revenues. Groups for funding mechanism are: cost recovery from revenues; fixed percentage of revenues; and legislative appropriation. *See*, Souder, *supra* note 42, at 112 for details and data sources.

93. It is easier in a statistical sense to show that differences do not exist than to determine that one group is "better or worse" than another. *Id.* at 111-13.

94. *Id.* at 81-83.

95. *Id.* at 75, tbl. 4-2.

these relationships do not exist, it is reasonable to look within each states' management program to determine whether resources are being effectively used on a program-by-program basis.

Funding Mechanisms. The influence that funding mechanisms have on personnel allocation led us to wonder if how the land offices receive funding affects their programs. State land offices are funded in three different ways: (1) offices expend as much money as needed to manage lands, with the remainder going to the beneficiaries or their permanent funds; (2) they can expend a fixed percentage of either their surface lease revenues or a percentage of their total revenues; or (3) their expenditures are determined by the legislature and come from the state's general fund. We wondered whether there was a disproportionate imbalance in surface compared to mineral program expenditures that resulted from receiving funding based on the source of the revenues. We found that there was a significant difference in personnel allocations as a result of funding procedures: where offices were funded only by a percentage of surface revenues, there was a statistically significant imbalance between surface and mineral management.[96] This suggests that tying budgets—hence agency activities—to accomplishment of objectives is crucial for effective, sustainable, management.

Summary. It is clear from our analysis that the information available from the trustee should be sufficient to allow the beneficiary to determine whether the trust is being efficiently managed.[97] By managing only productive lands, the likelihood of over-management is reduced. Sufficient information should be collected to determine at what point additional management expenditures are not worthwhile to the trust, that is, marginal lands should be either sold or that only custodial management should occur.[98] Thus the accountability theme leads directly to the enforceability theme by providing evidence of agency actions.

Enforceability. Clarity in goals and accountability give rise to the possibility of enforcement. Trusts are, in fact, designed in major part as means to direct resource managers who the trustor cannot or does not

---

96. *Id.* at 115.

97. We are not alone in identifying accountability as crucial in oversight of land management: Utah's state auditor found that the procedures used by the land office were insufficient to determine whether they were efficiently managing their trust assets. Off. of the Legis. Auditor Gen., *supra* note 76, at ii, 13-18.

98. This has traditionally been a problem in federal lands management. Whether *all* trust lands are required to be managed was examined by the California attorney general who found that "there is no compulsion on the state to sell or lease any of the lands." Op. Att'y General 63-48 (June 5, 1963), at 211.

know or, to put it simply, does not trust.[99] Many centuries of judicial effort to bind trustees to the trustor's intent have resulted in standards and criteria that bear suggestively, sometimes directly, on sustainable resource management.

Early school trust cases cited above, *Lassen* [100] and *Ervien* [101] confront fairly simple issues. The question in both was whether or not the trustee could allocate trust resources to a more general public benefit in the not unreasonable hope that the trust would also be enhanced. The answer in both cases was, as we have seen, an unequivocal no.

It is not, however, particularly surprising that a clearly stated and narrow purpose can be enforced in the courts.[102] This discussion is aimed beyond the importance of clarity to suggest the broader import for sustainability in resource management of enforcing not just *any* clear mandate, but of precisely the mandate elaborated in trust principles. To illustrate, we will follow another apparently narrow theme—is the obligation of the trustee to obtain full and fair market value in leasing trust resources—to show that enforcement is possible and important to sustainability. We will see two things: first, even so clear an economic priority as fair market value is potentially important to advocates of sustainable resource management; and second, that the ground rules for reviewing trustee behavior are meaningfully different from those under which resource managers normally operate.

The following cases are notable because it vindicates the beneficiary's claim against the trustee in the face of clear legislative statement to the contrary.[103] In different resource settings, in different states, protection and "wise use"—at least of the value—of a resource were at risk. The two examples are (1) agricultural and grazing leases in Oklahoma;[104] and (2) timber sale contracts in Washington.[105] In each case, trust principles yielded a considerably different result than one would predict in a traditional public resource case. This justifies exploring the possibility that

---

99. Delgado, *Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform*, 44 Vanderbilt L. Rev. 1209, 1214-1216 (1991).

100. Lassen, *supra* note 39.

101. *Ervien v. United States*, 251 U.S. 41 (1919).

102. The growing importance of the Endangered Species Act, Endangered Species Act of 1973, as amended 1978, 16 U.S.C.A.§§ 1531-1543, in diverse contexts simply heightens our awareness that if and when the mandate is clear, the Courts will hold the administrator to it.

103. When we come to discuss perpetuity, we will recall that a trust is durable and not easily altered by legislatures under transient political pressure. *See infra* note 111 and accompanying text.

104. Oklahoma Education Assoc. v. Nigh, 642 P2d. 230 (Okla. 1982).

105. County of Skamania v. State, 685 P.2d 576 (Wash. 1984).

judicial participation would have a different and more salubrious impact on sustainable management in the trust context than in the more familiar administrative setting.

Trust principles were successfully used to attack cross-resource subsidization in *Oklahoma Education Ass'n, Inc. v. Nigh.*[106] The state legislature had directed the trustee to lease lands for agricultural and grazing use at a maximum rent of three percent of their appraised value, well below fair market value. Further, the trustee was to make loans from the permanent fund for first farm and ranch mortgages at a legislatively directed maximum of 8.5 percent interest.[107] The beneficiary sued to keep trust assets from being transferred to farmers. The court found that "the use of trust fund assets for the purpose of subsidizing farmers and ranchers is contrary to the provisions of the Oklahoma Constitution, and to the provisions of the Oklahoma Enabling Act."[108]

The more interesting case in this context is *County of Skamania v. State.*[109] It permits a fairly direct comparison of management under trust principles and the multiple use mandate. Expecting future increases in the price of timber, purchasers in the late 1970s bid high prices for contracts on both Forest Service and Washington State school trust lands. When the recession of the early 1980s caused timber prices to decline precipitously, both the Federal Congress and the Washington State Legislature were pressured to allow timber purchasers to renege on their contracts.[110] Both the Congress and the Washington Legislature obliged. The state statute was enacted over the objections of the trustee Department of Natural Resources.[111] Skamania County, as a beneficiary of the trust, sued the state to overturn the legislation as a breach of the trust.[112] The State Supreme Court found for the County, requiring that the State contracts be fulfilled, holding that "no prudent trustee could conclude that the unilateral termination of these contracts was in the best interest of the trusts."[113] Thus, although Federal timber purchasers were not held to their contracts, state purchasers were.

---

106. Oklahoma Education Association v. Nigh, 642 P2d. 230, 235-236 (Okla. 1982). [Contrast with NRDC v. Hodel, CIV #S 86-054-8-EJ6 (1986)].

107. *Id.* at 235.

108. *Id.* at 236.

109. Skamania, 685 P.2d 576.

110. Federal Timber Contract Payment Modification Act of 1984, 16 U.S.C. §618 (1988). For a discussion of the effects of this act, and the general atmosphere regarding timber sales in the late 1970s and early 1980s, *see* J. Mattey, *The Timber Bubble That Burst: Government Policy and the Bailout of 1984* (1990).

111. Forest Products Industry Recovery Act of 1982, Wash. Rev. Code Ann. § 79.01.1331 - .1339 (West 1991) (expired Dec. 31, 1984). Section 6 of the Act allows for contract buyouts.

112. Skamania, 685 P2d. 576, 579.

113. *Id.* at 583.

In both of these cases, the beneficiaries were helped by the availability of the judicial forum to enforce trust principles. Indeed, it is easy to become so enthralled by undivided loyalty that one misses the fact that trust principles alter the nature of the judicial forum in which many school lands issues are heard: the courts approach trustees with considerably less deference than they view administrators. Traditional principles of administrative review favor the administrator; trust law, on the other hand, bends towards protecting the beneficiary and the trustor's intentions from the trustee.[114]

The administrator's advantage arises from the fact that the Court must respect agency discretion: it cannot substitute its judgment for the administrator's, and it must defer to the administrator's expertise.[115] These presumptions are not always dispositive, and they certainly do not define a zone where an administrator can depend on acting without close scrutiny from the judiciary, but they are the starting presumptions. The Court's willingness to take a "hard look" at administrative decisions ebbs and flows across time, place, and issue; even when it peaks, however, the Court must respect the agency, its expertise and its discretion.

The shoe is on the other foot in the case of a trustee. The court seeks specifically to assess whether the trustee has met the "prudent person" standard: did the trustee act with prudence in handling the trust assets? The effect of any apparent or alleged expertise on the part of the trustee is not to insulate his or her decision from scrutiny, but rather to require him or her to meet higher and higher standards of prudence.[116]

This slight tilt in the table does not mean that the beneficiary always "wins." Lessees have won many cases against school land administrators, particularly when challenging a decision not to grant the lessee a preference right to a lease renewal.[117] These cases are generally resolved within the parameters of normal administrative law principles. They afford no special protection either to beneficiaries or to trustees seeking to protect the trust. However, the potential exists for a different set of standards and outcomes: when the beneficiary rather than the lessee sues alleging a breach of trust, trust principles are clearly the basis for judicial analysis. This does give both the trust and the diligent trustee an extra measure of clout. Trust

---

114. This discussion applies, obviously, to issues in which the trustee is challenged as such. Typically, this means when the trustee is challenged by a beneficiary. When a lessee challenges an administrative decision, trust principles are frequently not even mentioned.

115. *Scenic Hudson Preservation Conf. v. FPC*, 453 F.2d 463 (2d Cir. 1971), *cert. denied*, 407 U.S. 926 (1972) is the classic statement of what gets weighed in this context.

116. A friend of the family or surviving spouse, for example, will pass muster with the Court if he or she evinces ordinary prudence in handling trust assets. A trustee who claims skill in handling resources, such as a bank, will be held to a higher standard of care. Bogert, *supra note 4, at § 541.*

117. *See*, Kerrigan v. Miller, 84 P.2d 724 (Wyo. 1938) and references cited therein.

principles are not always the factor; however, when they are invoked, they are enforceable. The special context provides the trust added protection from self-serving or politically or legislatively harassed administrators.

This explicit enforceability of the trust, and its peculiar context for judicial decisionmaking is not, we repeat, a panacea. However it clearly has potential for protecting long term resource commitments from politically pressured legislatures and managers and provides another tool in managing for sustainability.

Perpetuity. The three strains that we have already discussed, accountability, clarity, and enforceability, each contribute to what we characterize as perpetuity. But it is the perpetual nature of the trust doctrine as applied to school lands that we see as providing the essence of sustainability.

The original school land grants did not clearly establish a perpetual trust, or even a trust.[118] Indeed, early constitutions contemplated that the land be sold,[119] and early state programs frequently utilized the lands for such purposes as salaries for teachers.[120] It is clear that at the outset the grants were to get school systems started and that little thought was given to long term management.[121]

Perpetuity became a component of the school trust when the "permanent school funds" were established. The earliest school land grants, as the "old northwest" states between Ohio and Michigan joined the Union, were made to townships to support schools in each township. In 1849 during the Michigan accession, the State became the grant recipient: this was an explicit embrace of perpetuity because the state was obligated to set up a fund, known ever after as a "permanent school fund,"[122] and a formula for disbursing the receipts. Thereafter, states enacted increasingly elaborate provisions for supplementing the fund and for protecting it against loss and diversion.[123] Permanence in the school funds and in land management is

---

118. *See,* H. Taylor, *The Educational Significance of the Early Federal Land Ordinances* 123 (1922).

119. Many states did sell all or the vast majority of their lands. *See,* P. Gates, *History of Public Land Law Development* 236-39 (photo. reprint 1979) (1968).

120. Fairfax, *supra* note 1, at 807; F. Swift, *History of Public Permanent Common School Funds in the United States* 1795-1905, at 107 *passim,* 111 (1911).

121. Fairfax, *supra* note 1, at 806-07 and references therein.

122. *Id.* at 824. *supra* note 94, for a discussion of the technical names of what are ubqguitously referred to as permanent school funds.

123. Examples of common language are "shall be held by the said state in trust . . . . No mortgage or other encumbrance of the said lands . . . shall be valid in favor of any person . . . . Said lands shall not be sold or leased . . . except to the highest and best bidder at a public auction . . . . All lands, leaseholds, timber and other products of land before being offered shall be appraised at their true value, and no sale or other disposal thereof shall be made for a consideration less than the value so ascertained . . . ." New Mexico-Arizona Enabling Act, As Amended, § 10 (Act of June 20, 1910, 36 Stat. 557, ch. 310). *See also,* Fairfax,

a hallmark of the program and perhaps its most persuasive tie to current sustainability discussions.

The discussions of clarity, accountability and enforceability indicate that under the trust lands regime, perhaps you can sustain the production of dollars. One might agree that what we have achieved, up to this point, is implementation of the economic and continuing physical production notions of sustainability. Or, one might suggest that the trust provides opportunities to improve upon the sustained yield notions that dominate federal forestry.

But what about the broader definitions of sustainability? We see two bases for arguing that school lands management can be more inclusive than mere physical production or economic sustainability. Both are rooted in the trust principle that the trustee's duty to produce current income does not obviate the requirement to protect the trust corpus. In this discussion we will point to two crucial contexts in which the school lands commitment to perpetuity trumps the emphasis on current income generation and clearly provides for achieving broader notions of sustainability in trust land management programs.[124] First, ambiguity about future conditions transcends the requirement for current income and thus gives rise to conservative management styles.[125] Second, rising resource prices may surpass income and resultant dividends from the permanent fund.[126] Again, this leads to an emphasis on conservative management.

Numerous court decisions and state programs illustrate the first and simplest point. For example, in 1988, the Arizona Appellate court agreed with the land office that in some situations it was better to do nothing than to lease lands for one use that might be incompatible with future uses. Confronted with a grazing lessee's effort to tie up land in a rapidly developing area, the Court held that the Commissioners are required to make "best use" of lands.[127] They supported the Commissioner's conclusion that "keeping its options open may, under certain circumstances, be the 'best use' of the land."[128]

The Courts are clearly not always required to force trust notions on retrograde or embattled trustees. Trust principles guide the trustee. Trust managers rely on the duty to protect the corpus and maintain its productiv-

---

supra note 1, at 811-812, 820 *passim*.

124. Oklahoma Education Assoc. v. Nigh, 642 P.2d 230, 237-238 (Okla. 1982).

125. *See* the discussion of Havasu *infra* note 130 and accompanying text, and discussion of Washington's Olympic Peninsula experimental forest, *infra* note 138 and accompanying text.

126. *See* Souder, *supra* note 42, at 140-146.

127. Havasu Heights Ranch and Dev. Corp. v. State Land Dep't, 764 P2d. 37, 42 (Ariz. App. 1988).

128. *Id.*

ity in dealing with recalcitrant lessees, and quote it in defending their programs. In three additional disputes, the timber programs in Oregon and Washington, and New Mexico's grazing program, trustees have extended the trust mandate beyond simple current revenue maximization.

In Oregon, the Department of Forestry manages the timbered school trust lands through an agreement with the Department of State Lands,[129] as well as other timber lands where the counties are the beneficiaries.[130] Even though the production of revenues remains the primary objective, "consideration is given to the need to protect soils, streams, wildlife habitat, recreational opportunities, and other environmental values."[131] The state forests are used to provide physically mature, rather than economically mature, trees. Specifically, the department has decided to produce large, older trees suitable for sawlogs rather than younger ones used for pulp.[132] Intensive management practices are conducted to increase future yields.[133] There is even an explicit difference in the time horizon between the counties and the school lands: the Department of Forestry uses a 4.5 percent real discount rate to evaluate improvements on county trust lands, but a 3.5 percent rate for the school lands in the Elliot State Forest.[134]

Washington takes a more encompassing strategy to incorporate sustainability in their forest management plans. This may result from their comparatively larger land and revenues base, or from the higher level of state controversy over harvest practices.[135] When questions arose about the sustainability of biological, economic and social systems dependent upon old growth timber, the Department of Natural Resources (DNR), the trustee, established the Olympic Experimental State Forest to "be a 264,000-

---

129. Timber Management Contract, Oregon State Land Board, Oregon State Department of Forestry, August 2, 1982 (copy in files of authors).

130. Oregon State Forestry Department, Long Range Timber Management Plan, Willamette Region State Forests 3 (Report 3-0-2-210, September, 1989).

131. *Id.*

132. *Id.* at 12 (Oregon's decision to produce longer-rotation age sawlogs compared to short-rotation wood fiber).

133. L. Jones, *"State Forest Land" in Assessment of Oregon's Forests*, 1988, 52 (A Collection of Papers Published by the Oregon State Department of Forestry, 1988).

134. Willamette Region State Forests, *supra* note 130, at 11 (citing Level IV intensive management practices returning a 4.5 percent internal rate of return). Oregon State Forestry Department, Long Range Timber Management Plan, Southern Oregon Region State Forests 10 (Report 3-0-2-220, August, 1987) (citing discount rate used to calculate present net value of early harvests of common school lands).

135. Washington has about 1.8 million acres of commercial timber land (WDNR, 1984-1993 Forest Land Management Program 22 (Nov. 1983)), while Oregon has 735 thousand acres managed by the state (Jones, *supra* note 136, at 50). Most of Oregon's state-owned forest lands came to the state as a result of tax defaults after forest fires. In contrast, Washington, particularly on the Olympic Peninsula, has 200 thousand acres of old growth. As a result, the level of controversy over management of state trust lands timber in Washington is higher than in Oregon.

acre proving ground for theories and technology that hold promise for allowing sustainable timber production and important ecological values to exist side by side."[136] The experimental forest is not without immediate costs because timber harvests will be deferred on spotted owl habitat covering 63,000 acres of the Forest,[137] while another three thousand acres of old growth will be sold from the trust for preservation.[138]

The third example of perpetuity in the form of protecting the trust corpus is New Mexico's Range Stewardship Incentive Program.[139] This is a case where protection of the corpus, especially the productive capability of the lands to produce forage in the future, offsets the current income received from grazing fees. Grazing fees are determined by a formula that incorporates the value of comparable private grazing rates per head of cattle—using adjustments based on beef and producer prices—and then multiplies this fee by the carrying capacity of the land to determine the total rental. Under the stewardship program, participating lessees have the range condition on their allotments monitored every five years by outside specialists. Those lessees whose lands are in good or better condition, with a stable or an increasing trend, receive a 25 percent reduction in their fees.[140] The state land office expects that directly connecting land condition to rental fees will provide incentives for good management.[141]

Initiatives for protecting trust resources—known and potential—in relation to generating current revenues have not all been at the discretion of the trustee; indeed, there is a significant line of case law that obligates the trustee to consider it. The issue of whether the state has to receive maximum present value compared to best use in the long term value was litigated in Havasu Heights Ranch and Dev. Corp. v. State Land Dep't.[142]

---

136. S. Crickenberger, *"Management Philosophy Quickly Puts Winning Techniques to Work."* 33 Totem 16 (Winter, 1991).

137. The cost of this deferral in terms of timber volumes is estimated to be 1,000 board-feet per year per acre, or 63 million board feet for the entire area. Pat McElroy, Deputy Supervisor, Washington Department of Natural Resources, telephone conversation, November 18, 1992.

138. Note that in the 3,000 acres, the trust is receiving fair market value for the lands and timber. Money from the real estate portion of the sale will be use to purchase replacement land, while the revenues from the timber will go to the beneficiaries. C. Partridge, *Breakthrough Concept Offers Creative Alternative, New Optimism*, 33 Totem 6 (Winter, 1991).

139. New Mexico State Land Office, Range Stewardship Incentive Program (document on file with the authors, n.d.) and New Mexico State Land Office, State Land Office Rule 8, 7-8, 19 (Draft #4, June 22, 1992).

140. The grazing fee system used for this program has not had a court test.

141. Interestingly, this feature has been incorporated into the BLM's new proposals for federal grazing fees. *'Incentive-Based' Grazing Fees Proposed*, Albuquerque Journal, October 30, 1992.

142. Havasu Heights Ranch and Dev. Corp. v. State Land Dep't, 764 P.2d 37 (Ariz. App. 1988).

As noted above, Court held there that state could withhold land from leasing if it believed that the future use value would be greater if left undeveloped, i.e. unleased. The lessee would not have a compensatory interest in the lease and improvements that would lessen the ultimate value of the property to the trust.[143]

Another prospect for protecting the corpus of the trust is to leave the minerals in the ground and the trees on the stump.[144] Instead of harvesting the resource, and then placing the revenues in the permanent fund, the resource is "banked" where it exists.[145] This strategy can be justified where the value of the commodity produced from the land is increasing at a faster rate than the compounded interest in the permanent fund. This has happened over the past 25 years with oil and gas, coal, and high-quality timber.[146]

Perpetuity is maintained by the provision for permanent funds, where revenues from non-renewable resources and land sales income are placed. Problems exist, however, with the permanent funds because of restrictive investment and inflation effects. States are working to overcome this: for example, Montana distributes only 95 percent of renewable revenues to beneficiaries, with 5 percent going into the permanent fund; and distributes only 95 percent of the dividends of the permanent fund and retaining the other 5 percent.[147] This off-sets inflation of up to 5 percent to maintain the "purchasing power" of the permanent fund. Other states are working towards this.[148] One way is through equity investments where states receive both dividends (current income) while having growth and offsetting inflation. New Mexico allows up to 20 percent of its permanent fund to be invested in stocks.[149]

We see a direct relationship in the trust lands case between perpetual revenue production and the perpetual capacity to produce them. We have seen here that even in the trust lands case, perpetuity can mean more than just revenue production. By protecting the resources against special interest

---

143. *Id.* at 41, 43.

144. For an expanded discussion, *see* Souder, *supra* note 42, at 136 *passim.*

145. This assumes that the costs and risks of protecting the resources in place are factored into the decision. Note also that in the case of oil and gas, state law may require "unitization" if a percentage (it varies by state) of lease holders desire to produce in a field.

146. Souder, *supra* note 42, at 142-147.

147. Montana Constitution, Art. X, § 5.

148. Interview with Tim Kingstad, Commissioner, N. D. St. Land Dep't., Bismarck, N.D., Nov. 12, 1991.

149. *See* State Investment Council, Statement of Objectives for the State Permanent Fund, Rule 85-3 (Sept. 30, 1985). Historically, investments in stocks have been problematical for the states. Cf. discussion in F. Swift, *A History of Public Permanent Common School Funds in the United States,* 1795-1905, 132, 149-53 (1911). *See* cites therein under index entry "Securities, poor, unsafe, worthless."

groups—whether they be lessees or legislatures—the ultimate focus is upon protecting the lands themselves. The examples provided here show that this can be done by the trustees acting on their own, or will happen as a result of court decisions. But whichever occurs, the focus of the trust mandate remains on protecting the corpus in the long-term, enabling it to remain a sustainable source of benefits.

IV. What This Analysis Tells Us About the Usefulness of the Trust Responsibility in Sustained Public Resource Management

The state school lands experience contributes to discussion of sustainability in three ways. First, the school trust lands underscore the importance of institutional design. Clarity in objectives, accountability, and the requirement for undivided loyalty to the beneficiary of the trust establish clear priorities for management decisions. Second, the history of school lands controversies suggest that the details of enforcement mechanisms matter. Trust land disputes demonstrate that long term commitments are vulnerable to machinations of both legislatures and managers. However, the peculiar role of the beneficiary and the peculiar context in which trustee's actions are reviewed in the school lands disputes provide important examples of enforcement that emphasizes substance rather than procedural oversight. Finally, the trust's insistence on protection of the productive capabilities, in concert with the perpetual nature of the trust responsibility, provides a working concept of sustainable resource management. Even in a context where financial returns are defined as the primary goal, the school lands experience provides important insight into achieving perpetual commitment to sustainable resource management.

Institutional structure matters. The role of the beneficiary in providing clarity about priorities is crucial to sustainable resource management under the trust. The structure of the trust mandate requires the states to think clearly about who is the beneficiary, and what is the effect of their actions on that beneficiary. The clarity of the trustee's mandate—undivided loyalty to a specified beneficiary—does not entirely remove the self-interest of the manager from decision making. We see clear examples, specifically in the allocation of personnel, where the beneficiary is subsidizing the manager. However the clarity about goals makes meaningful accountability conceivable.

When combined with the reporting and disclosure requirements of the trust, the clarity also makes it possible to monitor trust land management to a degree not possible in traditional public resource management. It is possible to trace the effects of management actions and—within fairly limited constraints—to determine if actions serve the stated goals. The most definitive finding from our economic analysis is that the procedures used to fund the trust lands managing agency are important. This is true

both for the efficient allocation of personnel and for the amount of effort expended managing trust resources.[150] Surely the trustee must have sufficient power over its budget so that it can respond to changing management needs. At the same time, the agency must be under sufficient accountability—representing beneficiary interests—to control unwarranted expenditures. It is also important to be able to dig deep into how an agency functions—at individual staff and lease level—to determine whether goals and objectives are being met.[151] State school land management is not a perfect model of appropriate institutional design, or for that matter, of trust management. It does, however, demonstrate that accountability is possible once the goals are clear.

Enforcement mechanisms also matter. The judicial enforcement that is built into the trust concept is different from thoseprovide available to critics of administrative agencies. First, trust law provides the beneficiary with important, well-defined tools for compelling attention to trust resource allocation. The *Skamania* case cited is not atypical: undivided loyalty means something real, and it is sufficient to prevent raids on the trust even when perpetrated by the State Legislature. Second, the courts are not obligated to defer to agency expertise or to their interpretation of their own mandate.

One might object that all this is interesting, but that it is tied to revenue production, which is not the goal of most sustainability advocates. Although the Land Commission's traditional emphasis on revenues has not endeared the school land traditions to environmentalists,[152] we argue that the reticence ought to be carefully reevaluated. Even where the stated goal of the trust is to maximize economic returns, reliance on present net worth revenue maximization is not necessarily in the best interest of the beneficiary, particularly if externalities resulting from such actions adversely affect them.

Further, other components of the trust—its emphasis on perpetuity and on the preservation of the corpus of the trust—lead to management that is certainly more conservative than some have feared, and plausibly more conservative than public resource management which is not so constrained and directed. Part of this conservatism arises from the barriers noted above that the trust presents to managers who would manage the

---

150. *See* Souder, *supra* note 42, at 52-54 for the effects of expenditures on trust responsibilities.

151. This is based on interview with Kevin Carter, Unit Manager, Trust and Asset Management, Div. of State Lands & Forestry in Salt Lake City, UT (July 25, 1991); interview with Mike Brand, Surface Leasing Manager, N.D. Surface Leasing Manager in Bismarck N.D. (Nov. 12, 1991); and J. Souder, Address to N.M. State Land Office staff (Feb. 4, 1992).

152. *See* W. Patric, Trust Land Administration in the Western States, passim (Public Lands Institute Report, 1981) for a comparison of federal and state trust land provisions for access and multiple use.

school lands for the benefit of the trustee. The barriers are not perfect. We have seen, for example, that analytically it is difficult to distinguish self-serving over investment from what might be characterized as legitimate investment for long term management. However, we do not see in the school lands the massive cross-subsidies between resources, for example the trading timber for roads, that characterize federal lands management.[153] Management actions must be justified by tying costs and gains to the beneficiary.

If we have been convincing that school trust land management is worth considering, what is the next step? It would be fruitful to ponder what the consequences for different stakeholders would be some specific public lands were transformed into such a trust,[154] or if specific disputes were approached with the school lands experience in mind.[155] We also urge advocates of sustainability to identify a beneficiary and other particulars of a hypothetical trust instrument that would achieve sustainable resource management in particular settings. Is it possible to design a

---

153. This issue is specifically addressed under the topic "below-cost timber sales." *See* Wolf, *supra* note 31, at 1063, 1068-71; and Below-Cost Timber Sales Task Force Report, *supra* note 90, *passim*. Those cross-subsidies that do occur—for example the investment of permanent funds in first farm mortgages—are explicit in terms of the trust document. *See* Oklahoma Education Assoc. v. Nigh, 642 P.2d 230, 237, 243 (Okla. 1982) and our discussion in Fairfax, *supra* note 1, at 865, 868-73.

154. We are not advocating a transformation of the National Forests or BLM lands into a school lands type trust. This possibility has been appraised in the OTA Report, *supra* note 26, at 48. We are arguing that our lexicon for discussing sustainability is enhanced substantially by looking beyond the Forest Service model to other traditions of land management.

155. Some movement is occurring in this direction. Perhaps the best example is the Platte River Whooping Crane Maintenance Trust in Grand Island, NE. This $7.5 million trust was established in 1978 as part of mitigation for the Grayrocks Dam and Reservoir in Wyoming, a unit of the Missouri Basin Power Project. C. Bowen, *Grayrocks – A New Approach to Mitigation, The Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats* (1979). The trust is established similar to the examples cited in our discussion, i.e., it has a trust instrument, trustees, and a corpus consisting originally of the $7.5 million dollars and now including lands and easements subsequently purchased. Platte River Whooping Crane Maintenance Trust, Inc. "Amended Trust Declaration." November 20, 1981. Since its establishment, the trust has protected over 10,000 acres of crane habitat through purchase and easements along the Big Bend reach of the Platte River, an active research program, and public education through its Summer Orientation About Rivers (SOAR) program for school children and a publication, The Braided River. Platte River Whooping Crane Maintenance Trust, Inc. "The Platte River Whooping Crane Critical Habitat Maintenance Trust: A Ten Year Report" (1989).

Free-market economists have also focused on trusts as a mechanism to lessen the effects of environmental interest groups in controlling federal lands. *See* J. Baden, *Saving Wilderness and Biodiversity Through Trust Funds*, 12 Forest Watch 22 (June, 1922) as an example. While we do not necessarily agree with his result, we are certainly in accord that the topic is worth examination.

trust instrument that would achieve the an advocate's goals? If so, what process could be used to define the trust beneficiary, and construct management institutions that would ensure that the aims of the trust were fulfilled? These trust designs might not turn out to be implementable proposals, but the analysis would be clarifying.

Those who advocate sustainability must move beyond issues of definitions towards how to implement and institutionalize it. They will find in the school lands an instructive illustration of twenty-two different approaches, and a long standing body of case law and experience in monitoring and enforcing a commitment to perpetual management of resources that is very much worth their consideration.