

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1997

Meaningful reform of the national forests: Will a trust paradigm provide the balance of environmental quality and resource production needed for sustainable development?

Charles E. Hansberry
The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Let us know how access to this document benefits you.

Recommended Citation

Hansberry, Charles E., "Meaningful reform of the national forests: Will a trust paradigm provide the balance of environmental quality and resource production needed for sustainable development?" (1997). *Graduate Student Theses, Dissertations, & Professional Papers*. 4708.
<https://scholarworks.umt.edu/etd/4708>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

MEANINGFUL REFORM OF THE NATIONAL FORESTS: WILL A TRUST
PARADIGM PROVIDE THE BALANCE OF ENVIRONMENTAL QUALITY AND
RESOURCE PRODUCTION NEEDED FOR SUSTAINABLE DEVELOPMENT?

by:

Charles E. Hansberry

B.A. Wake Forest University, 1991

presented in fulfillment of the requirements

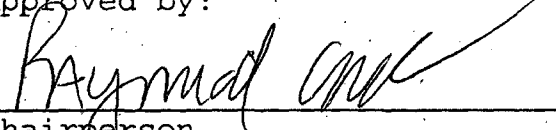
for the degree of

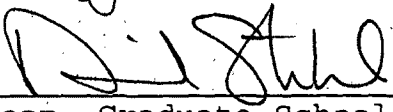
Master of Science

The University of Montana

1997

Approved by:


Chairperson


Dean, Graduate School

5-15-97
Date

UMI Number: EP40172

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP40172

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

JFE 6-27-97

Hansberry, Charles E., M.S., J.D. (May 1997).
Environmental Studies/ Law

MEANINGFUL REFORM OF THE NATIONAL FORESTS: WILL A TRUST
PARADIGM PROVIDE THE BALANCE OF ENVIRONMENTAL QUALITY AND
RESOURCE PRODUCTION NEEDED FOR SUSTAINABLE DEVELOPMENT?

Chairman: Raymond Cross *RC*

The current problems with the Forest Service are well documented. Due to its roots in the Progressive Era, the Forest Service has not evolved into an agency capable of balancing the competing needs of public forest users. Instead, overcentralization and budget structure have resulted in a top-down management approach that loses money and perpetuates losses of biodiversity. These problems with the Forest Service have evolved for almost a century and are too ingrained to be addressed by any piecemeal reform. Instead, a large scale reform of the entire structure needs to be initiated and a new paradigm for public forest management instituted.

Based on policies in the school trust lands context, a trust paradigm would have many advantages for national forest management. Trusts provide clear mandates for the trustee, instead of confusing multiple use mandates. Most of the current economic disincentives would be eliminated under a trust paradigm. The competing duties of making the trust productive and preserving the corpus of the trust force trustees to balance short term economic needs with long term preservation.

The "National Forest Trust Act", as proposed and modified in this paper, can provide a worthwhile departure into examining how a national forest trust would be created. Trust language mandates that lands be managed in accordance with accepted trust principles while implementing ecosystem management. This management structure would provide a clean break with ingrained multiple use, sustained yield practices and usher in a new era of national forest management.

Table of Contents

I.	Introduction	1
II.	Failures in U.S. Forest Service Management	4
	A. The Inability of Progressive Era Science to Adjust to Realities of the Modern World	5
	B. The Failure of Centralized Authority	10
	C. The Failure of the Forest Service to Face Economic Realities	14
	D. Conclusion- Failures of the Forest Service	23
III.	State Trust Management	24
	A. Trust Principles in the Context of Public Land Management	24
	B. How the Trust has been Treated by the Courts ..	26
	C. Possible Benefits of Trust Management over Current Federal Management	35
IV.	Creating a Federal Forest Trust	42
	A. Requirements of a Trust	42
	B. The National Forest Trust Act	47
IV.	Conclusion	56
	APPENDIX I: National Forest Trust Act	59

I. Introduction

Like a predictable lunar cycle, the debate over how to manage our public lands has once again entered the mainstream. Thanks to commentators such as Jon Souder and Sally Fairfax, a new management paradigm has also been thrown into the debate: the trust. As a model of trust management, the state school trust lands are being examined as an alternative to large federal agency management. This is particularly surprising given the unfavorable reputation that the state has so far developed in the public lands context.¹

Shifts in traditional interest group alliances may provide some answers as to why the conventional wisdom of states as land managers seems to be changing. For most of this century, debates over how to manage public land was dominated by two factions: multiple use conservationists vs. wilderness preservationists.² However, as we enter into

¹ Sally K. Fairfax, *Thinking the Unthinkable: States as Public Land Managers*, 3 Hastings W.-N.W. J. Envtl L. & Pol'y 249, 254-256 (1996). Professor Fairfax identifies cycles of state primacy that occurred within the context of federal land management. Now that we are in the era of land retention, state managers are vilified by environmentalists as being anti-retention and dishonestly admired by sagebrush rebels, despite the fact that they have the most to lose from transferring federal land to the states. *Id.* at 255-256.

² This conflict is basically an extension of the Gifford Pinchot vs. John Muir disputes of the early 20th century.

the twentieth century, the solidarity of either side is beginning to break down as individual interest groups are seeing new allies.³ One commentator identifies five factors as an explanation for the sudden focus on state land management as a model for federal land management: the rise of grassroots environmentalism, the introduction of natural resource economics, landscape level thinking, the end of Progressive Era science and the observation that the land management problems of the west are also being experienced in the east.⁴ While the implications of these shifting alliances is beyond the scope of this paper, expanding the tools of the debate to include trusts will play a positive role in examining reform of the current system.

The current literature examining state land management focuses on school trust lands as a comparative model for possible federal land management.⁵ These commentators have

³ Of particular interest is the strained similarities between deep ecologists and libertarian economists. Robert Nelson, *Government as Theater: Towards a New Paradigm for the Public Lands*, 65 U. Colo. L. Rev. 335, 355-356 (1994). Another, example is the local management alternative for reintroduction of grizzly bears to the Bitterroot ecosystem that is co-sponsored by the Inter-Mountain Forestry Products Assoc., National Wildlife Federation, and Defenders of Wildlife. *Bear With It: Grizzly Reintroduction Plan Worth A Try*, *Columbus Dispatch*, January 17, 1997, at 8A.

⁴ Fairfax, *supra* note 1, at 256-257.

⁵ See generally Sally K. Fairfax, Jon A. Souder & Greta Goldenman, *The School Trust Lands: a Fresh Look at Conventional Wisdom*, 22 *Envtl. L.* 797 (1992); Fairfax, *supra* note 1.

come to the conclusion that, while state trust management could be a possible departure for reform, trust management is not a panacea for all the political inefficiencies of public land management.⁶ It is doubtful that any of these commentators would suggest a wholesale shift of land ownership from federal to state governments. Indeed, the political realities would make such an idea virtually impossible.⁷

This paper takes the next step in the debate and examines how trust management of public lands would possibly be organized and what benefits of such a management scenario would achieve. Because the vast majority of western public land is held by the Forest Service, this paper will examine trust management in relation to that agency.⁸ This will serve as both a narrowing feature and a commonality for states in the northwest.

This paper is divided into three sections. The first

⁶ Fairfax, *supra* note 1, at 262-263.

⁷ Two noted commentators, Jack Ward Thomas and Charles Wilkinson, capture popular opinion when they flatly deny a large scale devolution of public ownership as a viable solution. Charles Wilkinson, *The Public Lands and the Public Heritage, Different Drummer*, Fall 1995, at 9; Jack Ward Thomas, *The View From the Top: Some Comments from the Chief*, 17 Pub. Land & Resources L. Rev. 9, 21-22 (1996).

⁸ While some of the problems inherent in the Forest Service can not be translated to other land management agencies, such as the Bureau of Land Management, it is probable that many of the benefits of forest trust management could be imputed to those lands as well. Indeed, if successful ecosystem management is to be achieved, agency boundaries need to be dissolved.

section will examine current failures of the Forest Service. The first step for change is identifying the harm caused by the status quo. In this section, I argue that the problems found within the Forest Service are both imbedded and intertwined. Therefore, only a large scale paradigmatic shift will bring about fruitful reform.

In the second section, I examine state school trust lands. I briefly analyze the competing trust duties of state trust managers and how the courts have interpreted these duties. Trust land management is slowly evolving to account for preservation goals as well as current income production. While few environmentalists regard state trust lands as a model of ecological health, the organizational structure of that trust could provide tangible benefits for future land management.

In the third section, I examine a trust bill proposed by the Thoreau Institute, and provide a model trust agreement. My intent is to identify some of the issues that must be resolved if a trust management scheme were to be offered as a paradigm for public land management.

II. Failures in U.S. Forest Service Management

Agency bashing is a time honored pastime in the American west. Because of its primacy in land stewardship in the northwest, the Forest Service is then perhaps the most reviled agency. Some commentators argue that, despite

its shortcomings, the Forest Service is actually a very capable manager.⁹

However mediocrity is not a valued trait in American society. The effectiveness of the Forest Service must be debated so that new and better methods of land management may be investigated. This is especially true now that the Service is seeking to implement cutting-edge science, such as ecosystem management, and account for past policies that have consistently lost money for the treasury.

There are three core failures of modern forest management: Progressive Era science, overcentralization, and economically inefficient policies. These failures are interwoven and closely related to one another. One shortcoming can not be individually corrected without addressing them all. Because of their interconnectedness, piecemeal reform of the Forest Service is impracticable. A fundamental shift in the management paradigm must be pursued.

A. The Inability of Progressive Era Science to Adjust to Realities of the Modern World

The Forest Service was created during the Progressive Era in American society.¹⁰ Forest Management during the Progressive Era was characterized by an unwavering faith in science to provide answers to the complex and growing

⁹ Wilkinson, *supra* note 7, at 10.

¹⁰ Robert H. Nelson, *The Failure of Scientific Management*, Different Drummer, Fall 1995 at 13.

demands of American society.¹¹ Scientific resource management would ensure a constant supply of commodities, thereby providing the greatest good for the greatest number of Americans.

However, grounding modern forest management in ideas that are over 100 years old presents several difficulties for reforming today's Forest Service. First, these ideas are so ingrained that any large scale changes are unlikely without a sweeping paradigmatic shift. Second, the unqualified belief in science to provide answers ignores the realities of a democratic society. Third, the mechanisms necessary to implement Progressive Era science, primarily command and control regulation, have proven to be highly inefficient methods of public land management.

Gifford Pinchot and his successors effectively insulated the Forest Service from the forces that transformed other government agencies.¹² This enabled the progressive paradigm to take root and it drive Forest Service decisions today. Most foresters in the Service are

¹¹ Nelson, *supra* note 3, at 344. The historical context of the Progressive Era was set against a backdrop of increasing industrialization, scientific discovery and the turning from divine guidance to secular pursuits. *Id.*

¹² This insulation created what some called an "esprit de corps" or religious zeal" among Forest Service employees in fulfilling their mission. Nelson *supra* note 10, at 13. It was not until early 1970 when events such as the Bolle report and the Monongahela decision did the Forest Service come under widespread public scrutiny for its management practices. Charles F. Wilkinson, *Crossing the Next Meridian* 140-144 (1992).

career employees that accept the beliefs and culture of their profession.¹³

The culture of scientific management tends to evolve an agency that is inflexible and unaccepting of change.¹⁴ Forest Service management has evolved into a near theology: the "religion of public land management."¹⁵ Instead of adapting to new information and challenges, the Forest Service has stagnated under a distrust of outsiders from other agencies or the private sector.¹⁶ The current attitude of the Service can best be described as embattled, creating a more introverted agency in an era where extroversion is necessary for wise and integrated management.

Gifford Pinchot was a firm believer that politics and scientific management did not mix.¹⁷ Ultimately, scientific management necessitates the end of political input into policy decisions.¹⁸ If resources are to be managed scientifically by elite managers, the Forest Service cannot afford to have public opinion second guessing its

¹³ Marion Clawson, *The Economics of National Forest Management* 102 (1976).

¹⁴ *Id.* at 103.

¹⁵ Nelson, *supra* note 3, at 353.

¹⁶ *Id.* at 354; Clawson, *supra* note 13, at 103.

¹⁷ Nelson, *supra* note 10, at 13.

¹⁸ Nelson, *supra* note 3, at 345.

decisions. However, this belief ignores a basic tenet of our democratic society: competing values and interests.¹⁹

After World War II, the number and power of interest groups rose and demanded a voice in the decision process. With the Monongahela decision that declared clearcutting illegal, interest groups successfully questioned the Forest Service's science, forever eliminating the perceived infallibility of Service discretion.²⁰ Furthermore, the legislation passed during the late 1960's and into the 1970's, primarily the National Environmental Policy Act (NEPA)²¹ and the National Forest Management Act (NFMA)²², gave interest groups a stronger voice in determining the outcome of timber management.

While other agencies have come to grips with the now politically charged atmosphere of land management, the Forest Service has not changed the progressive paradigm.²³ Instead it has cobbled together a mixed bag of progressive science and democratic participation that is mostly

¹⁹ See James L. Huffman, *Markets, Regulations, and Environmental Protection*, 55 Mont. L. Rev. 425, 428 (1994) (arguing that public decisions are, by definition, political decisions and scientists do not have a special capacity to chose among competing values).

²⁰ Nelson, *supra* note 10, at 13.

²¹ 43 U.S.C.A. §4321 et seq.

²² 16 U.S.C.A. §1600 et seq.

²³ Nelson, *supra* note 3, at 347-48.

procedural and unacceptable to most constituents.²⁴

The core standard of interest group government is simply that a satisfactory political compromise can be worked out among all the players. At least in the extreme forms of this political philosophy, the substantive result is not really of concern at all. Other than the fact that an agreement is reached, there is no further objective basis for judging the final outcome because in interest-group liberalism, all the attention is focused on the procedure followed.²⁵

An agency attitude has developed that equates procedural success with substantive success.²⁶ The final outcome has been an agency that is responsive to the interest group that amasses the most power and learns to "play the game" most effectively.²⁷

Utilizing science as a management tool is one thing; having it dictate the ultimate decision is an entirely different matter. If humans were motivated solely by logical science, then scientific management would be an acceptable goal. Instead, they are motivated by an array of factors: monetary, emotional, ethical and biological. Distrust of these external motivators has lead most public land managers to utilize one tool in achieving the desired

²⁴ Id. at 348.

²⁵ Id.

²⁶ One commentator argues that the primary challenge behind implementing ecosystem management is maintaining substantive integrity without diluting it to a "mere procedural device." Robert B. Keiter, *Conservation Biology and the Law: Assessing the Challenges Ahead*, 69 Chi-Kent L. Rev. 911, 931 (1994).

²⁷ Nelson, *supra* note 11, at 348.

result: command and control regulation.²⁸

In economic terms, the impetus behind command and control regulation is the failure of a market solution. Market failures occur for many reasons: the existence of negative externalities²⁹, the free rider problem³⁰ and/or the lack of information.³¹ Government regulation is an attempt to internalize these problems and achieve a superior result. However, as the level of regulation increases, so does the level of bureaucratic control and the resulting inefficiencies that arise from it.³²

B. The Failure of Centralized Authority

Progressive Era science was a centralizing vision.³³ It was believed that if science could solve the resource allocation dilemma, then that answer should be applied uniformly across the country. Furthermore, only the federal

²⁸ Huffman, *supra* note 19, at 426. On a more theoretical scale, the use of command and control regulation is also rooted in a distrust of capitalism (the incentive for short term profit) that was a corollary to the Progressive Era. Id.

²⁹ An externality is the uncompensated cost born by a third party that was not a market participant. Id. at 427; Douglas B. Rideout and Hayley Hessel, *Principles of Forest and Environmental Economics* 7.9. (1995).

³⁰ Huffman, *supra* note 19, at 430.

³¹ Rideout and Hessel, *supra* note 29, at 7.10.

³² Id. at 7.11-7.12.

³³ Nelson, *supra* note 10, at 13.

government was able to gather the resources and the expertise necessary to achieve a nationwide application.³⁴ Today, with the myriad of comprehensive planning requirements, the Forest Service is only becoming more centralized.³⁵ This is ironic, given the recent trend toward decentralization among other industries and government functions.³⁶ Besides being a very inefficient and costly structure,³⁷ top down management can create two significant problems for the Forest Service: interest group polarization and the inability to implement ecosystem management.

When public land decisions originate within a central authority in Washington, it only tends to exacerbate the already growing problem of interest group influence. Because the number of interest groups that compete for forest resources are too numerous for any one to dominate, some commentators suggest that actual "agency capture" is impossible.³⁸ Instead, these commentators explain that the Forest Service utilizes a "multiple clientism" approach, whereby they pit constituents against one another in order

³⁴ Id.

³⁵ Id. at 14.

Id. at 13.

³⁷ Rideout and Hesselh, *supra* note 29, at 7.12.

³⁸ Randall O'Toole, *Reforming the Forest Service* 109 (1988).

to achieve the desired political result.³⁹

This adversarial system of interest group politics thrives in a centralized authority where victory is achieved by the group that has developed the best political machine. Eventually, polarization over public land issues results.⁴⁰

Since the scale of decision is national, the individual members of the interest groups do not have to account for the on-the-ground impacts to their neighbor.

While the Forest Service is facing the problem of interest group polarization today, they will inevitably face another crisis in the future: how to implement adequate principles of ecosystem management. Depending on its interpretation, ecosystem management can either be a powerful new tool in public land management or a re-hashed attempt at Progressive Era science.⁴¹ In contrast with Progressive Era scientific management, ecosystem management recognizes that scientists do not have complete knowledge of the interrelated processes that make ecosystems work.⁴²

³⁹ Id.

⁴⁰ Randall O'Toole, Address at the 18th Annual Public Land Law Conference, *Managing America's Public Lands: Proposals for the Future* (October 24, 1996) (conference notes available from Public Land & Resources Law Review).

⁴¹ Nelson, *supra* note 3, at 359.

⁴² Deborah M. Brosnan, *Ecosystem Management: An Ecological Perspective for Environmental Lawyers*, 4 U. Balt. J. Envtl. L. 135, 147-148 (1994); Robert B. Keiter, *Beyond the Boundary Line: Constructing a Law of Ecosystem Management*, 65 U. Colo. L. Rev. 293, 322 (1994).

Therefore, no one scientific answer exists. However, the tension between the political arena and scientific management is an old issue that will reemerge in implementing ecosystem management.⁴³

The difference between achieving on-the-ground changes with ecosystem management or taking another ride on the merry-go-round of Progressive Era scientific management may lie in the decentralization of public land management. Principles of ecosystem management support an integrated, organized approach to conservation and land management.⁴⁴ However, while this approach may seem to favor centralized, national management, theorists dismiss implementing ecosystem management through top down management. A primary concept of ecosystem management is that to manage at the ecosystem level managers must adopt a spatial and temporal scale that correlates to ecological processes.⁴⁵

The broad aims of conservation biology are to support the functioning of a world composed of semi-autonomous, self-organizing subsystems, which interact within a nested hierarchy of larger systems. By logical extension, an ecosystem management approach not only tolerates but endorses a diverse array of semi-autonomous human

⁴³ See Keiter, *supra* note 42 at 324 (arguing that, while scientific data is valuable in defining policy choices, there is no divorcing the underlying social values from resource allocations).

⁴⁴ Lee P. Breckenridge, *Reweaving the Landscape: The Institutional Challenges of Ecosystem Management for Lands in Private Ownership*, 19 Vermont L. Rev. 363, 402 (1995).

⁴⁵ Keiter, *supra* note 26, at 929

organizations--if they operate adaptively within the parameters of larger ecological systems. In a world where centralized government programs offer no easy solutions, the search for institutional arrangements has turned from unilateral, monolithic answers to a consideration of whether smaller-scale organizations might, through a network of voluntary agreements, coordinate and influence each others' activities "from the bottom up," instead of awaiting "top-down" national prescriptions.⁴⁶

Management should be focused at a level that better equates individual ecosystems with administrative boundaries.⁴⁷

Furthermore, for land managers to implement such a politically charged management paradigm, it will have to be sold to local constituents that will bear the costs of such an implementation. Contrary to some observations, local people have much to contribute to the management of public lands.

Ecosystem management will only occur if the decision process is decentralized and not handed down from an unknown bureaucrat in Washington.

C. The Failure of the Forest Service to Face Economic Realities

Shrouded in science, the Forest Service has long argued that they are immune from the expectations that govern private sectors, namely to turn a profit.⁴⁸ As a

⁴⁶ Lee P. Breckenridge, *supra* note 44, at 402.

⁴⁷ Nelson, *supra* note 3, at 361.

⁴⁸ O'Toole, *supra* note 38, at 38-39.

benevolent government entity, the Forest Service's role is to allocate multiple uses of the public forests in accord with utilitarian principles. For example, the Forest Service frequently cites their commitment to maintaining community stability as an excuse for scheduling timber sales that lose money for the federal treasury.⁴⁹ However, timber is not an entitlement; it is a commodity and the Forest Service's practices must be scrutinized as a business would be.⁵⁰ This inefficient result is made even more maddening when environmental degradation occurs concurrently with a net drain to the federal treasury. Ironically, this result has made unlikely allies of two very different interest groups: environmentalists and economists.⁵¹

The most often cited example of economic inefficiency within the Forest Service is below-cost timber sales. Recently, the Wilderness Society charged that 1995 timber

⁴⁹ William E. Shands and Thomas Waddell, *Below Cost Timber Sales in the Broad Context of National Forest Management* 39 (1988).

⁵⁰ See generally O'Toole, *supra* note '38, at 112. To further illustrate the lack of sound business practices within the Forest Service, Mr. O'Toole provides an analogy where General Motors applies the same accounting principles to the automobile industry that the Forest Service applies to timber. Id. at 26-27. The result of such an application would be the sales of profitable models subsidizing the sales of unprofitable models. Id. So long as capital costs were not included, a net profit would be realized on paper. Id.

⁵¹ Nelson, *supra* note 3, at 355.

sales in the United States amounted to a \$398 million loss.⁵² However, the timber industry hotly contests the results of such studies.⁵³ This inflammatory rhetoric on both sides only serves to cloud the issue and removes below-cost timber sales as a point of reform for the Forest Service.⁵⁴

So the first question is: are below-cost timber sales actually occurring? Most economic studies⁵⁵ of timber sales used a cash flow analysis to determine whether the costs of timber sales were exceeding the receipts for a single year.⁵⁶ Generally, these studies have found that, in the aggregate, receipts from timber sales on national

⁵² Groups Allege Logging's at a Loss, *Missoulian*, February 6, 1997, at A3.

⁵³ Id.

⁵⁴ In the cited article above, the Wilderness Society accuses industry of picking taxpayer's pockets while the American Forest & Paper Association accuses the Wilderness Society of not doing a credible analysis. Id.

⁵⁵ Since 1980, comprehensive studies have been conducted by the Natural Resources Defense Council, the Library of Congress, the Wilderness Society, Resources for the Future, and the General Accounting Office. O'Toole, *supra* note 38, at 28-37.

⁵⁶ Shands and Waddell, *supra* note 49, at 19. There are some inherent problems with analyzing cash flow for timber sales because not all receipts are received in a single year and some costs, such as roads, need to be amortized over the life of the road. Id. Additionally, cash flow accounting does not account for the non-market costs such as aesthetics. Id.

forests exceed the costs.⁵⁷ However, when sales are broken down by individual region or individual timber sale, it is apparent that sales of high valued old growth timber are subsidizing the sales of timber with marginal value.⁵⁸ The General Accounting Office recently found, using an accounting method that they helped to design with the Forest Service, that for fiscal years 1992-1994, timber sale costs exceeded receipts across the country in every region.⁵⁹

What causes below-cost timber sales? Different commentators have pointed to many problems inherent in the Forest Service as an explanation. It is probable that the real reason for below cost timber sales can be explained by a combination of factors.

One of the primary causes identified for below cost

⁵⁷ Id.

⁵⁸ Id. at 19-20. However, even this may no longer be the case as sales of old growth timber in the northwest have been significantly curtailed for the protection of spotted owl habitat. See GAO, *Forest Service: Distribution of Timber Sales Receipts Fiscal Years 1992-1994*, RCED-95-237FS (1995) reprinted in Different Drummer, Fall 1995, at 43 (showing a net loss on the federal treasury for regions that encompass the Pacific Northwest).

⁵⁹ Id. The GAO included as costs payments to associated funds, such as the Knutsen-Vandenburg fund, and 25% payments to the states that are required by law. Id. at 40-42. Many supporters could argue that these payments serve as a legitimate function of the Forest Service mandate and serve many functions as community stability that are not valued. Shands and Waddell, *supra* note 49, at 22. In any event, the net effect on the treasury of the U.S. is negative.

timber sales has been the process of budget maximization.⁶⁰ Unlike a business that is funded by profits, federal agencies are funded by tax dollars.⁶¹ Budgets are determined not by results, but by the perceived need and the satisfaction of powerful interest groups.⁶² The larger the budget, the more staff that can be hired and the greater prestige for the agency.⁶³

The drive for budget maximization is not to suggest some culpable motive by the Forest Service.⁶⁴ It is more a natural outgrowth of federal agencies in general.⁶⁵ However, decentralizing the top-down management of the Forest Service and funding the agency out of user profits would go a long way in eliminating the incentive to sell timber at below cost.⁶⁶

Another explanation for below-cost timber sales has been the Service's commitment to promoting a sustained

⁶⁰ O'Toole, *supra* note 38, at 104-108; O'Toole, *supra* note 40, at 2.

⁶¹ O'Toole, *supra* note 27, at 104.

⁶² Id. at 104-105. When studying timber sales, a Montana State economist found that below-cost timber sales allow the Forest Service to implement "harvesting activities across political jurisdictions", thus gaining favor with multiple legislators that decide the Forest Service Budget. Id.

⁶³ Id. at 104.

⁶⁴ Id. at 107.

⁶⁵ Id. 107-108.

⁶⁶ O'Toole, *supra* note 40, at 2-3.

yield-even flow of timber to dependent communities. To understand the Forest Service's unending drive to achieve sustained yield, it is necessary to understand the historical forces that originally prompted the creation of the Forest Service in the first place. Prior to the 1897 Organic Act, industrial loggers practiced what can be characterized as a "cut-out and get-out" policy.⁶⁷ Timber was quickly harvested and the industry moved on to the next merchantable stock.⁶⁸ This method created the fear of a timber famine and finally led to the creation of the timber reserves, the precursor to the national forests.⁶⁹ The method by which community stability would be promoted and a timber famine averted was known as maintaining a "sustained yield."⁷⁰

In scientific terms, sustained yield is the point where the mean annual increment of stumpage growth is maximized within a harvest rotation and regulations require that rotation ages be within 95% culmination of mean annual

⁶⁷ Rideout and Hessel, *supra* note 29, at 1.13.

⁶⁸ Id.

⁶⁹ Con H. Schallau and Richard M. Alston, *The Commitment to Community Stability: A Policy or Shibboleth?*, 17 *Envtl. L.* 429, 433 (1987).

⁷⁰ Sustained yield is defined as "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources on the national forests without the impairment of the productivity of the land." Multiple-Use, Sustained-Yield Act of 1960, 16 U.S.C.A. §531(b) (1990)

increment.⁷¹ This is a biological determination that does not account for the current market for stumpage or the capital costs of producing the stand.

A corollary to the concept of sustained yield is non-declining even flow. If the amount of timber that could be produced was determined at a scientifically sustained level, then the Forest Service could also guarantee a certain level of timber to local mills and communities. As required by federal regulations, the Forest Service must guarantee that the harvest level of each decade be equal to or greater than the harvest level of the previous decade.⁷²

If the market for stumpage was constant from year to year, a non-declining even flow policy may achieve some of the goals it is intended to achieve. However, a constant market for stumpage does not exist. Therefore, a non-declining even flow policy can only be achieved by either below cost timber sales (when supply exceeds demand) or by forgoing opportunities to sell timber at a profit (when demand exceeds supply).⁷³

Non-declining, even flow and sustained yield policies

⁷¹ 36 C.F.R. §219.16(a)(2)(iii) (1996). Culmination of mean annual increment is where the average growth of the stand is maximized. Rideout and Hesseln, *supra* note 29, at 6.10.

⁷² 36 C.F.R. § 219.16(a)(1) (1996) It is important to remember that the rotation age of any particular timber stand may be fifty years or more.

⁷³ David Wear, et al., *Even Flow Timber Harvests and Community Stability*, 87 J. Forestry 24 (1989).

were implemented as a response to a perceived timber famine and issues of community stability.⁷⁴ However, neither of these issues are properly addressed by a non-declining even flow policy and the continuance of this policy should be seriously questioned.

The predicted timber famine of the early 20th century has failed to materialize. With current public opinion and existing environmental laws, the cut-out and get-out policies of the turn of the century timber barons are forever a thing of the past. In fact, early implementations of non-declining even flow were not so much a response to a timber famine but a timber glut.⁷⁵ By controlling the amount of timber on the market with a low sustained yield, early managers hoped to change the market for stumpage from a buyers market to a sellers market.⁷⁶

Community stability is often cited as a primary goal of public forest management.⁷⁷ However, noted forestry economists have concluded that the relationship between sustained yield and community stability is nothing more than "forestry lore", imported along with scientific management

⁷⁴ Rideout and Hessel, *supra* note 29, at 5.3.

⁷⁵ Con H. Schallau, *Sustained Yield Versus Community Stability: An Unfortunate Wedding*, 87 J. Forestry 16, 18 (1989).

⁷⁶ Id.

⁷⁷ Schallau and Alston, *supra* note 69, at 429-430.

from Europe.⁷⁸ An economic analysis of non-declining, even flow reveals that the policy actually promotes instability. The total market for stumpage is comprised of public and private suppliers. A non-declining, even flow policy does not account for the fluctuations of a dynamic market for timber.⁷⁹ Instead, an inelastic supply of timber from National Forests is created that ignores price changes in the market for timber.⁸⁰ When shocks to the market for stumpage occur⁸¹, the shock is only felt by the private supplier because of the inelastic supply of timber from public lands.⁸² This causes a greater decrease in the price (and consequently revenues) in the overall market for timber than would actually occur if the market shock were absorbed by both private and public suppliers.⁸³ The end result is community instability from widely fluctuating prices.

⁷⁸ Id. at 444. These economists base their conclusions on the actual economic implications of sustained yield and not on any social welfare notions.

⁷⁹ Rideout and Hessel, *supra* note 29, at 5.3.

⁸⁰ Id.

⁸¹ An example of an exogenous shock to the market may be a decrease in demand for timber due to a boycott of lumber produced from old growth forests. See Id. at 3.9 & 3.12.

⁸² Id. at 5.5-5.8; Thomas R. Waggener, Some economic implications of Sustained Yield as a Forest Regulation Model 13 (1969).

⁸³ Rideout and Hessel, *supra* note 29, at 5.6-5.8; Waggener, *supra* note 82, at 13-14.

In addition to the destabilizing economic implications of a non-declining, even flow policy, many commentators argue that community stability should not even be a goal of forest management. At a practical level, community stability requires the maintenance of the status quo, resulting in the stagnation of economic growth.⁸⁴ Indeed, the earliest attempts at implementing a sustained yield cooperative unit failed because the community around which it was organized actually prospered.⁸⁵ Furthermore, there is evidence that there is a decreasing number of timber dependent communities because of diversification of local economies.⁸⁶

D. Conclusion- Failures of the Forest Service

The inherent problems facing the Forest Service are a product of the evolution of the agency over the past century. Some of these problems are indicative of bureaucracies in general. Others are unique to the experience and founding philosophies of the Forest Service in particular. However, because these problems are all interwoven, no amount of individual exorcising will

⁸⁴ Waggener, *supra* note 82, at 17.

⁸⁵ Schallau, *supra* note 75, at 20 (examining the experience of the Shelton cooperative unit).

⁸⁶ Shands and Waddell, *supra* note 49, at 40. For example, by diversifying their economy, the infamous Oregon community of Sweet Home is beginning to bounce back from the shut down of lumber mills from spotted owl litigation. John G. Mitchell, *In the Line of Fire: Our National Forests*, National Geographic, March 1997, at 82.

significantly reform the Forest Service. Therefore it is necessary that a fundamental paradigmatic shift be made in the Forest Service to send a clear mandate to the agency as to how our public timber resources are managed.

III. State Trust Management

The Forest Service is not the only game in town. In the west, nearly forty-one million acres of land is managed by the states as part of their school land grants.⁸⁷ Not all of these lands are primarily valuable for timber. In New Mexico and Wyoming, school grant lands are very valuable for mineral deposits.⁸⁸ However, in Washington, Oregon and Idaho, state trust forests produce large revenues for the state's permanent fund.⁸⁹ Additionally, these lands have very high recreational value, especially when they border high density visitor areas like Grand Teton National Park.⁹⁰ In addition to the economic value of these lands, state trust lands are also home to areas with high environmental values due to endangered species habitat or

⁸⁷ Fairfax et al., *supra* note 5, at 832.

⁸⁸ Melinda Bruce and Teresa Rice, *Controlling the Blue Rash: Issues and Trends in State Land Management*, 29 Land & Water L. Rev. 1, 8. Mineral and oil and gas royalties on these lands produce about 175 million for both states.

⁸⁹ *Id.* at 9. For Washington alone, 1990 timber revenues were \$225 million.

⁹⁰ *Id.* at 11.

other unique attributes.⁹¹

A. Trust Principles in the Context of Public Land Management

I will argue that a general trust management scheme would be beneficial to forest management, not that state trust management should be extended to include national forests. Therefore the historical evolution of state trust land management is not as important as an understanding of the interplay that trust principals have on on-the-ground management.⁹²

Imposing a trust on the managers of public lands elevates the manager's responsibility to that of a fiduciary.⁹³ The trustee must manage the trust for the benefit of a described beneficiary class following certain prescribed rules and duties, among them: the duty to exercise skill and prudence in caring for the trust, the duty of undivided loyalty to the beneficiaries, the duty to disclose, the duty to protect and preserve trust property, and the duty to make the trust productive.⁹⁴

Some of these duties are conflicting and require

⁹¹ Id. at 12.

⁹² In any event, the history of the land grant program and the resulting school trust lands have been exhaustively examined elsewhere. See Fairfax, et al., *supra* note 5, at 803-841 (1992).

⁹³ Id. at 851.

⁹⁴ Id. at 851-852.

careful balancing on the part of the trustee. For the purposes of land management, the duties that are most important are the duty to preserve the trust and the duty to make the trust productive. In trust law, when these two duties conflict a trustee must act as a "prudent investor" would.

Unless it is otherwise provided by the terms of the trust or by statute, the trustees are under a duty to make such investments as a prudent man would make of his own property having primarily in view the preservation of the trust estate and the amount and regularity of income to be derived.⁹⁵

This rule has since been modified somewhat by the Restatement and renamed as the "unconstrained" Prudent Investor rule.⁹⁶ This rule states that the trustee must manage trust assets as a prudent investor would taking into account the context of the individual investment in relation to the trust portfolio as a whole.⁹⁷ For the most part, courts have only taken into account one side of the equation: current income for the trust.⁹⁸ However, if the beneficiary class is expanded and courts become more aware of the competing nature of uses, the application of the

⁹⁵ IVA William F. Fratcher, *Scott on Trusts* §389 (1989). This is the same rule regardless of whether it is a charitable or private trust.

⁹⁶ Restatement (Third) of Trusts § 227(a); Tacy Bowlin, *Rethinking the ABC's of Utah's School Trust Lands*, 1994 Utah L. Rev. 923, 948 (1994).

⁹⁷ Bowlin, *supra* note 96, at 948..

⁹⁸ See *Id.* at 943-55.

prudent investor rule could become a beneficial mandate for public land management.

B. How the Trust has been Treated by the Courts.

Despite the very different enabling acts and constitutions that established state trust lands, the courts have treated the trust relationship relatively the same from state to state.⁹⁹ This is because early Supreme Court cases addressing the trust relationship came from Arizona and New Mexico and these cases have, in turn, been cited as precedent in state courts.¹⁰⁰ While this mistake of history has been a source of criticism for some commentators,¹⁰¹ it is also a point of commonality which makes the jurisprudence in this legal area comparable across state borders.

Two common threads seem to generally line cases in the state trust context.¹⁰² State trust managers are both trustees, with a higher standard of care, and bureaucrats that are traditionally afforded some degree of discretion.

⁹⁹ Fairfax et al., *supra* note 5, at 842.

¹⁰⁰ *Id.* at 843; See e.g. Lassen v. Arizona, 385 U.S. 458 (1966). The enabling acts for the individual state school trust lands were all very different from one another. However, by citing these Supreme Court cases, state courts have imported Arizona's and New Mexico's enabling acts into the state's common law.

¹⁰¹ See Bowlin, *supra* note 96, at 930-931.

¹⁰² Fairfax et al., *supra* note 5, at 848.

In the vast majority of cases, the issue could be framed as a dispute over how the lessee works the land. If the challenger to the state's authority is a lessee, courts have accorded the trustee discretion in how the land is managed.¹⁰³ However, if the challenger is a beneficiary, stricter notions of trust law are imputed to the trustee.¹⁰⁴

Because most challenges brought by the beneficiary centered on the disposition of trust assets for less than full value by the trustee, the cases tend to emphasize income maximization as the dominant duty of the trust.¹⁰⁵ For example, in State v. University of Alaska¹⁰⁶, the state included trust lands within state park boundaries without compensating the trust. The court held that including the lands within the park placed unconstitutional restrictions on the ability of the lands to produce income for the beneficiary university.¹⁰⁷ The duty of the state with regard to the lands was to maximize the economic return to

¹⁰³ Id. at 848-849.

¹⁰⁴ Id. at 849.

¹⁰⁵ However, if the issue involves the misuse of trust lands by a lessee, courts have had little difficulty upholding a decision by the trustee to prevent the destruction of trust assets under the guise of income maximization. See Winchell v. Dept of State Lands, 785 P.2d 212, 216 (Mont. 1990) (overgrazing of state land by lessee necessitates cancellation of lease).

¹⁰⁶ 624 P.2d 807, 809-810 (Alaska 1981).

¹⁰⁷ Id. at 813.

the beneficiary.¹⁰⁸

These cases have fed the fears that many environmentalists have with state management. When the duties of making the trust productive and the duties of preserving the trust conflict, most critics of trust management feel that courts will only uphold the alternative that maximizes current income for the schools.¹⁰⁹ While there is some evidence for this sentiment in court opinions, the full scope of the trust model should instill confidence in many environmentalists. Recent decisions in the state trust context have included language that includes the competing duty of the trustee to preserve the trust.

To begin with, the heightened duty imposed on trustees by the courts eliminate many of the current problems found within current Forest Service management. The duty of loyalty would virtually eliminate subsidized resources given away to extractive industries.¹¹⁰ Furthermore, trusts are typically self-sustaining and not dependant on the budget

¹⁰⁸ Id.

¹⁰⁹ Bowlin, *supra* note 96, at 939-940.

¹¹⁰ See Oklahoma Education Assoc. v. Nigh, 642 P.2d 230, 236 (Okl. 1982) (use of school trust lands to subsidize farming and ranching is a breach of the trust); County of Skamania v. Washington, 685 P.2d 576 (Wash. 1984) (use of school trust lands to subsidize timber industry is a breach of the trust).

appropriations whims of Congress.¹¹¹ Therefore, the incentive to allocate trust resources in an environmentally damaging way is minimized.

These issues are well settled with courts and are a function of the trust paradigm itself. They did not require the active representation of environmental interests to achieve an environmentally friendly result. The duty to maximize income did not conflict with preservation of the trust corpus. However, as these duties begin to conflict, courts are beginning to grapple with the emerging knowledge that short term economic returns are not always the most prudent course of action for the trust.

One possible explanation for the unequal emphasis on the duty to maximize income can be found in standing. Strictly construed, environmental groups do not have standing to challenge trustee actions unless they are a lessee.¹¹² The school districts, not the parents of individual school children serve as the representatives for

¹¹¹ Jon A. Souder, Sally K. Fairfax, & Larry Ruth, *Sustainable Resources Management and State School Lands: The Quest for Guiding Principles*, 34 Nat. Resources J. 271, 292 (1994); Moon v. State Board of Land Commissioners, 724 P.2d 125, 129 (Idaho 1986) (use of ten percent of trust revenues for maintenance of trust do not constitute a breach of the trust).

¹¹² Selkirk-Priest Basin Assoc, Inc. v. State, 899 P.2d 949, 952 (Idaho 1995). However, these groups have been successful in challenging trustee decisions based on other grounds such as public trust doctrine, Id. at 955, or under unique state doctrines, National Parks and Conservation Assoc. v. Board of State Lands, 869 P.2d 909, 913 (1993).

the beneficiary.¹¹³ Without anyone asserting an interest in conserving the corpus of the trust over production of income, the courts have had little opportunity to develop a jurisprudence to address these conflicting duties.

However, in National Parks and Conservation Association¹¹⁴, the Utah Supreme Court was squarely faced with a direct conflict between the duty to preserve the trust and the duty to produce maximum income. In that case, environmental groups sought to challenge the decision by the Utah Board of State Lands to exchange trust lands within a national park for county lands.¹¹⁵ The county intended to pave a road running through the trust lands for greater tourist access to the surrounding area.¹¹⁶ The NPCA challenged the exchange on the grounds that the Board determined that it could not "give preference to scenic, aesthetic, or recreational values over income maximization in managing school trust lands."¹¹⁷ The Court upheld the Board's determination holding that the trust was not created for the general welfare of the people.¹¹⁸

¹¹³ Selkirk-Priest Basin Assoc., 899 P.2d at 952.

¹¹⁴ 869 P.2d at 909.

¹¹⁵ Id. at 911.

¹¹⁶ Id. at 911.

¹¹⁷ Id. at 916.

¹¹⁸ Id. at 919. The Court went on to specifically deny that the enabling act created a public trust instead of the traditional private trust.

While the holding in National Parks and Conservation Association has been criticized¹¹⁹, the Court in dicta began the long road to reconciling the conflicting trust duties of income maximization and preservation of the trust. Specifically the Court held that long term income potential must not be sacrificed for short term profits.¹²⁰ Furthermore, where possible, income production must be accomplished so as not to sacrifice unique scenic or cultural values.¹²¹

National Parks and Conservation Association upholds the traditional notion of income production of state trust lands while recognizing the merit of preserving the corpus of the trust. However, as the Court in that case also recognized, trust management must be accomplished within the confines of existing law.¹²² Therefore, if other statutes mandate that environmental values are to be protected, then trust management must conform to those values.¹²³

¹¹⁹ See Bowlin, *supra* note 96, at 934-045.

¹²⁰ National Parks and Conservation Assoc., 869 P.2d at 921.

¹²¹ Id. However, the court went on to hold that, in the final analysis, state lands must be income productive. If that would cause a complete loss of aesthetic value, then the trustee should attempt to exchange the land for more productive lands. Id.

¹²² Id. at 920.

¹²³ However, because the origins of state trust lands arise from state constitutions, these laws must be constitutional if they are to provide limitations to the duty to produce income. See Board of Natural Resources v.

In Colorado State Board of Land Commissioners v. Colorado Mined Land Reclamation Board¹²⁴, the Conda Mining Co. sought a permit to expand its mining operations on school trust land. Obviously, this expansion would have maximized the amount of income the lands were producing for the trust. However, because of local zoning regulations designed to protect the wildlife and character of the community, Conda was denied a permit to expand its mine.¹²⁵ Conda sought a declaratory judgement that counties could not constitutionally exercise zoning authority over school trust lands.¹²⁶ The Court disagreed with Conda holding that

[T]he State Land Board "must first look to the statutes ascertain the regulations prescribed, and then, in exercising their constitutional powers, they must so act as in the judgement of the board will secure the maximum amount, under the prescribed regulations." . . . The constitutional scheme does not contemplate that the State Land Board can ignore a reasonable legislative regulation for the purpose of carrying out its constitutional responsibility of securing "the maximum amount possible" for public lands."¹²⁷

A similar case arose in Montana where an environmental organization sued the trustee for failing to complete an

Brown, 992 F.2d 937, 943 (9th Cir. 1993) (law designed to conserve forests by banning timber exports from state forests is constitutional despite large economic loss to school trust).

¹²⁴ 809 P.2d 974, 978 (Col. 1991).

¹²⁵ Id. at 978.

¹²⁶ Id. at 985.

¹²⁷ Id.

environmental impact statement before modifying a grazing lease on trust land.¹²⁸ The lessee wished to change his lease in order to graze domestic sheep instead of cattle in an area adjacent to a bighorn sheep range.¹²⁹ The trustee argued, *inter alia*, that its ability to deny a lease based on environmental concerns is limited by its duty to maximize income for the trust.¹³⁰ The Court held that while income maximization is a consideration of the trustee, it is not the only consideration.¹³¹

MEPA requires that an agency be informed when it balances preservation against utilization of our natural resources and trust lands. The DSL may not, as here reach a decision without first engaging in the requisite significant impacts analysis.¹³²

These two cases illustrate that the trustee's duty to maximize income for the benefit of the current beneficiary is not a loophole for trustees to avoid environmental protections that other land managers also have to comply with.

It is unfortunate that the duty to make the trust

¹²⁸ Ravalli County Fish & Game Assoc., Inc. v. Montana Department of State Lands, 903 P.2d 1362, 1366 (Mont. 1995).

¹²⁹ Id. at 1365-66.

¹³⁰ Id. at 1370. However, the real issue in this case was not whether DSL could modify the lease, but whether they could modify the lease without first examining the environmental impacts of the modification. Id.

¹³¹ Id.

¹³² Id. at 1371.

productive has received top billing in court opinions because it has led to a general mistrust of state management by environmentalists. In theory, the challenge of the trustee is to balance the duties of income production and preservation of the trust. As the preservation interests become represented more often in lawsuits and the economic potential of scenic beauty and recreation are increasingly recognized, this balance should be restored to the management perspective. As a lowest common denominator, the duty to make the trust productive does not suspend the trustee's responsibility to comply with existing environmental protection laws, assuming those laws are constitutional.

C. Possible Benefits of Trust Management over Current Federal Management

Managing public lands as a trust requires that the entire paradigm of current management be abandoned. Section II outlines many of the fundamental problems with the current Forest Service paradigm. By shifting management to a trust paradigm, the unclear and conflicting mandates of Progressive Era science could be achieved.¹³³ Instead of

¹³³ It is impracticable to assume that no "Progressively" trained foresters will be employed as trustees. Indeed, current Forest Service employees still have much to offer to resource management. The current problems found in national forest service management is more a problem with the overall centralized system than with individual Forest Service employees.

controlling the equation, science would be one tool that managers will use to determine how to best fulfill their duties as trustee for the resource.

Infusing trust principles that have a well established common law has caused state land managers to accept four characteristics of trustee management: clarity, accountability, enforceability, and perpetuity.¹³⁴ Each of these characteristics could have enormous positive impact on future forest management. Furthermore, trust principles foster economic efficiency while also facilitating the shift to ecosystem management.

Unlike ambiguous multiple use mandates, trust principles are relatively clear where lands are managed to meet specific goals for named beneficiaries.¹³⁵ As management objectives become more blurred as demands on the resource becomes greater, clarity in mandates are going to be critical in preventing mismanagement. As some commentators explained, "[c]larity, 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."¹³⁶

Trustees are accountable to the beneficiaries through clearly measurable goals, the duty to disclose, and the duty

¹³⁴ Souder, et al., *supra* note 111, at 278-279.

¹³⁵ Id. at 283.

¹³⁶ Id. at 286.

of undivided loyalty.¹³⁷ In particular, accountability makes it very difficult to divert trust assets for the benefit of the manager so as to maximize budgets. An examination of the allocation of personnel and resources to particular management prescriptions on state lands revealed that beneficiaries can identify and force trustees to manage lands in the most economically efficient manner.¹³⁸ Furthermore, if budgets are tied to actual revenues and not state legislatures, sustainable management is possible.¹³⁹ Trust accountability would go a long way in eliminating the economic inefficiencies in current Forest Service management. This concept of accountability makes it a breach of the trust to allow the use of trust assets to subsidize users. Below cost timber sales in the name of community stability would be inconsistent with trust principles, unless the community was a direct beneficiary of the trust.

Of all of the characteristics of trust management, enforceability is the most well established. Countless cases have developed a common law that is fairly analogous

¹³⁷ Id. at 286.

¹³⁸ Id. at 286-290.

¹³⁹ Id. at 292. Western trust lands budgets are typically funded in one of three ways: 1) determination politically by the legislature; 2) a fixed, predetermined percentage of revenues; and 3) no fixed budget, where costs are directly deducted from revenues and the remainder given to the beneficiaries.

to resource management issues.¹⁴⁰ As public interest groups are beginning to assert more of a stake in state land management issues, these standards are evolving as well to accept more contemporary notions of preservation.¹⁴¹ When weighing alternatives in the natural resource context, courts treat trustees with less deference than the would normally be given to public land administrators, thus making judicial enforceability more of a reality in the trust paradigm than in the current agency context.¹⁴²

Perpetuity directly reflects the conflicting trust duties of maintaining the trust assets and producing income for the current beneficiaries. Some commentators argue that this conflict has given rise to a conservative management style.¹⁴³ This notion of a direct relationship between "perpetual revenue production" and "perpetual capacity of lands to produce" provides strong tools for land managers to avoid special interests that would like to see short term revenue production maximized.¹⁴⁴

Another primary benefit to a trust management regime would be the creation of incentives to manage forests for economic efficiency. In a side by side comparison, state

¹⁴⁰ Id. at 293.

¹⁴¹ See Section IIIB, above.

¹⁴² Souder et al., *supra* note 111, at 295.

¹⁴³ Id. at 297-299.

¹⁴⁴ Id. at 300-301.

forests fair much better economically than national forests. In a study by the Political Economy Research Center (PERC), state forests in Montana generated a \$ 13.3 million return while national forests in Montana yielded a loss of \$42 million.¹⁴⁵ The reason for this disparity is that state forests are managed more efficiently for both costs and revenues. State forests in Montana spend two and a half times less money than the nearby Gallatin National Forest spends in preparing timber sales.¹⁴⁶ From 1978-1983, state forests in Montana received much higher revenues for timber sold.¹⁴⁷ These dramatic economic differences were not

¹⁴⁵ Donald R. Leal, PERC Policy Series: Turning a Profit on Public Forests 4-5 (1995). This is despite the fact that twenty times the timber was harvested on national forests than on state forests.

¹⁴⁶ Id. at 8. This difference can not be explained by a lower burden of environmental review by state agencies. Most states have some version of NEPA that requires the trustee to perform a similar level of environmental review. See Ravalli County Fish & Game Assoc., Inc., 903 P.2d at 1371. One commentator has demonstrated that some states, at least in the short run, are very efficient at allocating personnel to projects that receive the highest margin of return. Souder et al at 288-289.

¹⁴⁷ Leal, *supra* note 145, at 10-11; David H. Jackson, Why Stumpage Prices Differ Between Ownerships: A Statistical Examination of State and Forest Service Sales in Montana, 18 Forest Ecology and Management 219 (1987). Professor Jackson offers two explanations for this disparity. First, the Forest Service primarily employs clear cutting, resulting in both high and low value timber harvested. However, the state employs more selective cutting, harvesting only high value timber. Second, because the Forest Service timber sales are so high in volume, more capital costs, such as road construction, have to be incurred and bids are lower than competing state sales. Recent studies indicate that the Forest Service may have corrected for some of these problems because average stumpage prices in 1993 between the

achieved at the price of environmental quality either. A 1992 study found that logging practices employed on state forests protected the watershed better than logging practices on national forest land.¹⁴⁸

While not a perfect fit, individual forest trusts could also facilitate the procedural shift to ecosystem management. Three dominant themes must be embraced by land managers utilizing ecosystem management: 1) boundaries must coincide with ecological processes, not politics, 2) scientific uncertainty must be accepted, and 3) governance of the ecosystem must not be ad hoc through a multitude of agencies.¹⁴⁹ A trust would be able to embody these themes better than the current hodge podge of federal and state agencies.¹⁵⁰ Trust boundaries could easily coincide with

state and national forests were nearly equal. Leal, *supra* note 145, at 11.

¹⁴⁸ Leal, *supra* note 145, at 11. This is not to suggest that state forests are more ecologically healthy than national forests. Because state forests are so disjointed, it is doubtful even that they enjoy a large amount of biodiversity. However, the study does serve to illustrate that economic efficiency can be achieved without wholesale disregard of the environment.

¹⁴⁹ Thomas T. Ankerson & Richard Hamann, *Ecosystem Management and the Everglades: A Legal and Institutional Analysis*, 11 J. Land Use & Envtl L. 473, 475-476 (1996).

¹⁵⁰ Ecosystem management is currently being pursued through both "hard management", where one agency manages an entire ecosystem, and "soft management" where management is accomplished through multiple agencies cooperating. *Id.* at 502. A single managing authority will eliminate conflicting mandates that can stall soft management.

individual watersheds.¹⁵¹

To implement ecosystem management, the prudent investor rule would have to be reconciled with the concept of scientific uncertainty. However, the trust concept does not presuppose perfect knowledge. In fact, trusts by nature are conservative and not entrepreneurial institutions. This would lead to management that generally embraces a "precautionary principle" where managers would act to ensure that environmental harm does not occur.¹⁵² In trust language, the trustee must act to insure that the corpus of the trust is protected. These two principles are actually closely related.

Despite these possible benefits of trust management, there are some deep criticisms of trust management. Most of these criticisms center on the "income maximization" principles currently recognized by the courts in regard to school trusts.¹⁵³ However, there is really no reason for

¹⁵¹ *Id.* at 476-479. The problem with defining an appropriate scale for ecosystem management is that no spatial level will adequately cover all species. *Id.* at 478. Larger ecosystem units (sometimes called "greater ecosystems") that span many watersheds will fall into the same overcentralization problem that plagues the current forest service. Therefore, it is best to limit trusts to watersheds, the ecosystem unit suggested by the U.S. Fish and Wildlife Service.

¹⁵² Daniel Bodansky, *Scientific Uncertainty and the Precautionary Principle*, *Environment*, Sept. 1991, at 4.

¹⁵³ Steve Alder, *Some Pitfalls with Government Land Trusts*, *Different Drummer*, Fall 1995, at 47; John Arum, *Old Growth Forests on School Lands- Dedicated to Oblivion?- Private Trust Theory and the Public Trust*, 65 *Wash. L. Rev.*

environmentalists to shy away from the trust concept in regards to land management. The principle of the trustee as a "prudent investor" will ensure sustainable development of public lands in perpetuity. Courts, in examining state trust management, are beginning to reconcile the competing trust duties of managers as the income maximization principle is slowly eroding. Furthermore, the creation of federal forest trusts does not have to be governed by the same principles currently found in the enabling acts for state school trusts. In fact, these critics acknowledge that trusts could be created that provide better protection for wilderness values.¹⁵⁴

IV. Creating a Federal Forest Trust.

Constructing a trust management paradigm is as simple and as complicated as reinventing the Forest Service. The only available model for such a large scale land trust is the states. However, there are many pitfalls in the evolution of the state lands program and also many dissatisfied users of these state lands. Therefore, a wholesale adoption of the state program is not practicable and many improvements of the state paradigm can be made if such a trust system was to be implemented. As a departure for this analysis, I will utilize the "National Forest

151 (1990).

¹⁵⁴ Alder, *supra* note 153, at 47-48.

Reform Proposal" offered by the Thoreau Institute as a model for implementing a trust paradigm on federal forest management.¹⁵⁵

A. Requirements of a Trust

Generally, in order to create a trust, there must be 1) a manifest intent to create a trust,¹⁵⁶ 2) some trust property,¹⁵⁷ 3) some trust purpose,¹⁵⁸ 4) a beneficiary,¹⁵⁹ and 5) must be in writing in some form to satisfy the statute of frauds.¹⁶⁰ Based on established common law in the context of state school trust lands,¹⁶¹ there can be little doubt that a national forest trust can be created. Any bill that creates a trust would have to intend to do so, however no particular language is necessary to manifest that intent.¹⁶² A trust can be created for any purpose that is not illegal.¹⁶³ Any national forest trust

¹⁵⁵ Reprinted in Different Drummer, Fall 1995, at 44-46. The edited version, hereinafter the National Forest Trust Act, is included as Appendix I.

¹⁵⁶ Restatement (Third) of Trusts §23.

¹⁵⁷ Id. at §66.

¹⁵⁸ Id. at §59.

¹⁵⁹ Id. at §66.

¹⁶⁰ Id. at §40.

¹⁶¹ Fairfax et al., *supra* note 5, at 850-91.

¹⁶² Restatement (Third) of Trusts §24; See National Forest Reform Act §4 (e), below.

¹⁶³ Restatement (Third) of Trusts §59.

would be created for the purpose of ensuring that the national forests were managed in the most economically efficient manner while protecting the environmental quality.¹⁶⁴ The trust property, the national forests, and the writing requirements are also easily identified.

By far the most problematic aspect of creating a trust is naming a beneficiary. The primary requirement of naming a beneficiary is that it is definitively ascertainable.¹⁶⁵ Given that, in theory, national forests belong to every citizen of the United States, managing lands "in trust for the people of the United States" may at first seem an appropriate beneficiary. However, it would be ill advised to have such an inclusive beneficiary for a number of reasons.

First, the beneficiary class should not be so large as to encompass too many people. For a trustee to manage the forests in trust for a beneficiary class with many competing needs would sacrifice the clarity of the trust mandates. It would be very difficult for a trustee to ascertain and balance the competing needs.¹⁶⁶ Standing to seek redress for trustee decisions would be granted to a very large group of plaintiffs.

¹⁶⁴ See National Forest Reform Act §2, below.

¹⁶⁵ Restatement (Third) of Trusts § 112.

¹⁶⁶ Conflicting mandates are actually a problem that current public land managers face. James Brown, *The Forest Service Needs a Clear Mandate*, Different Drummer, Fall 1995, at 31.

Second, use of the phrase "in trust for the people of the United States" denotes the public trust doctrine.¹⁶⁷ There are considerable differences between public trust doctrine and private trusts and the two should not be confused. While the public trust doctrine has provided a successful theory on which to provide some protection for natural resources¹⁶⁸, it is not expansive enough to provide guidance in the national forest context. The public trust doctrine, while it has expanded in recent years to include other resources¹⁶⁹, it has mostly been limited to resources with some nexus to navigable waters. Therefore, there is no established precedent to apply to the multitude of resources that make up the corpus of the trust. Second, while the public trust doctrine has received increasing support from courts¹⁷⁰, there are many commentators that predict its demise.¹⁷¹ Basing a reform of the Forest Service on a less

¹⁶⁷ For example, Article XVI of the Washington state constitution provides that "[a]ll the public lands granted to the state are held in trust for all of the people." Wash. Const. art XVI, § 1.

¹⁶⁸ See National Audubon Society v. Superior Court of Alpine County, 658 P.2d 709 (Calif. 1983) (the Mono Lake litigation).

¹⁶⁹ See Wade v. Kraemer, 459 N.E.2d 1025 (Ill. 1984) (applying the doctrine to wildlife).

¹⁷⁰ George A. Gould and Douglas L. Grant, Water Law 510, note 1 (1995).

¹⁷¹ Id. at 511-512, note 3 and the references cited therein.

than solid legal doctrine is inadvisable.¹⁷²

Of course this begs the question: who should be the beneficiary? However, no hard and fast answers emerge. The beneficiary class should be limited enough so that actual measurable objectives can be formulated and loyalty to the beneficiary is not expanded to the point that it has little meaning. A preference for local beneficiaries over national ones could also be advantageous as a method to decentralize management and account more for the costs of management decisions on local constituencies. However, this would necessitate people to recognize that "public lands" do not mean what they once did.¹⁷³

For lack of a clear choice, I recommend adopting the same beneficiary as the states- the public schools. This would limit the beneficiary to a class of people that have both short term and long term needs of the trust. Balancing competing trustee duties would be easier and mandates would remain clear. Generally, public schools do not have an immediate, direct stake in land management decisions as compared to industry or environmentalists. Furthermore, a common law defining the scope of the beneficiary already exists. A portion of national forest revenues in the

¹⁷² Private trust theory, however, has an established common law and is widely accepted.

¹⁷³ Instituting a preference for local beneficiaries over national ones would probably cause a larger outcry than is actually deserved and represents the unwillingness for special interests to give up any "turf" that they control.

federal treasury already are allocated to public education. Naming public schools as the beneficiary would only eliminate the "middle man" of congressional appropriations and ease the burden on states.¹⁷⁴

The question of who will be the beneficiary of a national forest trust will be the focus of considerable debate and likely stall any attempts to apply trust principles to forest management for some time. While the public schools as a beneficiary could be a compromise, it is not the only possibility. However, any attempts to further define the beneficiary class in the future should take great care to avoid the problems with an over-expansive beneficiary class outlined above.

B. The National Forest Trust Act

In order to incorporate the issues outlined above, significant changes were made to the Thoreau Institute model. However, the general purpose of creating a national forest trust, "to ensure that the Nation's renewable forest and rangeland resources be managed so as to provide the greatest economic efficiency, environmental quality, and responsiveness to public demand", is the same for both models.

Sections 1 through 3 of the National Forest Trust Act

¹⁷⁴ While definitely an argument against naming public schools as the beneficiary, the relative merit of public funding of education is beyond the scope of this paper.

are self explanatory and do not require elaboration.

Beginning with Section 4, the Act is makes substantive changes. Section 4(a) provides that the Secretary of Agriculture redraw national forest boundaries to approximate the boundaries of watersheds.

The Thoreau Bill originally divides land into Forest Trusts and Wilderness Trusts and divides their management

accordingly.¹⁷⁵ For the purposes of this revision, I have included wilderness lands in the National Forest Units in an attempt to maintain the integrity of a watershed and provide continuity in management.

The Thoreau Bill also provided no guidance for drawing boundaries besides limiting the units to between one to six million acres in size.¹⁷⁶ This subsection mandates that boundaries be based on individual watersheds, more approximating an appropriate scales for effective ecosystem management. By allowing the boundaries to be redrawn with no regard to political boundaries, this clause would create National Forest units that spread across more than one state. This may cause some difficulty in determining which state trust law to apply to each individual unit. However, the federal courts can easily develop a federal common law with regard to National Forest Units. Additionally, because of cases such as Lassen, much of the individual state

¹⁷⁵ Thoreau Institute, *supra* note 155, at 44.

¹⁷⁶ Id.

precedent is already very similar.¹⁷⁷

In order to provide some continuity of management while individual trust units are drawn, section 4, subsection b, allows the secretary to name an interim supervisor for each unit. The interim supervisor will be responsible for arranging the members of the forest trust to elect a governing board.

Section 4, subsection c creates the trust responsible for managing the trust, subject to defined principles. This subsection allows for any citizen of the United States to become a member of the trust for a nominal fee. This clause is identical to the Thoreau model. By allowing anyone to become a member of the trust, it expands the class of potential plaintiffs and diminishes the standing problems at issue in Selkirk-Priest Basin Association.¹⁷⁸ However, the ability of any one plaintiff to sue the trust would be governed by corporate law and stockholder rights.

Section 4, subsection e is mandated that the national forest units be managed in trust for the public schools of the United States. The Thoreau model originally states that the National Forest Units will be held "in trust for the people of the United States."¹⁷⁹ This language actually creates a "public trust" with the possible difficulties

¹⁷⁷ See note 100.

¹⁷⁸ 899 P.2d at 952.

¹⁷⁹ Thoreau Institute, *supra* note 155, at 45.

explained above.¹⁸⁰ Limiting the beneficiary class to the public schools creates a private charitable trust with an established common law.

This subsection also mandates that management shall be in accordance with established trust principles, ecosystem management, and established federal law. The original Thoreau model stated that management "shall be in accordance with accepted multiple use and sustained yield principles, and shall be aimed at producing the greatest good for the greatest number for the longest period of time."¹⁸¹ This language would only serve to further entrench the established theories of Progressive science by grounding them in law. Inserting language that places the emphasizes the trustees duties provides a clean legal break with Progressive Era notions. Furthermore, the competing duties of making the trust productive and preserving the corpus of the trust are given equal weight in this language, eliminating the authority for one sided judicial interpretations focusing on "maximization of income." While this subsection also mandates that principles of ecosystem management be utilized in managing the trust. However, it does not mandate any substantive result. As already established by current trust law, trust management must comply with current environmental protection

¹⁸⁰ See section IVA, above.

¹⁸¹ Thoreau Institute, *supra* note 155, at 45.

laws.¹⁸²

Section 4, subsection f outlines the powers given to the board. These powers included the ability hire and fire trust personnel, including the supervisor, the power to approve an operating plan, and the power to set membership fees. Subsection g allows the board to set fees to use forest units at market value. This provision is crucial if a market for alternative uses of the National Forest Unit is to be recognized. User fees for recreation and other non-consumptive activities will make it possible for a trustee to make the trust productive for the beneficiary while also preserving the corpus of the trust.

Disposal of the trust corpus is forbidden by section 4, subsection h. However, the board can exchange land of equal value if the exchange will ease the management of the trust. Also, the board can approve a land acquisition in order to make the trust more valuable both economically and ecologically. Habitat fragmentation has been identified as one of the greatest threats to biodiversity worldwide.¹⁸³ This clause was inserted to enable the Board of Trustees to actively pursue the acquisition of lands that are part of the ecosystem they are managing, but outside the current

¹⁸² See Colorado State Board of Land Commissioners, 809 P.2d at 985; Ravalli County Fish & Game Assoc., 903 P.2d at 1370.

¹⁸³ Reed F. Noss and Allen Y. Cooperrider, *Saving Nature's Legacy* 51 (1994).

boundaries of the National Forest Unit in order to connect habitats that are fragmented.

Section 4, subsection j gives the power to revoke the charter of any forest trust to the federal judiciary. The Thoreau model gave this power to Congress.¹⁸⁴ This clause was changed, giving this power to the judicial branch, for two reasons. First, Congress is very accommodating of the desires of individual interest groups and placing this power with them may not be wise. Utilization of this power could be inconsistent depending on the perceived needs of a constituency and the desire of a politician to be reelected. Second, unless the National Forest Trust Act was grounded in the Constitution, it is unclear what kind of judicial review could be obtained for Congress' notions of "gross malfeasance". However, an established chain of appeals is provided by giving this power to the judicial branch.

Section 4, subsection k states that if the unit is unable to sustain itself, the board of trustees may transfer the lands in the trust to jurisdiction of another trust willing to undertake its management. This would occur when a trust is created that has only marginal sustainable economic value. While this subsection may break up ecosystems, the trust must first be self sustaining in order to provide adequate management.

Section 5 controls the budgeting and financing of the

¹⁸⁴ Thoreau Institute, *supra* note 155, at 44.

individual units. In order to escape the budget maximization problems afflicting the current Forest Service, it is crucial that units are only financed out of revenues and donations that they generate. Subsection b provides for start-up funds for each of the National Forest Units. Because the units would be decentralized, no money for an overriding management bureaucracy will be needed. For the first year, this administrative allocation is redistributed to National Forest Units to alleviate the incentive to immediately sell high-value timber, such as old growth, to make the trust self-sustaining.

Section 5, subsection c lists how the receipts generated by the units are to be distributed amongst the beneficiary and the management of the unit. Another recipient, the biodiversity trust fund, also receives twenty percent of the gross receipts.

While the purpose of a biodiversity trust fund is explained in more detail below, by funding the biodiversity trust with receipts from the trust at an equal level as receipts paid to the states in support of public schools, biodiversity and ecological integrity are raised to a "quasi-beneficiary" level, providing greater protection for species.

The rest of section 5 is designed to eliminate many of the economic disincentives that are currently found in the Forest Service. Subsection e specifically eliminates the incentive of managers to maximize their budget by promoting

the uses of resources that curry favor with legislators that control their budgets. Instead, their budgets are tied to the actual productivity of the land they manage and the costs incurred in managing it. Subsection f rewards sustainable and efficient management. Instead of managers utilizing a "use it or lose it" budgetary framework, they can employ a more conservative approach and bank resources until they are actually needed. Subsection h liquidates funds that have been held in trust and distributes them to the appropriate Unit. For example, under the Knutson-Vandenberg Act about 25% of timber receipts for fiscal years 1992-1994 were retained for reforestation activities.¹⁸⁵ Elimination of these funds will further decentralize the units and break their dependence on Congressional appropriations.

Section 6 expressly provides for the use of conservation easements in order to preserve natural resources and biodiversity. The sale of conservation easements creates a market where "existence" value (the value of just knowing the resource exists) and other non-market values can compete with market values. Any entity can purchase a conservation easement and the decision whether to sell a conservation easement must be given equal weight by the board of trustees as resource uses. Subsection c mandates that, at the time that forest

¹⁸⁵ See GAO, *supra* note 58, at 41.

boundaries are re-drawn, any existing wilderness areas will be protected by a conservation easement. As stated above, the original Thoreau model divided the management of wilderness and national forests.¹⁸⁶ By including wilderness within the management of a National Forest Unit, trustees can better incorporate ecosystem management since the boundaries of an ecosystem may include both wilderness and non-wilderness lands.

Section 7 establishes an independent biodiversity trust as a means for species preservation to actively compete with resource commodities. The biodiversity trust would be governed by a board of trustees drawn from scientists that represent areas of concern. Subsection b provides a considerable amount of flexibility for the Biodiversity Trust. If a linkage necessary for the protection of an endangered or threatened species is outside the boundaries of National Forest Unit, the linkage can be protected through the purchase of conservation units. In order to avoid administrative drain of trust resources, subsection c mandates that the vast majority of trust funds must be spent on the ground purchasing easements for species protection.

The National Forest Trust Act is not designed to eliminate all of the inefficiencies of Forest Service management. However, as a comparative model it is superior to the current regime that promotes economic inefficiencies

¹⁸⁶ Thoreau Institute, *supra* note 155, at 44.

and ecological destruction. It is my hope that the trust paradigm be debated and improved on in order to provide some reform of the current system.

IV. Conclusion

The current problems with the Forest Service are well documented. Due to its roots in the Progressive Era, the Forest Service has not evolved into an agency capable of balancing the competing needs of public forest users. Instead, overcentralization has resulted in a top-down management approach that caters to the most powerful interest groups. This management style will hinder the Forest Service's shift to ecosystem management. Furthermore, the agency budget structure and notions of community stability have created incentives to sell timber below cost, resulting in both a net drain on the treasury and environmentally destructive logging.

These problems with the Forest Service have evolved for almost a century and are too ingrained to be addressed by any piecemeal reform. Instead, a large scale reform of the entire structure needs to be initiated and a new paradigm for public forest management instituted. One possible paradigm could be a decentralized trust system governing national forest units that encompass individual watersheds.

Based on land management policies in the school trust lands context, a trust paradigm would have many advantages

for national forest management. Trusts provide clear mandates for the trustee, instead of confusing multiple use mandates. Based on an established common law, trustees are directly accountable to the beneficiary in perpetuity. Most of the destructive economic incentives would be eliminated under a trust paradigm. The competing duties of making the trust productive and preserving the corpus of the trust force trustees to balance short term economic needs and long term preservation.

The "National Forest Trust Act", as proposed and modified in this paper can provide a worthwhile departure into examining how a trust paradigm for national forest management would be created. Trust language that mandates that lands be managed in accordance with accepted trust principles and implementing ecosystem management will provide a clean break with ingrained multiple use, sustained yield practices and usher in a new era of national forest management.

However, the National Forest Trust Act also highlights some of the obstacles that must be surmounted before a trust paradigm can be adopted, namely the question of who is the beneficiary. Any meaningful reform must not name a beneficiary class that is too large where clarity in trust mandates are lost and multiple use principles are embraced all over again. Furthermore, managing national forests "in trust for the people of the United States" will create a

public trust regime that does not have the accepted legal theory as private trusts and may not apply to all of the resources found in the national forests.

While the concept of a trust paradigm for national forest management would require a complete revision of the Forest Service as we now know it, it should be seriously debated and analyzed for possible application. The traditional opponents of trust management, environmentalists, should take a fresh look at the possibilities that a trust may present for environmental protection. However, as with any reform, compromise is necessary for any meaningful change. All national forest users are going to have to give up some of the benefits they now enjoy, whether that means losing free recreation, subsidized resource extraction, or national control. Until users are willing to do that, any reform is unlikely.

APPENDIX I: National Forest Trust Act**A Bill**

To improve economic efficiency and environmental quality of the Nation's renewable forest and rangeland resources management.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress Assembled,

Section 1. SHORT TITLE

This Act may be cited as the "National Forest Trust Act."

Section 2. PURPOSE

The purpose of this Act is to ensure that the Nation's renewable forest and rangeland resources be managed by the Forest Service so as to provide for the greatest economic efficiency, environmental quality, and responsiveness to public demand for resources.

Section 3. DEFINITIONS

For the purposes of this Act-

(a) the term "National Forest System" means the national forests, national grasslands, and other lands managed by the U.S.D.A. Forest Service;

(b) the term "proclaimed national forest" means the current Congressional designations of national forest or national grasslands and their boundaries;

(c) the term "National Forest Unit" means one of a

number of management units of the National Forest System as determined by the Secretary of Agriculture under section 4, paragraph a of this Act;

(d) the term "National Forest Trust" means a chartered organization, with a membership and a board of trustees elected by the membership, that is authorized and obligated to manage a National Forest Unit in trust for the support of public schools in the United States.

(e) the term "secretary" means the secretary of the Department of Agriculture.

Section 4. NATIONAL FOREST TRUSTS.

(a) Within four months of the passage of this Act, the Secretary of Agriculture shall draft a division of all lands, including wildernesses and wild and scenic rivers, in the National Forest System into individual National Forest Units, establishing clear boundaries for each unit. Such boundaries shall closely approximate the recognized boundaries of individual watersheds. In order to more closely approximate the geography of individual watersheds, the boundaries may be drawn with no regard for current political boundaries. Final determination of National Forest Unit boundaries shall be made after 30 days of public comment but no later than six months after passage of this Act.

(b) The Secretary shall appoint an interim supervisor for each National Forest Unit. The interim supervisor shall

carry out the laws and regulations of the Forest Service until the first meeting of the Board of Trustees of the National Forest Unit.

(c) Upon establishment of the National Forest Unit boundaries, the Secretary shall create for each unit a National Forest Trust, which shall be a not-for-profit corporation chartered under the laws of the United States. Any citizen of the United States can become a member of any National Forest Trust for a nominal annual fee, initially set at \$20 per year, paid to the supervisor or interim supervisor of the National Forest Unit. Each trust shall have complete management jurisdiction over the lands and resources subject with the associated National Forest Unit, subject to the provisions of section 4, paragraphs e, f, g, and h, of this Act.

(d) Within 90 days of the establishment of each national Forest Trust, the interim supervisor of each National Forest Unit shall arrange for members to elect, by mail-in ballot, a nine-member Board of Trustees. Board members shall have three-year terms, with three members elected each year.

(e) The Board of Trustees for each National Forest Trust shall be obligated to manage the associated National Forest Unit in trust for the public schools in the United States. Such management shall be in accordance with established duties of the trustee, balancing the duty to

make the trust productive and the duty to preserve the corpus of the trust as a prudent investor would. Every attempt at implementing management at an ecosystem scale will be undertaken by the Board. Such management shall also be subject to those federal laws that would apply to any private land trust or land owner.

(f) The Board of Trustees of each National Forest Unit shall have the following powers:

(1) The power to select from among themselves a chair and other officers as deemed appropriate;

(2) The power to hire and fire the supervisor of the National Forest Unit;

(3) The power to approve an annual operating plan, including the establishment of budgets, fees, activities and projects, the allocations of land to various uses, and criteria and procedures used to sell or lease resources within the jurisdiction of the National Forest Trust;

(4) The power to set membership fees and arrange annual, mail-in elections for members of the Board.

(g) Notwithstanding the provisions of any other law, each National Forest Unit may charge fees at fair market value for any of the resources within their jurisdiction subject to the requirements of section 4, paragraph e of this Act.

(h) The Board of Trustees shall not sell any of the

lands within their jurisdictions. However, they may exchange land for land of equal value if such an exchange will ease the management of lands in their jurisdiction and such exchanges meet the objectives specified in section 4, paragraph e of this Act. The Board of Trustees may also acquire more land from public or private sources and if such acquisitions meet the objectives specified in section 5, paragraph e of this Act.

(i) Board members shall receive no compensation for their time, but may elect to reimburse themselves for costs traveling to and from and participating in board meetings.

(j) A court, with the appropriate subject matter jurisdiction, may revoke the charter of any Wilderness Trust in the event of gross malfeasance or violation of any provision of section 4 of this Act.

(k) In the event that any National Forest Unit is unable to sustain itself with the funds provided for it under section 6 of this Act, the Board of Trustees for that unit may elect to transfer the lands under its jurisdiction to the jurisdiction of any other willing National Forest Trust.

Section 5. BUDGET AND FINANCE

(a) Notwithstanding the provisions of any other law, no funds may be appropriated to the National Forest Units or National Forest Trusts except as described in this section.

(b) During the first fiscal year beginning after

passage of this Act, Congress may appropriate funds to each National Forest Unit equal to the funds appropriated for the management of the lands within such National Forest Unit during the previous fiscal year, exclusive of funds spent by the Regional, Washington, or other non-ranger district or non-national forest supervisor offices of the Forest Service. Those funds spent by the Regional, Washington, or other non-ranger districts or non-national forest supervisor offices of the Forest Service will be reallocated to the National Forest Units based on need for that fiscal year.

(c) At the end of each fiscal year beginning with the first fiscal year after passage of this Act, the Secretary of Agriculture shall audit each National Forest Unit to determine the total funds expended and the total receipts collected by each unit during that fiscal year. Receipts collected by each unit shall be divided as follows:

(1) 100 percent of the net receipts shall be retained by the National Forest Trust to be spent managing and improving the lands and resources under the trusts jurisdiction;

(2) 20 percent of the gross receipts shall be paid to the states for the support of public schools;

(3) All remaining receipts, up to a maximum of 20 percent of the gross receipts, shall be paid to the National Biodiversity Trust Fund;

(4) All remaining receipts shall be deposited into

the general fund of the United States treasury.

(d) National Forest Trusts may retain 100 percent of any donations paid to the trusts to spend on managing and improving the lands and resources under the trust's jurisdiction, provided that such donations shall not be made in exchange for any goods or services provided by the National Forest unit in the trust's jurisdiction. Donations made in exchange for goods or services shall be considered user fees and shall be distributed as provided in section 5, paragraph c of this Act.

(e) The distributions of funds described in section 5, paragraphs c and d of this Act shall not be a part of the budget of the United States and shall not require annual approval or appropriation by the United States Congress.

(f) Funds appropriated to the National Forest Units and Wilderness Systems under section 5, paragraph b, and funds retained by the National Forest Units under section 5, paragraph c, and d of this Act that are not spent in any given fiscal year may be carried over by such National Forest or Wilderness System to be spent in any future fiscal year.

(h) Trust funds held by the Treasury in account for the Forest Service under the Act of August 11, 1916, the Knutsen-Vandenberg Act of 1930, the National Forest Roads and Trails Act of 1964, and the National Forest Management Act of 1976 as of the first day of the first fiscal year

after passage of this Act shall be made available to the National Forest Units that generated those funds so that they may be used for the purposes for which they were intended according to established plans approved by the Supervisors.

Section 6. CONSERVATION EASEMENTS

(a) Supervisors are authorized to sell resource rights in the form of conservation easements on National Forest System lands. Conservation easements may convey rights to timber harvesting, grazing, mineral development and/or other uses. Conservation easements may exist for a limited time or in perpetuity. The price of a conservation easement must equal or exceed the price of commodity uses foregone, adjusted for the difference in costs of administering the easement instead of the commodity use; in the case of renewable resources, the price should also be adjusted for the future value of the renewed resource commodities.

(b) Any agency of the Federal Executive, the States and any political or governmental subdivision thereof, any corporation, not-for-profit corporation, private entity or person may hold a conservation easement on national forest land. In a transaction involving a contract for use of forest or rangeland resources, any bids for a conservation easement on the area must be accorded equal weight with bids for traditional resource uses; the highest bid shall be accepted taking into account the true cost of a conservation

easement when adjusted according to the factors detailed in the previous paragraph.

(c) At the time that National Forest Unit boundaries are established in accordance with section 4, paragraph a, all existing wilderness areas and wild and scenic rivers found within proclaimed national forests are placed within a conservation easement, the term of which are consistent with the Wilderness Act of 1964 and the Wild and Scenic Rivers Act of 1968, in perpetuity.

Section 7. NATIONAL BIODIVERSITY TRUST

(a) The director of the Smithsonian Institute shall create a National Biodiversity Trust dedicated to protecting a repository of diverse ecosystems and habitat for threatened and endangered species of wildlife.

(b) The National Biodiversity Trust is to be governed by a Biodiversity Board of Trustees who shall administer funds in the National Biodiversity Trust Fund by purchasing conservation easements or paying landowners or land managers for providing habitat for threatened and endangered species of wildlife. The Biodiversity Board of Trustees shall consist of seven members selected by the director of the Smithsonian Institute each of whom is qualified in anthropology, biology, zoology, botany, ecology, or other life and social sciences.

(c) No more than 1 percent of the National Biodiversity Trust Fund may be used for administrative purposes. No more

than 20 percent of the National Biodiversity Trust Fund may be used for research and inventory purposes. The remainder of the fund must be dedicated to the protection of biodiversity, including but not limited to:

(1) The purchase of conservation easements on public or private land;

(2) Payments to public land managers or private landowners who provide habitat for threatened and endangered species of wildlife;

(3) Grants to federal, state or local agencies, or to corporations or individuals, in support of projects aimed at protecting or improving biodiversity.