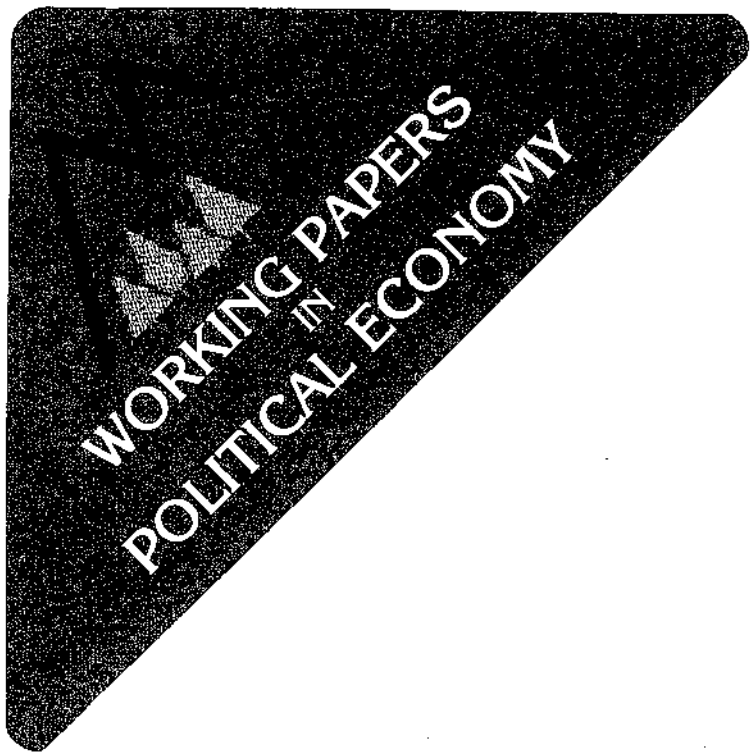

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INCREASING THE PRODUCTIVITY OF FEDERAL LAND MANAGEMENT: A CRITIQUE AND RECOMMENDATIONS FOR REFORM

Increasing the Productivity of Federal Land Management: A Critique and Recommendations for Reform

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These comments have a simple theme. Essentially, the movers and shakers, the producers, and the entrepreneurs of any society are those who contribute the most to their society's welfare. However, their contribution and productivity is heavily influenced by their institutional environment. In the U.S. that environment has become rather hostile for certain industries. This is largely because the mission and social function of entrepreneurs is seriously misunderstood and badly underappreciated.

The task of developing resources, of moving resources to more highly values uses, becomes increasingly difficult due to more rigid political constraints on such efforts. This is the expected outcome when decisions are moved to the political arena. Generalized efficiency enjoys no political constituency. Thus, and narrow special interests are able to thwart the productive impulses of those who produce society's real wealth. This is increasingly true when we turn to the question of the public lands, where during the 20th century, U.S. land policy has become one of centralized governmental planning, withdrawal of valuable tracts of land from economic development, and rigid regulation of human activities on the parcels remaining open for development. While some control (e.g., pollution control) is socially beneficial, beyond some limit the social costs of controls exceed their benefits.

This brief paper will outline elements of a successful public land management policy regarding development. It will identify and explain some of the problems faced by producers, will list criteria for good policy,

will suggest reforms of existing policy, and will conclude with a discussion of what individuals in the petroleum industry can do to improve the situation.

Elements of a Successful Public Land Policy

During this century there have been three basic approaches to public land management. This century began with the Progressive Era's "reforms" of resource management. This approach is associated with Teddy Roosevelt and Gifford Pinchot. The movement stressed the failures of an allegedly private property rights-market process orientation to resource management. A system of markets and property rights was to be replaced by one of government ally managed "scientific management." The architects of the Progressive vision failed to understand how markets operate, while grossly exaggerating both current problems and the expected benefits of their changes. Many were wildly optimistic about the potential improvements of "scientific" governmental management, while assuming that the private sector had a monopoly on self interest and the attendant social costs.

The goal of the Progressive Era was to develop highly competent, scientifically trained managers who were insulated from political pressures and who were motivated primarily by concern for the public interest, an interest that they could somehow divine. Essentially, those pushing for Progressive reforms sought a benevolent despot. Thus, the managers of the public lands were to be vestal virgins of the public interest. Fortunately, however, most of those associated with this movement tended to be oriented toward resource production rather than preservation and lockups of valuable resources.

Although the ideology of the Progressive Era still survives in some colleges of natural resources, in the real world, scientific management has

been replaced by interest group liberalism. This perspective, that society is composed of organized groups who articulate particular interests, is currently dominar

In this model, the miners, loggers, oil producers, ranchers, builders of subdivisions, speed boat enthusiasts, offroad vehicle operators, day trippers, backpackers, rock climbers, bird watchers, and preservationists (some call them Druids and tree huggers) are locked in a complicated, confusing battle for control of public policy. From this battle good policy is to emerge. Although trial by combat is considered a relic of the Middle Ages, it survives intact in the policy arena of natural resources.

Unfortunately, concurrent with this shift toward pluralism and interest group liberalism has been a change in the character of the public land managers, especially over the past decade and a half. The individuals populating the expanding federal natural resource agencies are often quite different from their predecessors. In my experience teaching and lecturing at natural resource colleges across the nation, I observe that few graduates in forestry have a timber background, and a decreasing proportion of graduates in range management come from ranches. Since Earth Day in 1970, a growing proportion of our future public land managers have been attracted to their disciplines because of an interest in the natural environment and ecology. These future graduates are the individuals who will orchestrate the public involvement meetings that are required for many land management programs, decisions, and developments.

The third approach to public land management, developed substantially by the Montana group and their associates, is based on property rights theory, an analysis of the market process, and entrepreneurship. This perspective, approximately one decade old, has had a major impact in the intellectual

community. It places emphasis on property rights, entrepreneurship, and institutions as generators of information and incentives. It also describes the pathology inherent in public sector management. It is generally agreed that this perspective has been largely developed by "the Montana Gang." Within the last several years it has achieved substantial attention in academic and legal journals, a growing number of books, publications by environmental groups, and such general circulation publications as The Mall Street Journal, Barron's, Los Angeles Times, and many regional newspapers. It is this approach that offers the greatest potential for constructive and responsible reform consistent with environmentally sensitive development.

Any successful public land management program must provide information and incentives that encourage resources to be moved to their most highly valued uses. There are, of course, problems of ranking the alternative uses. A few of these are listed below.

First, some uses such as backpacking, hunting, fishing, or birdwatching normally do not pass through markets. Thus, in the absence of prices, we can only crudely estimate their values. Similarly, it is virtually impossible to establish a dollar value on the maintenance of genetic diversity in undisturbed natural areas, environmental buffering, and the provision of water sheds.

A second problem involves the rational ignorance of voters who are increasingly ignorant about most aspects of their world. This is true for a simple reason: individuals continue to seek information only so long as the value of that information exceeds the cost of obtaining it in terms of time, attention, and similar considerations. For instance, for most of us the optimal amount of information about a television set is how to turn it on and how to select channels. Though we see it every day, for most of us it is simply a black box. Television works quite nicely without us knowing much of

anything about it and it would be a waste of valuable time for most of us to know more. Indeed, we substitute another valuable commodity, money, to buy a high quality television so that we can afford to remain ignorant of the electronic nuances of the T.V. In the same way most citizens are rationally ignorant or misinformed regarding the profits of oil companies, which they commonly believe to be 25 to 50 percent of gross sales. They are equally uninformed regarding the reversability of temporary damage to an ecosystem. Many believe that if an oil patch is developed the local ecology is destroyed forever. Thus, few people understand that environments differ dramatically in their sensitivity to human disturbances. While an alpine tundra at 11,000 feet may be extremely sensitive, a coastal swamp is incredibly tough and resilient. The swamp may be thrashed with a D-9 cat and a year later only the cat will be significantly worse for the wear.

The third problem involves the technical complexity of natural resource issues. Every important natural resource policy area involves the interaction of biophysical variables with economic, political, cultural, and social variables in a highly interdependent manner. Even professionals working fulltime on these issues have difficulty sorting out the implications of different policy choices. For the average citizen, the task would be virtually impossible even if he had incentives to study. Given that public decisions are public goods, these incentives are normally zero, or negligible.

The above problems are compounded by the fact that most issues involving natural resource policy are extremely emotional. The conjunction of technical complexity and high emotion provides a recipe for confusion, error, and acrimonious squabbling. When compounded by a lack of knowledge of the value of resources and the rational ignorance of voters, it becomes increasingly

easy to understand why resource decisions made in the public sector are far from optimal.

It is compellingly obvious that the current system is most seriously flawed. Land management decisions, like all others, are made on the basis of information and incentives. Institutions produce both information and incentives. Thus, to understand land management decisions, we are led to examine the institutional context of land management policy. Such an examination will reveal that the current land management institutions generate both poor information and perverse incentives which do not foster economic efficiency, productivity, and environmental quality. When examining the institutions surrounding public land management we normally encounter three types of problems which are briefly discussed below.

Institutional Problems of Public Land Management

First, economically inefficient and environmentally destructive development is promoted by the various federal resource management agencies. It is no surprise that most of the economical irrigation developments have been built privately. At the same time, projects advocated by the Bureau of Reclamation stand as colossal monuments to bureaucratic entrepreneurship and pork barrel politics. The Teton Dam, whose failure flooded portions of southern Idaho with over a billion dollars of damage, and the Garrison Diversion Project of North Dakota, "Dr. Strangelove's canal", are glaring examples of the economic inefficiency and environmental ruination associated with the porkbarrel politics of the transfer society. The U.S. Forest Service timber programs that return less than twenty cents for every federal dollar spent, are distressingly common in the high, dry, and fragile slopes of the Rockies. The situation is far worse in Alaska's Tongass National Forest,

where $2 is returned to the federal treasury for every $178 invested in timber harvest and management.

The Bureau of Land Management's chaining of pinion and juniper forest in the Southwest and the proposed capital intensive introduction of rest rotation grazing on from 87 percent to 92 percent of the grazing area under its jurisdiction provides additional evidence of the folly of collective management. In each of these cases, economic inefficieny is compounded with ecological destruction.

Inefficiency is the second hallmark of public sector management. When dealing with timber resources, government official do not charge interest on projects whose products will not come on line for years. Capital, in the form of standing inventory, is assumed to have no value. In the case of coal in a split estate, the law has been changed to require coal companies to secure the consent of the surface landowner prior to developing the resource. In such a situation, the surface owner can legally act as an extortionist, receiving huge windfall gains. Further, after the coal is mined on land whose surface value may be less than $50 per acre, $8,000 per acre may be mandated for its reclamation. When dealing with the development of oil and natural gas on public lands, excessive and unreasonable environmental controls produce endless delays such as those experienced by Marathon in Wyoming's Shoshone National Forest, obviously such delays dramatically increase exploration costs. Ultimately, this strongly discourages development of any sort regardless of very minor longrun environmental consequences.

The third problem is that the existing system does not force decision makers to confront the opportunity costs of a failure to develop. Those who will never receive the products that are not developed are unaware of the causes of increased scarcity, while those not employed in producing potential goods are equally uninformed regarding their losses. The federal

coal program is a classic example. Coal strip mines are not particularly attractive and neighbors, ranchers, and absent preservationists are understandably not enamored with the process of coal mining. But the failure to lease coal today for development 10 to 30 years into the future means in all probability higher electrical rates, less efficient productivity in the American economy, fewer job opportunities, higher costs for American goods and services, and probably the development of alternative and more environmentally damaging energy programs.

Why do the above problems exist? Each of these failures share fundamental, underlining causes.

First, as indicated above, general efficiency has no underlying constituency within our political system. While specific firms are, of course, sensitive to the efficiency of their particular operations, no one faces strong incentives to increase the efficiency of the general system.

The second reason is that consumers of amenities are buffered from the costs of preservation. Oil patches and timber sheds are also amenity sheds. Given that the consumption of amenity goods is not taxed, and that our marginal tax rates have increased most dramatically over the last 15 years, the relative value of environmental amenities has increased considerably, encouraging the growth of a politically powerful environmental community. Those who believe that they will be disadvantaged in terms of an amenity loss from development can gain no compensating benefits when the resources are owned by the public sector.

The third cause is simply the absence of owners or residual claimants. Compare, for example, the behavior of the Audubon Society on land it owns, such as the Rainey Preserve in Louisiana, with its attitude towards resource development in the Bob Marshall Wilderness. The same individuals act quite

responsibly when dealing with the development potential of their privately-owned sanctuaries, while strenuously resisting development on public lands. The ownership of a resource guarantees that the preferences of other potential resource users will at least be considered.

A fourth cause of poor management has to do with public perceptions. If the mythology is to be believed, the poor little environmental groups are on the side of Bambi and the Angels as they fight to protect the public interest from the rapacious multinational oil companies who set prices at whatever levels they want and who make from 25 to 50 percent profit on every gallon of gasoline sold. In the political arena, where perceptions count, there are no direct and immediate reality checks, such as agencies of the federal government going bankrupt, to constrain behavior. This, of course, is the classic problem of industrial management in socialized nations. While the press and a variety of researchers may point out serious governmental inefficiencies, they often wail in the policy wilderness.

A fifth underlying problem is that the United States has become a transfer society. Rather than being rewarded for increasing productivity, people have incentives to improve their positions by using the government to transfer resources from one group to another. The Wild Sheep Association, for example, uses the political process to prevent Marathon Oil from developing resources in the Shoshone National Forest. This constitutes a wealth transfer from the general society to those who have an interest in preserving this specific area for wild sheep. For such a policy to make sense, these wild sheep must be worth more than the value of the oil on those lands. Wild sheep, however, are by no means an endangered species. Further, it is not clear that the proposed oil development would injure, let alone destroy, the sheep habitat.

The final underlying cause of these problems is that when decisions are

made in the public sector, the merits of a policy are often measured in political terms. The relevant questions then become: how many votes will a resource management decision cost? How many does it produce?

The Montana Perspective on the New Resource Economics

The above discussion suggests that if economically efficient policies are developed as an alternative, we must first change institutions in order to change the information and incentives faced by decision makers. Authority to act must be tied with responsibility for actions. The individuals who use the legal and political system to preclude development are almost perfectly insulated from the consequences of failures to develop. A system where authority is not linked to responsibilty for action is inherently perverse. In such a setting, the rational strategy for environmental groups is to increase the costs of exploration and development. This may be done directly by imposing draconian environmental constraints and lengthy delays. Unless the fundamental institutional arrangements are changed, alternative policies are unlikely to generate net improvements. Thus, it is upon institutions that we should focus our attention. The Montana scholars have been developing constructive institutional reforms for over a decade. The following paragraphs deal with a few of those reforms.

Criteria for Good Policy

Good policy, in accord with the standard principles of welfare economics, encourages the movement of resources to their most valued uses. In examining the criteria for good policy, the closer we are to arrangements that generate market type information and incentives, the better the policy. There are five basic criteria constituting good policy:

1) Decision makers must have good information regarding the resource and the relative value of inputs and outputs.

2) Decision makers must face incentives to utilize the above information. Unemployed information obviously contributes very little.

3) Incentives encouraging constructive behavior among parties competing for resources should be available. Positive sum games are produced from constructive behavior and attitudes.

4) Good policy must foster entrepeneurial behavior. It is the entrepreneur who provides society's only free lunch. Policies which thwart entrepreneurial behavior generate suboptimal outcomes.

5) The authority to act must be linked with the responsibility for outcomes. In the absence of such a linkage, the relationship between benefits and costs become murky at best.

Alternative Policies: Potential for Reform

In evaluating reforms we should move from relatively minor, incremental approaches to a basic restructuring of institutions. This brief section begins with apparently modest reforms. The most obvious beginning is to amend the National Environmental Policy Act (NEPA) to specify what constitutes an acceptable Environmental Impact Statement (EIS). The current situation in the Shoshone National Forest represents a horror story of frustrated and needlessly expensive exploratory efforts. Given the lack of specificity under NEPA, radical preservationists can create an endless set of procedural hoops through which developers must jump before exploration commences. This relatively minor reform of NEPA would make it consistent with the original legislative intent and could make a major contribution to solving the immediate problem. Environmental Impact Statements cannot accurately portray all possible environmental effects of a proposed action and should not attempt

to do so. A streamlined process with a briefer, clearer final statement would actually be more useful to policymakers than the current unwieldy and expensive process.

A more radical alternative is to get people to think in terms of environmental and wilderness values as opposed to specific parcels of land. Thus, we have called for the development of "wilderness endowment boards" that would exist as nonprofit coorporations. They would be charged with fostering wilderness values. This is in marked contrast to preserving specific tracts of land.

A comparable arrangement is a college endowment. An individual may give 1,000 shares of Arco stock or a deed to a ranch to a college endowment. This presumably is not done to build a portfolio of specific assets but rather to generate revenues to foster education and research. Thus, the trustees of the endowment might sell the stock and build a different, more profitable, portfolio. In a similar manner, the ranch might be developed for its mineral potential. If the trustees are true to their mission there is little question that they could better enhance their educational objectives by such development.

In the case of wilderness, the endowment board would be remiss if it failed to develop the mineral potential of some lands and used the income generated to foster wilderness values by purchasing other lands, critical habitat, or easements. Given the extremely low value of most wilderness areas per acre, one acre sacrificed for development may yield several hundred acres in additional land. Again, the case of the Rainey Preserve is instructive.

The most radical reform would be the privatization of existing public lands with accompanying recreational easements and limited covenants on development, such as those on drilling activities in Audubon's Rainey Preserve. This would transfer public lands to the private sector and would meet the ideal criteria listed in the previous section. Again, though this

may be considered radical, modest experiments involving the transfer of wilderness areas, especially to environmental groups such as the Wilderness Society, Audubon, The Nature Conservancy, and similar organizations would prove to be valuable experiments. The liberal interest group theory of modern democracy claims to be pragmatic, flexible, and experimental. Surely, there should be nothing wrong with trying some experiments in this area. A good place to start would be with several tracts in different states which are up for review in the BLM wilderness studies, or in the proposed wilderness lands under the Forest Service's RARE II program.

What Can the Petroleum Industry Do?

I) Public Relations:

Because we are dealing in the policy arena, the first task involves public relations. Profit, which for many is a fourletter word, merits particular attention. Strenuous efforts should be made to inform the public of the actual size of oil company profits. They are commonly believed to range from 25 to 50 percent of gross sales. If one has the image of being a bloated "pollutocrat," he will be fair game in the political jungle. People should be informed that the function of prospective profits is to draw capital into promising enterprises. Such abominations as the Windfall Profits Tax discourage saving resources until a time when they are more valuable, while also discouraging the movement of capital to developments within the industry. Shortages, the predictable outcome, only occur when there is governmental interference precluding market clearing prices. This function should also be advertised.

An important part of a public relations campaign would focus on the reversibility of damage associated with resource development. People believe that oil field development leads to irreversible environmental damage. Few

understand that an oil well has a relatively short life span and that when it is exhausted the surrounding terrain can be quickly returned to its original condition. Demonstration projects would be highly valuable.

Television advertisements might be directed less to selling your product and more towards a discussion of your positive contributions to society and to visual demonstrations of reclaimed well sites, safety measures taken in drilling, production, transportation, and refining, as well as a thorough explanation of the OCS program. This is an industry effort of great consequence about which the general public knows very little.

The alleged damage associated with exploratory work should also be exposed. Again, demonstration sites would be useful. The environmental sensitivity of most areas is grossly exaggerated as is the damage associated with both exploration and development. If people believe that petroleum exploration and development in Montana's Bob Marshall Wilderness will lead to its total destruction, they can be expected to be opposed to such efforts. Under current arrangements, the professional leaders of environmental organizations have every incentive to amplify, exaggerate, and distort the anticipated negative consequences of resource development.

The secondary benefits arising from development should also be advertised. Prospective suppliers of labor and other inputs should be informed of potential benefits associated with development, as should consumers of products. The American Petroleum Institute is currently working on such a strategy.

It is especially important for policy relevant individuals to understand that an improvement in environmental quality is associated with increased wealth. The myth that there are necessary tradeoffs between economic development and environmental quality requires exposure. In general, efficiency enhancing developments lead to a higher quality environment.

You people have able and skilled public relations departments and you know far more about this sort of thing than I do, but at least to this relatively informed layman, who works daily with natural resource questions, it seems to me that the oil industry in general has been far too cautious in getting its message across, and far too intimidated by the possible political consequences of ardent advocacy.

II) Research, Publishing, and Scholarship.

Economists and other policy analysts who understand the industry's side in the public lands controversy hold both the intellectual and moral high ground. There are numerous scholars and researchers who understand the problems of developing resources on public lands and who are sensitive to the problems discussed above.

As the director of a research center, I am recurrently both amazed and frustrated by the degree to which businesses and their foundations attempt to assauge their guilt by giving money to their enemies.

Individuals in business should understand more fully that there is substantial scholarly support for the arguments that they know are right. Unless such thinking is fostered and encouraged, they are needlessly abandoning the potential for improved understanding that can lead to genuine reform. Ideas do in fact have consequences, and we are making substantial progress in spreading ideas that challenge both the rhetoric and the inefficiency that has evolved from Progressive Era mythologies and the porkbarrel transfers of interest group liberalism.

When it comes to the war of ideas, the business community is farsighted in the management of resources, in the deployment of capital, in the training of personnel, and in the funding of research and development. However, business also seems to be too narrowly focused on the concerns of the immediate

political fray. You are a great company I am sure that right now, throughout your organization, you are making plans and decisions that will pay off 30, 50, or even 100 years from now. Arco, I assume, plans to be around then. But you should be doing your part also to make sure that the ideas which sustain a political climate which allows you to do business are also around then. I admit that my own interests are involved here, but I assure that you relatively small expenditures, on a regular and sustained basis, to some of the intellectual think tanks working for the cause of liberty, sums that would only be a fraction of your normal public relations expenditures, would be funds well spent for the long policy battle ahead.

The Political Economy Research Center is an unusual organization. Our research orientation and level of commitment provide PERC associates with an important opportunity to analyze and make recommendations on economic and natural resource issues in both the governmental and private sectors. Approximately 50 percent of our efforts have been devoted to natural resource economics and policy, while the balance of our work deals with taxation, regulation, entrepreneurship, economic history, and a sprinkling of other topics. To the best of our knowledge, we are the only research organization with this orientation.

Since its founding in 1980, the Center has maintained a principled commitment to the development of a society of free and responsible individuals in their relations with one another and their environment. On the basis of considerable study and research, we expect these values to be fostered by social and political organizations relying on private property rights, the rule of willing consent, and the market process. Although we are sensitive to the problems of market failure, we recognize that there is an analogous set of problems with governmental management.

This paper is one of a series of research efforts supported by PERC.