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PROTECTING AMERICA'S PRECIOUS PLACES

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ABSTRACT: America's 90 million acre National Wilderness Preservation System requires an active management program to protect the values it protects. This paper suggests that several issues confront the process of developing an adequate and appropriate management program: (1) lack of understanding of the meaning of wilderness; (2) lack of knowledge of natural processes and wilderness clientele; (3) inadequate education and training of wilderness managers; (4) poor understanding of the social and economic consequences of maintaining natural processes; and too often viewing wilderness as a primitive recreation area. Four principles for developing management actions are identified: (1) maintenance of ecological processes and natural conditions should govern management; (2) wilderness dependent human uses should be emphasized; (3) involve the public in wilderness management planning; and (4) avoid actions that intrude into experiences.

Spring is a time of turbulence and the season's winds bring with them the metamorphosis to new life and the promise of futures still to be borne. Spring freshets are bold, enthusiastic, almost careless in their spirited tumble from snowy watersheds, yet alerting the sympathetic observer to the bright expectations of the coming months.

Like spring freshets and breezes, a global tempest in ideas is jolting us out of our settled and comfortable way of viewing the future. There is chaos, rather than tranquility, in our world. This is good because the upheaval in thinking bears fresh and energetic visions of what our world should become, of what is just and what is right. At no other time in the recent past have so many people in so many places peacefully revolted against the dominant paradigm of governing and economic systems. The awakening of peoples to their intrinsic rights as human beings encompasses more than how to govern, and like spring clouds upwelling on thermal drafts, will grow to encircle other questions and places as well.

Concerns about democracy, self-determination, environmental quality, ancient forests, and global warming shape the context of America's growing debate over the management of its most precious places. These precious places comprise our National Wilderness Preservation System, a system of about 500 units and over 90 million acres. Found in nearly every state, designated wilderness is truly a resource of priceless value, and forms an extraordinary yet essential bequest to our grandchildren. John Muir once noted that "wilderness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life." The fountain of life is our precious legacy; how we defend and protect it now determines what our grandchildren will receive later.

Wilderness is precious because the solitude and serenity found there are all too often isolated remnants of what life should be all about. Wilderness is precious because of the lessons it provides about natural ecosystems; lessons about diversity, change, relationships, process.

Wilderness is precious because it is sensitive to human-induced impacts, impacts which once they occur not only alter what we have protected, but become difficult to rectify. Wilderness is precious because it symbolizes not only what we value as a society but also because of the role it has played in our heritage.

Like the enthusiasm of a spring breeze displacing the staleness of a winter inversion, the blustery winds of global social change affect wilderness. I have previously spoken of the need to understand change and its implications for wilderness and wilderness management before: "The view of wilderness as a static (and beautiful) landscape is giving way to the notion that it is a dynamic (and sometimes ugly) place that is valued because freely operating ecological processes generate landscapes that are natural, shifting, complex and, to some extent, unpredictable" (McCool 1989). In wilderness, beauty is defined by process, not by outcome, and natural ecological changes will come to be understood, appreciated and valued. I have also noted how the definitions of parks and wildernesses are deeply embedded within our social values, and how, when those values change, conflict develops over the management of these resources (McCool 1983). Just as a summer thunderstorm breeds atmospheric drafts of incredible energy, social change leads to extraordinary struggles over management of our precious places.

Change forces us to deal with protecting the wild integrity of wilderness as an urgent responsibility. While we still argue over what additional pristine areas should be allocated to wilderness, management is arguably the most important issue confronting the system. Like the noble Bald Eagle or the magnificent Grizzly Bear, our Wilderness System is threatened, and the values it protects may be irreversibly lost in the next decade, thereby nullifying this gift to our heirs.

We know that our wilderness system is threatened. It is threatened by atmospheric

deposition from unwanted pollutants. It is threatened by boundaries that allow individual wildernesses to be designated without a full understanding of ecosystem processes. It is threatened by too many compromises in the legislative process that allow incompatible uses to continue and which provide little direction on how we should manage them. It is threatened by a serious shortage of professionally educated wilderness managers. It is threatened by an all too often species versus ecosystem management approach. And, in some places, wilderness values are threatened by the unacceptable impacts from recreational use. Simply put, our approach to protecting the wild integrity of these precious places is typified by too few resources in terms of appropriately trained staff, not enough money to monitor wilderness conditions, very little understanding of the historical and philosophical foundations of wilderness, and insufficient knowledge about the ecological complexities, nuances and consequences of natural systems. And like the endangered populations of the Bald Eagle, the Grizzly Bear or the Timber Wolf, neglect, even though benign, does not repair the damage wrought by unknowing actions.

What I would like to do today is to first briefly explore with you the major issues confronting the protection and management of America's precious places. Second, I propose basic principles of management that are prerequisites to bringing these precious places back from the brink of endangerment. My emphasis in this presentation is not so much on specific threats, but on how we must design our management to control them.

Management is required to protect or restore the wild integrity of these precious places. We cannot afford to put a line around them and leave them alone. The values are too important, too scarce, too irreversible and too endangered to manage by neglect. Our ordinary custodial, reactive and crisis-management styles of decision-making are no longer acceptable because of the various threats confronting the wilderness system. Management is more than

trail maintenance and litter pickup, it is an active, yet sensitive and systematic set of actions designed to resolve issues, reclaim sites, allow natural processes to operate, and permit visitors to enjoy the significant personal and social benefits of wilderness. Management involves establishing goals, monitoring change and impacts, setting standards of acceptable human-induced changes, rehabilitating sites, educating visitors, and, in a few places, more intrusive actions. Many battles have been fought over what lands should receive designation as wilderness. However, without management the values for which many have fought can be lost.

ISSUES IN IMPROVING THE QUALITY OF WILDERNESS MANAGEMENT

1. Lack of Understanding of the Meaning of Wilderness.

A specific philosophical tradition, rooted in the romanticist writings and transcendental philosophy of the 19th century guides the management of our precious places. Thoreau's famous statement "...In wildness is the preservation of the world" was a reaction to the human excesses of an industrial revolution that had little recognition of the values of wild things. George Catlin's call in 1833 for a nation's park where the Indian and buffalo would continue in "their pristine beauty and wildness" acknowledged the importance of maintaining primeval human-nature relationships in pristine settings. In some respects, this was an early cry for ecosystem management. John Muir, Bob Marshall, Joseph Wood Krutch, Sigurd Olson, Aldo Leopold and others built upon and strengthened this tradition of wildness as an integral component of American life.

At the National Wilderness Management Conference in Minneapolis in September 1989, U.S. Representative Bruce Vento called for a "revolution in wilderness management" needed to protect the integrity of wild places (Vento 1990).

This revolution can succeed if, and only if, our managers are deeply steeped in the philosophical, cultural, and historical heritage that is wilderness.

2. Poor Knowledge About Natural Processes and Wilderness Clientele.

One of the fascinating aspects of wilderness is that it protects the bustling energy of nature's complex and dynamic ecosystems. Indeed, a principal reason for wilderness is to preserve a few places in our increasingly developed planet where ecosystems can function without the unwanted interference of human occupation. We are only now beginning to identify, yet understand, the elaborate and still mysterious interactions among the flora, fauna and ecological processes endemic to wilderness.

We have made considerable progress in grasping the role of fire as a shaper of the vegetative mosaic. But how much do we understand about the more subtle second and third order ecological consequences of fire such as the effect on nutrient cycling and its impact on fish populations? Only recently have we identified how changes in air quality may affect the biotic environment, but we have yet to understand how other forces of nature — avalanches, earthquakes, insects, animals, meteorological events, floods—interact.

We also lack a healthy understanding of the social and psychological values of wilderness, and the implications of these values for protection and management. The scientific literature on these benefits and visitor attitudes toward wilderness environments is only now beginning to be cumulative (Driver et al. 1987; Stankey and Schreyer 1987). Nearly all wilderness research on people has been directed at recreational uses; we know little about the spiritual, educational and personal development uses and values of wilderness. And, after 25 years of wilderness management, we still have no reliable and cost effective method of estimating and reporting how many people visit wilderness. How can we possibly manage human

uses of wilderness if we lack the basic inventory information about those uses?

3. Inadequate Training and Education of Wilderness Managers.

Many of the recently designated wildernesses occur on National Forest and Bureau of Land Management districts that previously had no mission in management of protected lands. Natural resource management oriented toward extracting material goods and services and a philosophy of turning wild environments into more domesticated and controllable ones dominates these units. Protecting a naturally functioning ecosystem is a new responsibility for these managers. Yet, few are trained in understanding wilderness, and its values and philosophy.

Our professional land management schools have done little to provide the needed academic background for the wilderness management task. Most train land managers well in extracting commercial products from wildlands; few train managers in understanding amenity resources and appreciating the nondollar benefits of pristine environments or the subtleties of working with natural processes instead of replacing them. And, we have not done well in instructing our students about the realities of working in a dynamic, even chaotic, social framework where politics is a legitimate component of the decision-making process.

4. Social and Economic Consequences of Maintaining Ecological Processes are Poorly Understood.

I spoke earlier about how little we now know about natural processes in wilderness. Comparatively, our understanding of the social and economic consequences of these natural processes is meager. Yet, it is the social-political system that drives wilderness designation and management. We, as a profession of resource managers have been too timid about working with users of wilderness: we rarely contact our

clients, preferring instead the appearance, if not reality, of the socially safer shelter of ranger stations and backcountry patrols. Our clients have little understanding of what wilderness management is about, and we, in turn, know little about how our clients feel about management actions.

An excellent example of not learning about the social and political consequences of natural processes are the fires of 1988, many of which were naturally occurring. The fires produced a wave of confusion in the public, as well as among natural resource managers, about the capacity of a system to absorb natural events even though we explicitly desired such to happen. We were not prepared for the social and economic consequences of these events. Nor did we design and implement the research programs to learn from these events.

5. Wilderness is Too Often Viewed as an Area for Primitive Recreation.

Wilderness is a special place, one that contains values which depend on unmodified natural environments where ecological processes operate freely. The polemical literature documents these values that, to some extent, are substantiated by the technical and scientific literature. They include spiritual, personal renewal, solitude, learning, appreciation of natural processes, scientific, historic, aesthetic and many other values, including recreation.

There is a significant tendency to view wilderness as only a place to recreate. For example, in written testimony submitted to the U.S. House Subcommittee on National Parks and Public Lands, Cliff Merritt (Executive Director, American Wilderness Alliance) stated that "Many Forest Service officials consider wilderness areas largely as recreation areas. This is a major error that, if pursued, will result in the ultimate destruction of wilderness" (Merritt 1989).

One example of this orientation is the tendency to view wilderness as a place to hunt

and fish, and state fish and game agencies, by and large do little to dissuade the public of this image. Another example is the overriding attention given to the issue of recreational use and carrying capacity in the literature of wilderness management.

PRINCIPLES

I noted earlier several factors that threaten the wild integrity of America's precious places. Other writers have documented these threats so I need not discuss them in detail here (see for example General Accounting Office 1989). However, I do wish to briefly discuss some principles that should be applied in wilderness management to deal with these threats and to otherwise respond to various management problems.

1. Maintenance of Ecological Processes and Protection of Wild Integrity Should Govern Management.

The value of our precious places lies in their wildness. We can maintain that wildness only if we allow natural processes to take place wherever we have designated wilderness. All management actions should be judged by the criterion of what impact they would have on ecological processes and wild integrity. Too often, we look upon natural processes as something that has to be tamed or controlled or influenced.

Unfortunately, this orientation carries over into our management of wilderness. It has taken a longtime, but we have finally come to grips with the role of fire, but are we too eager to burn the wilderness? We view lack of fire as something that must be corrected immediately, and thus we see proposals to introduce planned ignitions in wilderness to make up for fire suppression in the past. Planned ignitions in many situations, particularly in the northern Rockies may not be needed because the period of fire suppression is only a fraction of the

natural fire frequency. Planned ignition is inappropriate because it is just another way of introducing human influences on a natural landscape.

Another area of human influence over natural processes is that of fishing and hunting in wilderness. Many wildernesses contain non-native fish species, put there for the convenience of anglers. There is a real question whether plantings should continue and whether agencies should work to eliminate non-native species. Hunting undoubtedly changes the natural population structure of game species, as well as the population's reaction to seasonal and yearly changes in forage and precipitation. What are these impacts? Are they acceptable? If the impacts from hunting on natural processes are acceptable, why not impacts from other human activities?

These are important questions not only from the perspective of the impact on the wild integrity of a precious place, but also from the point of view of other recreationists who do want to view wildlife populations that are culturally manipulated.

2. Wilderness Dependent Human Uses Should Be Emphasized, Others Should Be Moved Elsewhere.

People can make many types of uses of wilderness that depend on its wild integrity. For this reason alone, they are special places. We need to identify those uses, such as primitive recreation, spiritual activities, learning about and appreciating wildness and natural processes, and human development, and manage for them. Other recreational uses should be encouraged to occur in different types of primitive settings. Our precious places are simply too much in demand to allow those uses that do not require wild integrity or natural processes to occur in wilderness.

3. Involve the Public in Wilderness Management Planning.

Wilderness exists because a few people had the wisdom to protect it. We've learned that a variety of actors are involved in any given wilderness management situation. To make management work, cooperative efforts with different agencies and citizen groups is essential. We can term this principle developing partnerships, or we can call it simply good management, but interagency cooperation and coordination together with legitimate public involvement is essential to preserving the integrity of America's precious places.

Of particular importance are the crucial cooperative efforts with members of the affected publics. Getting publics involved early in the management planning process can avoid unnecessary conflict, promote communication and education, take advantage of the public's expertise and knowledge, and can build a constituency informed about the complexities and nuances of wilderness management. I note that we have much to learn about developing a dialogue and promoting opportunities for mutual learning with our publics.

4. Avoid Actions that Intrude into Experiences.

Wilderness is as special as it is precious. This specialness is reflected in several lines by Robert Service:

"Have ever you stood where the silences brood;

And vast the horizons begin,
At the dawn of the day to behold far away
The goal you would strive for and win?"

The vastness can be as much mental as geographical, and the freedom and escape such vastness provides can be easily destroyed by management actions that unnecessarily trespass on one's mind.

All too often we have sought the regulatory route to solving problems, particularly recreational impact ones, that are best settled with creative information and education. A brief review of wilderness management plans indicates, for example, that agencies regulate where people may camp, how they will camp, how many people can camp in a group and how long they can camp. We control but do we educate? We restrict, but do we inform? We limit, but do we instruct? Many of these regulations are as unnecessary as they are ineffective and costly. More importantly, however, they intrude into and conflict with the wildness of the experience, thereby compromising its integrity.

Applying these principles and protecting our precious places will not be simple, easy or economical. But it will be a bargain, for we will have ensured that the legacy of wildness persists, and that our children will come to know and benefit as we have.

I know that springs in Cache Valley can be abrupt, and summer weather will be shortly upon you. The change to summer is not only a change, but brings with it a clearer view of the future that was promised with the birth of spring. Just as streams in summer run clear, allowing us to see the mysteries that were once muddied by the water's hurried rush downhill, our vision of wilderness management is now plain to see. We should be using the rush and enthusiasm of the first quarter century of wilderness management to build the knowledge and wisdom to protect an enduring resource of wilderness — our precious places.

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