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## Wilderness Management Principles

The following discussion has been drawn directly from the *Wilderness Management* text referenced below. Chapter 7 of the text provides a very insightful and useful discussion of wilderness management principles—the following is intended as an executive summary for quick reference. See *Wilderness Management; Stewardship and Protection of Resources and Values*, 3<sup>rd</sup> edition, by John C. Hendee and Chad P. Dawson, 2002 and [http://fulcrum-books.com/html/wilderness\\_management.html](http://fulcrum-books.com/html/wilderness_management.html)

Wilderness management is complex. Problem solutions are almost a challenge and often require much research, thought and collaboration. A manager well grounded in fundamental wilderness principles, however, will have an easier time formulating solid, defensible, and consistent answers to problems.

These principles are summarized below:

### **1. Manage wilderness as the most pristine extreme on the environmental modification spectrum.**

This principle visualizes categorizing Federal lands on a spectrum or continuum according to the level of development and management intensity. This spectrum runs from paved to primeval. Wilderness must be viewed as the primitive extreme of this environmental modification spectrum being the least affected by man of these lands.

The essence of this principle is that wilderness management is to maintain the wild quality (naturalness and opportunities for solitude) that distinguishes designated wilderness from other lands. Also vital to protecting wilderness are lands that can provide commodities and other recreation opportunities not dependent on the same degree of wildness and solitude that are essential in wilderness.

### **2. Manage wilderness comprehensively, not as separate parts.**

The primary goal of wilderness management is to protect intact ecosystems and to encourage natural processes and conditions to operate free from human influence. An ecosystem management approach that recognizes the dynamic and interconnected nature of all components of these wilderness ecosystems is what is needed.

### **3. Manage wilderness, and the sites within, under a non-degradation concept.**

Within individual components of the NWPS sites and areas often range dramatically in terms of their naturalness and the opportunities offered for solitude. “As applied to wilderness the non-degradation principle recognizes that naturalness and solitude vary between and within each wilderness. The objective is to prevent degradation of current naturalness and opportunities for solitude in each wilderness and to restore and raise substandard levels to minimum standards rather than letting all areas in the NWPS decline to a common minimum.

#### **4. Manage human influences, a key to wilderness protection.**

Considering all of the growing external influences on wilderness (from fire control to weather modification to pollution) and all of the internal influences (ranging from grazing to growing recreation use to water resource developments to statutory special provisions) few would deny that managing human influences in and on wilderness should be a managers first priority. Where possible, managers should focus on managing human influences from outside wilderness.

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” Sec. 2, 1964 Wilderness Act.

The term “untrammelled” was specifically chosen for its nuance and meaning – “not subject to human controls and manipulations that hamper the free play of natural forces.”

“A wilderness... is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with imprint of man’s work substantially unnoticeable; (2) has outstandingly remarkable opportunities for solitude or a primitive and unconfined type of recreation...” ’64 Wilderness Act. Sec. 2

#### **5. Manage wilderness biocentrically to produce human values and benefits.**

The extremes of land and resource management philosophies have been characterized as anthropocentric or biocentric. “Anthropocentric” suggests a management orientation that focuses on optimizing human values and experiences by maximum environmental modification. It sees humans as the central feature of the universe and the environment as a medium to shape for human comfort, convenience and sustenance. Such a philosophy might include improving access, eliminating risks, and

insulating visitors from the weather. When something goes wrong “anthropocentrists” are confident technology can fix the problem.

A “biocentric”, or better, an “ecocentric” management philosophy suggests management strategies that work to benefit society by maximizing natural conditions and processes. An analogy might be organic gardening versus gardening emphasizing use of pesticides and chemical fertilizers.

Several areas of benefits are produced by an ecocentric wilderness management approach with wilderness:

1. Character building values of wilderness are vital to society.
  - a. Encourages individualism and teamwork at the same time.
  - b. Encourages development of leadership skills.
  - c. Encourages the spirit of freedom and risk taking.
  - d. Encourages an entrepreneurial spirit.
  - e. Encourages self sufficiency.
2. Large unaltered ecosystems provide a wellness benchmark against which to measure actively managed ecosystems. Few large unaltered ecosystems, especially aggregations of unaltered ecosystems exist outside wilderness.
3. Large unaltered tracts of land are testament to what the nation’s forebears experienced in pioneering and developing most of the continent. These areas are the vestiges of the continents natural landscapes.
4. Wilderness can perpetuate primitive skills using tools for trail maintenance (such as using an axe and crosscut saw), primitive travel skills (such as packing with livestock). It can also provide a sense of what explorers and pioneers had to surmount to settle and develop the majority of North America.
5. Mental and physical health... the stress reducer, a “disconnect”, healthy body/healthy mind, burns fat.
6. Other

There is within an eco-centric management philosophy potential for a quality distinction among components of the NWPS. The larger it is, and the more unaltered it is, the more amplified are all of the benefits described above.

## **6. Favor wilderness-dependent activities.**

Wilderness can be the setting for many activities. “Whenever one or more uses conflict or compete for access, the principle of wilderness dependency, which calls for favoring activities most dependent on wilderness conditions, is used to guide visitor management toward preventing overuse.”

“Defining an activity as “wilderness dependent” can be difficult. Often it is not the activity itself that is dependent, but the particular style in which it is pursued.” Hunting and fishing in remote locations with little or no human interaction and especially with more primitive techniques, are good examples of activities with wilderness dependent style.

The key is being able to favor wilderness dependent activities in wilderness is having alternative non-wilderness areas where the non-wilderness dependent activities can occur.

## **7. Guide wilderness management by using written plans with specific area objectives.**

Wilderness management actions must be guided by formal plans that describe clear people-management objectives and site specific remedial measures. All planned actions must be consistent with agency policies and regulations and supportive of the direction in the '64 Wilderness Act. Public involvement is a fundamental part of wilderness planning.

“Wilderness management plans must include specific objectives – clear statements of desired wilderness conditions so proposed management actions can be evaluated for their potential contribution to the specific objectives.”

The inevitable outcome of not using a well crafted plan is that managers will apply well intentioned but unsound decisions and actions based on personal philosophy, faith, ungrounded definitions. “The combined impact of these uncoordinated actions (a tyranny of small decisions) can depreciate wilderness values.”

## **8. Set human carrying capacities to recognize limits of use to sustaining wilderness character.**

“Wilderness has limited capacity to absorb the impacts of use and still retain its wilderness qualities.” The broad concept of carrying capacity is that as use increases and/or as impactful behavior increases the wilderness resource may be affected and wilderness qualities may be degraded or disappear. “Carrying capacity is the amount of use an area can tolerate without unacceptable change in conditions.”

As applied to wilderness carrying capacity is usually from two perspectives. First, is the physical-biological dimension and the second is the social-psychological dimension. These two points of reference derive from the “64 Wilderness Act. “A wilderness...is... an area retaining its primeval character and influence... which is protected and managed so as

to preserve its natural conditions... and... has outstanding opportunities for solitude or primitive and unconfined type of recreation.”

As it relates to wilderness carrying capacity is relative and not a precise number. Four points are offered for clarification.

- A. Carrying capacity will range according to wilderness management objectives, established standards and guidelines, as well as natural conditions like the weather.
- B. Carrying capacity must be established by involved public and engaged managers.
- C. Carrying capacity is affected by both biological-physical factors, the values of naturalness in wilderness, and social-psychological factors, the human experience factors.
- D. The development of carrying capacity estimates must be tied into the management units land use planning process for areas and activities where wilderness character might be negatively affected.

#### **9. Focus management on threatened sites and damaging activities.**

Selectively focus management actions on site specific problems where impacts are most severe and most long lasting rather than broadly applying the same management prescription to an entire wilderness.

When restrictions are necessary they should be focused on effectively changing or eliminating behaviors causing the unacceptable impacts.

Recognize that “to minimize excessive environmental and social-psychological impacts, restrictions should be selective to times, at places, and to activities having the greatest potential for damage.”

Many decisions based on judgment must be made in wilderness management and, even with principles and criteria to guide decision logic, it is not an exact science. Sensitive managers willing to make decisions and to adjust those decisions as appropriate, are required.

#### **10. Apply only the minimum tools, regulations, or force to achieve wilderness area objectives.**

Wilderness embodies opportunities for solitude, for freedom, for a “disconnect” from the high tech. high pressure world and the opportunity to reconnect with the natural world. Both visitor impacts and management of visitors in wilderness can degrade its essential qualities.

“The guiding principle is that only the minimum tool, regulation, or force necessary to achieve established wilderness objectives is justified. This principle is sometimes called the minimum tool rule – apply only the

minimum tool, equipment, device, force, regulation, action, or practice that will bring the desired result.”

“Wilderness management actions fall on a continuum, ranging from subtle, light-handed and indirect options, to direct and authoritarian options – such as telling visitors where they can travel and camp each day, and how long they can stay. However, a key goal of wilderness management is to use indirect methods whenever and wherever possible to delay and minimize the need for direct controls.”

## **11. Involve the public as a key to the success of wilderness management.**

In 1969 the National Environmental Policy Act and subsequent agency policies mandate public involvement in designation and management of wilderness.

“...Public involvement is recognized as perhaps the most important tool for successful development and implementation of wilderness management plans and actions...”

“Any proposed wilderness management action needs public involvement as a source of practical information and essential public support...”

Another form of public participation, that of managing volunteers to do the work of wilderness management, has become essential and common place in many areas. A basic reality is that public involvement in the every day management of wilderness can be an invaluable management tool for growing appreciation and support for wilderness values.

## **12. Monitor wilderness conditions and experience opportunities to guide long-term wilderness stewardship.**

Any management plan or program needs monitoring system to evaluate progress in meeting prescribed objectives and to evaluate the success of management actions and/or the need to redirect those efforts.

Few activities are as important to the future of the NWPS as an inclusive and objective monitoring program that includes biological, physical, and social conditions.

“Wilderness provides enclaves of the earth’s most natural remaining areas and can be a benchmark source of information of the degree of distortion of natural processes elsewhere – but only if sufficiently detailed information is collected and made available of use as environmental baselines.”

### **13. Manage wilderness in relation to management of adjacent lands.**

“What goes on outside of, but adjacent to a wilderness can have substantial impacts inside its boundaries. Conversely, the designation of a tract of land as a wilderness can substantially affect the management of adjacent areas.”

An easy way to visualize this principle is to think of managing timber harvest, road construction, or the construction of high density use recreation facilities (like a major campground, visitor center, resort or a ski area) immediately adjacent to a wilderness area. These management activities and the level of development they typically produce can affect wilderness by dramatically improving easy access, increasing the risk of man caused wild fire, and can dramatically affect fish and wildlife populations, habitat, and movement. Conversely, wilderness can also affect prudent land management on adjacent non-wilderness lands.

“The best protection for wilderness from impacts originating on surrounding lands is through comprehensive land use planning that anticipates potential conflicts and addresses the complimentary and competitive relationships between wilderness and adjacent lands.”

For additional information, research and science, and on-line education opportunities on the Wilderness Management Principles go to [www.wilderness.net](http://www.wilderness.net) Home Page, click on Search, enter Wilderness Management Principles.