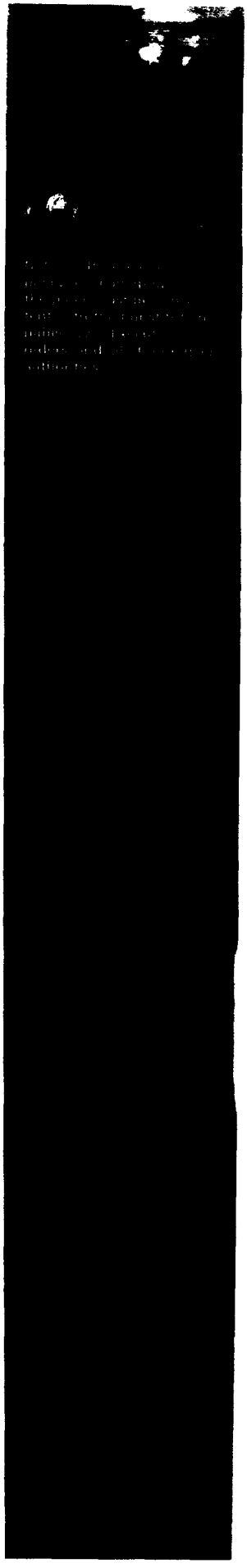
Management Policies 2001

Introduction

Law, Policy, and Other Guidance



This volume is the basic Service-wide policy document of the National Park Service. Adherence to policy is mandatory unless specifically waived or modified by the Secretary, the Assistant Secretary, or the Director.

> tent with and founded in the purpose established by section 1 of this title [the Organic Act provision quoted above], to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress. (16 USC 1a-1)

This section 1.4 of Management Policies represents the agency's interpretation of these key statutory provisions.

1.4.2 "Impairment" and "Derogation": One Standard

Congress intended the language of the Redwood amendment to the General Authorities Act to reiterate the provisions of the Organic Act, not create a substantively different management standard. The House committee report described the Redwood amendment as a "declaration by Congress" that the promotion and regulation of the national park system is to be consistent with the Organic Act. The Senate committee report stated that under the Redwood amendment, "The Secretary has an absolute duty, which is not to be compromised, to fulfill the mandate of the 1916 Act to take whatever actions and seek whatever relief as will safeguard the units of the national park system." So, although the Organic Act and the General Authorities Act, as amended by the Redwood amendment, use different wording ("unimpaired" and "derogation") to describe what the National Park Service must avoid, they define a single standard for the management of the national park system—not two different standards. For simplicity, Management Policies uses "impairment," not both statutory phrases, to refer to that single standard.

1.4.3 The NPS Obligation to Conserve and Provide for Enjoyment of Park Resources and Values

The "fundamental purpose" of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment, and so applies all the time, with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values.

The fundamental purpose of all parks also includes providing for the enjoyment of park resources and values by the people of the United States. The "enjoyment" that is contemplated by the statute is broad; it is the enjoyment of all the people of the United States, not just those who visit parks, and so includes enjoyment both by people who directly experience parks and by those who appreciate them from afar. It also includes deriving benefit (including scientific knowledge) and inspiration from parks, as well as other forms of enjoyment. Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. This is how courts have consistently interpreted the Organic Act, in decisions that variously describe it as making "resource protection the primary goal" or "resource protection the overarching concern," or as establishing a "primary mission of resource conservation," a "conservation mandate," "an overriding preservation mandate," "an overarching goal of resource protection," or "but a single purpose, namely, conservation."

1.4.4 The Prohibition on Impairment of Park Resources and Values

While Congress has given the Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement (enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The impairment of park resources and values may not be allowed by the Service unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment.

1.4.5 What Constitutes Impairment of Park Resources and Values

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact to any park resource or value may constitute an impairment. An impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment to the extent that it is an unavoidable result, which cannot reasonably be further mitigated, of an action necessary to preserve or restore the integrity of park resources or values.

Impairment may occur from visitor activities; NPS activities in the course of managing a park; or activities undertaken by concessioners, contractors, and others operating in the park.

1.4.6 What Constitutes Park Resources and Values

The "park resources and values" that are subject to the no-impairment standard include:

- The park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- Opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing any of them;
- The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- Any additional attributes encompassed by the specific values and purposes for which it was established.

1.4.7 Decision-making Requirements to Avoid Impairments

Before approving a proposed action that could lead to an impairment of park resources and values, an NPS decision-maker must consider the impacts of the proposed action and determine, in writing, that the activity will not lead to an impairment of park resources and values. If there would be an impairment, the action may not be approved.

In making a determination of whether there would be an impairment, a National Park Service decision- maker must use his or her professional judgment. The decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); relevant scientific studies, and other sources of information; and public comments.

When an NPS decision-maker becomes aware that an ongoing activity might have led or might be leading to an impairment of park resources or values, he or she must investigate and determine if there is, or will be, an impairment. Whenever practicable, such an investigation and determination will be made as part of an appropriate park planning process undertaken for other purposes. If it determined that there is, or will be, such an impairment, the Director must take appropriate action, to the extent possible within the Service's authorities and available resources, to eliminate the impairment. The action must eliminate the impairment as soon as reasonably possible, taking into consideration the nature, duration, magnitude, and other characteristics of the impacts to park resources and values, as well as the requirements of NEPA, the Administrative Procedure Act, and other applicable law.

(See Levels of Park Planning 2.3;Evaluating Environmental Impacts 4.1.3; Planning 5.2; General 8.1; Visitor Use 8.2; General 9.1. Also see Director's Order #12: Conservation Planning and Environmental Impact Analysis)

1.5 External Threats and Opportunities

Strategies and actions beyond park boundaries have become increasingly necessary as the National Park Service strives to fulfill its mandate to preserve the natural and cultural resources of parks unimpaired for future generations. Ecological processes cross park boundaries, and park boundaries may not incorporate all of the natural resources, cultural sites, and scenic vistas that relate to park resources or the quality of the visitor experience. Therefore, activities proposed for adjacent lands may significantly affect park programs, resources, and values. Conversely, Park Service activities may have impacts outside park boundaries. Recognizing that parks are integral parts of larger regional environments, the Service will work cooperatively with others to anticipate, avoid, and resolve potential conflicts; protect park resources and values; provide for visitor enjoyment; and address mutual interests in the quality of life of community residents, including matters such as compatible economic development and resource and environmental protection. Such local and regional cooperation may involve other federal agencies; tribal, state, and local governments; neighboring landowners; non-governmental organizations; and all other concerned parties.

The Service will use all available authorities to protect park resources and values from potentially harmful activities. Superintendents will monitor land use proposals and changes to adjacent lands, and their potential impacts on park resources and values. It is appropriate for superintendents to engage constructively with the broader community in the same way that any good neighbor would. Superintendents will encourage compatible adjacent land uses, and seek to mitigate potential adverse effects on park resources and values by actively participating in the planning and regulatory processes of other federal agencies, and tribal, state, and local governments, having jurisdiction over property affecting, or affected by, the park. When engaged in these activities, superintendents should promote better understanding and communication by documenting the park's concerns and sharing them with all who are interested, and by listening to the concerns of those who are affected by the park's actions.

(See Cooperative Planning 2.3.1.9; Addressing Threats from External Sources 3.4; Air Quality 4.7.1; Soundscape Management 4.9)

1.6 Environmental Leadership

Given the scope of its responsibility for the resources and values entrusted to its care, the Service has an obligation, as well as a unique opportunity, to demonstrate leadership in environmental stewardship. The NPS must lead by example not only for visitors, other governmental agencies, the private sector, and the public at large, but also for a world-wide audience. Touching so many lives, the Service's management of the parks must awaken the potential of each individual to play a proactive role in protecting the environment.

environment (both internal and external in relation to park boundaries). The collection and analysis of information about park resources will be a continuous process that will help ensure that decisions are consistent with park purposes.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Planning for Natural Resource Management 4.1.1; Planning 5.2)

2.3.1.6 Public Involvement

Members of the public—including existing and potential visitors, park neighbors, people with traditional cultural ties to lands within the park, concessioners, cooperating associations, other partners, scientists and scholars, and other government agencies—will be encouraged to participate during the preparation of a GMP and the associated environmental analysis. Public involvement will meet NEPA and other federal requirements for identifying the scope of issues, for developing the range of alternatives considered in planning, for reviewing the analysis of potential impacts, and for disclosing the rationale for decisions about the park's future. The Service will use the public involvement process to share information about legal and policy mandates, the planning process, issues, and proposed management directions; learn about the values placed by other people and groups on the same resources and visitor experiences; and build support for implementing the plan among local interests, visitors, Congress, and others at the regional and national level.

While the NPS will encourage public involvement, FACA allows NPS staff to meet or consult with individuals and groups only for the purpose of exchanging views and information, and to solicit individual advice on proposed NPS actions. If consensus advice is sought, an advisory committee must first be chartered pursuant to FACA.

(See Consultation 5.2.1. Also see NPS Guide to the Federal Advisory Committee Act)

2.3.1.7 Alternative Futures

Alternative futures for the park will be explored and assessed during general management planning and environmental analysis. Within the broad parameters of the park mission and mission goals, various approaches to park resource preservation, use, and development may be possible, some of which may represent competing demands for the same resource base. The GMP will be the principal tool for resolving such issues. The range of alternatives will examine different combinations of management prescriptions, within the limits of laws, regulations, and policies governing national parks.

2.3.1.8 Environmental Analysis

The analysis of alternatives will meet the program standards for NPS implementation of NEPA and related legislation, including the National Historic Preservation Act (NHPA). An environmental impact statement (EIS) will be prepared for GMPs. In a few cases, the Environmental Quality Division, through the Associate Director for Natural Resource Stewardship and Science, may approve an exception to this general rule if completion of scoping demonstrates that there is no public controversy concerning potential environmental effects, and when the initial analysis of alternatives clearly indicates there is no potential for significant impact by any alternative. Where NEPA and sections 106 and 110 of NHPA (16 USC 470f and 470h-2, respectively) both apply, NEPA procedures will be used to inform the public about undertakings having the potential to affect properties listed on, or eligible for listing on, the National Register of Historic Places, consistent with the Advisory Council on Historic Preservation's regulatory provisions governing coordination with NEPA, and the NPS nationwide programmatic agreement on section 106 compliance.

(See Evaluating Impacts on Natural Resources 4.1.3; Planning 5.2. Also see Director's Order #12: Conservation Planning and Environmental Impact Analysis)

2.3.1.9 Cooperative Planning

General management planning will be conducted as part of cooperative regional planning and ecosystem planning whenever possible. NPS participation in cooperative regional planning will be undertaken with the hope of better coordinating and focusing the independent and autonomous efforts of multiple parties. Service participation in such planning efforts will acknowledge the rights and interests of other landowners. While being consistent with NPS management policies and park goals, plans will identify and consider potential effects outside, as well as inside, park boundaries, and will identify ways to enhance beneficial effects and mitigate adverse effects.

2.3.1.10 Wild and Scenic Rivers

Potential national wild and scenic rivers will be considered in planning for the use and development of water and related land resources. The Service will compile a complete listing of all rivers and river segments in the national park system that it considers eligible for the national wild and scenic rivers system. GMPs and other plans potentially affecting river resources will propose no actions that could adversely affect the values that qualify a river for the national wild and scenic rivers system. A determination of eligibility will not necessarily mean that the Service will seek designation, which requires legislation. A decision concerning whether or not to seek designation will be made through a GMP, or an amendment to an existing GMP, and the legislative review process.

2.3.1.11 Alaska Park Units

GMPs for park system units in Alaska that were established or expanded by ANILCA will address the provisions for conservation and management planning specified in section 1301 of that act (16 USC 3191).

2.3.1.12 Periodic Review of GMPs

As necessary, GMPs will be reviewed and amended or revised, or a new plan will be prepared, to keep them current. GMP reviews may be needed every 10 to 15 years, or sooner if conditions change more rapidly. Even in parks with strong traditions and established patterns of use and development, managers will be responsible for assessing whether resources are threatened with impairment, the visitor experience has been degraded, or the park's built environment is difficult to sustain. Periodically reassessing the GMP will give everyone with a major stake in the park an opportunity to re-validate the park's role in the nation and in the region, and to re-evaluate whether the kinds of resource conditions and visitor experiences being pursued are the best possible mix for the future. An approved GMP may be amended or revised, rather than a new plan prepared, if condi-

tion also may involve coordinating management activities in two or more separate areas, integrating management practices to reduce conflicts, coordinating research, sharing data and expertise, exchanging native biological resources for species management or ecosystem restoration purposes, establishing native wildlife corridors, and providing essential habitats adjacent to, or across, park boundaries.

In addition, the Service will seek the cooperation of others in minimizing the impacts of influences originating outside parks by controlling noise and artificial lighting, maintaining water quality and quantity, eliminating toxic substances, preserving scenic views, improving air quality, preserving wetlands, protecting threatened or endangered species, eliminating exotic species, managing the use of pesticides, protecting shoreline processes, managing fires, managing boundary influences, and in using other means of preserving and protecting natural resources.

(See External Threats and Opportunities 1.5; Partnerships 1.9; Addressing Threats from External Sources 3.4; Agreements 5.2.2)

4.1.5 Restoration of Natural Systems

The Service will re-establish natural functions and processes in human-disturbed components of natural systems in parks unless otherwise directed by Congress. Landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, hurricanes, tornadoes, and fires, will be allowed to recover naturally unless manipulation is necessary to protect park developments or visitor safety. Impacts to natural systems resulting from human disturbances include the introduction of exotic species; the contamination of air, water, and soil; changes to hydrologic patterns and sediment transport; the acceleration of erosion and sedimentation; and the disruption of natural processes. The Service will seek to return human-disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The Service will use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of landscape and biological-community structure and function. Efforts may include, for example:

- Removal of exotic species;
- Removal of contaminants and non-historic structures or facilities;
- Restoration of abandoned mineral lands, abandoned or unauthorized roads, areas over-grazed by domestic animals, or disrupted natural waterways and/or shoreline processes;
- Restoration of areas disturbed by NPS administrative, management, or development activities (such as hazard tree removal, construction, or sand and gravel extraction) or by public use;
- Restoration of natural soundscapes; and
- Restoration of native plants and animals.

When park development is damaged or destroyed and replacement is necessary, the development will be replaced or relocated so as to promote the restoration of natural resources and processes.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Restoration of Native Plant and Animal Species 4.4.2.2; Management of Natural Landscapes 4.4.2.4; Siting Facilities to Avoid Natural Hazards 9.1.1.6. Also see Director's Order #18: Wildland fire Management)

4.1.6 Compensation for Injuries to Natural Resources

The Service will take all steps necessary to protect and restore natural resources and the environmental benefits they provide when actions of another party cause the destruction or loss of, or injury to, park resources or values.

Pursuant to the National Park System Resource Protection Act, the Service will:

- Determine the injury caused to natural resources, assess all appropriate damages, and monitor damages;
- Seek to recover all appropriate costs associated with responses to such actions, and the costs of assessing resource damages, including the direct costs of response, restoration, and monitoring activities; and
- Use all sums recovered in compensation for re source injuries to restore, replace, or acquire the equivalent of the resources that were the subject of the action.

(See Compensation for Damages 5.3.1.3. Also see Director's Order #30C: Damage Assessments)

4.2 Studies and Collections

The Service will encourage appropriately reviewed natural resource studies whenever such studies are consistent with applicable laws and policies. These studies support the NPS mission by providing the Service, the scientific community, and the public with an understanding of park resources, processes, values, and uses that will be cumulative and constantly refined. This approach will provide a scientific and scholarly basis for park planning, development, operations, management, education, and interpretive activities.

The term "studies," as used here, means short- or long-term scientific or scholarly investigations or educational activities that may involve natural resource surveys, inventories, monitoring, and research, including data and specimen collection. Studies include projects conducted by researchers and scholars in universities, foundations and other institutions, tribal colleges and organizations, other federal and state agencies, and Service staff. The data and information acquired through studies conducted in parks will be made publicly available, consistent with section 4.1.2.

The Service will promote cooperative relationships with educational and scientific institutions and qualified individuals offering expertise that can assist the Service in obtaining information, and when the opportunity for research and study in the parks offers the cooperators a significant benefit to their programs. NPS facilities and assistance may be made available to qualified cooperators who are conducting NPS-authorized studies.

Studies in parks will be preceded by (1) an approved scope of work, proposal, or other detailed written description of the work to be performed; and (2) a written statement of environmental and cultural resource compliance appropriate to the proposed methodology and study site. All studies in parks will employ non-destructive methods to the maximum extent feasible with respect to resource protection, research methodology, and the scientific and management value of the information

the management goal is to increase the variability of the park gene pool to mitigate past, human-induced loss of genetic variability. Actions to transplant organisms for purposes of restoring genetic variability through gene flow between native breeding populations will be preceded by an assessment of the genetic compatibility of the populations.

The need to maintain appropriate levels of genetic diversity will guide decisions on what actions to take to manage isolated populations of species or to enhance the recovery of populations of rare, threatened, or endangered species. All resource management actions involving planting or relocating species, subspecies, or varieties will be guided by knowledge of local adaptations, ranges, and habitat requirements, and detailed knowledge of site ecological histories.

When native plants or animals are removed for any reason—such as hunting, fishing, pest management, or culling to reduce unnatural population conditions resulting from human activities—the Service will maintain the appropriate levels of natural genetic diversity.

(See Restoration of Native Plant and Animal Species 4.4.2.2; Restoration of Natural Systems 4.1.5)

4.4.1.3 Definition of Native and Exotic Species: "Native species" are defined as all species that have occurred or now occur as a result of natural processes on lands designated as units of the national park system. Native species in a place are evolving in concert with each other. "Exotic species" are those species that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities. Exotic species are also commonly referred to as non-native, alien, or invasive species. Because an exotic species did not evolve in concert with the species native to the place, the exotic species is not a natural component of the natural ecosystem at that place.

4.4.2 Management of Native Plants and Animals
Whenever possible, natural processes will be relied upon to maintain native plant and animal species, and to influence natural fluctuations in populations of these species. The Service may intervene to manage individuals or populations of native species only when such intervention will not cause unacceptable impacts to the populations of the species or to other components and processes of the ecosystems that support them, and when at least one of the following conditions exists:

- Management is necessary
  - because a population occurs in an unnaturally high or low concentration as a result of human influences (such as loss of seasonal habitat, the extirpation of predators, the creation of highly productive habitat through agriculture or urban landscapes) and it is not possible to mitigate the effects of the human influences;
  - to protect specific cultural resources of parks;
  - to accommodate intensive development in portions of parks appropriate for, and dedicated to, such development;
  - to protect rare, threatened, or endangered species;
  - to protect human health as advised by the U.S. Public Health Service (which includes the Centers for Disease Control and the NPS Public Health Service Program);
  - to protect property in cases in which it is not possible to change the pattern of human activities; or
  - to maintain human safety in cases in which it is not possible to change the pattern of human activities.
- Or, removal of individuals or parts thereof
  - is part of an NPS research project described in an approved management plan, or is part of research being conducted by others who have been issued a scientific research and collecting permit;
  - is done to provide plants or animals for restoring native populations in parks or cooperating areas without diminishing the viability of the park populations from which the individuals are taken; or
  - meets specific park management objectives.

The Service will assess the results of managing plant and animal populations by conducting follow-up monitoring or other studies to determine the impacts of the management methods on non-targeted, as well as targeted, components of the ecosystem.

4.4.2.1 NPS Actions That Remove Plants and Animals: Whenever the Service removes plants or animals, manages plant or animal populations to reduce their sizes, or allows others to remove plants or animals for an authorized purpose, the Service will seek to ensure that such removals will not cause unacceptable impacts to native resources, natural processes, or other park resources. Whenever the Service identifies a possible need for reducing the size of a park plant or animal population, the Service will use scientifically valid resource information obtained through consultation with technical experts, literature review, inventory, monitoring, or research to evaluate the identified need for population management, and to document it in the appropriate park management plan.

In planning and implementing plant and animal population management actions, the Service will follow established planning procedures, including provisions for public review and comment. The Service will consult, as appropriate, with other federal land-managing agencies, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, state agencies, tribal governments, and others. Such consultation will address (1) the management of selected animal populations, (2) research involving the taking of animal species of management interest to these agencies, and (3) cooperative studies and plans dealing with the public hunting and fishing of animal populations that occur across park boundaries.

In addition, the Service will manage such removals to prevent them from interfering broadly with:

- Natural habitats, natural abundances, and natural distributions of native species and natural processes;
- Rare, threatened, and endangered plant or animal species or their critical habitats;
- Scientific study, interpretation, environmental education, appreciation of wildlife, or other public benefits;
- Opportunities to restore depressed populations of native species; or
- Breeding or spawning grounds of native species.

Where the need to reduce animal populations may be due to persistent human/animal conflicts, the Service will determine whether or not it can eliminate or mitigate the conflicts by modifying or curtailing the conflicting visitor use or other human activities. Where visitor use or other human activities

cannot be modified or curtailed, the Service may directly reduce the animal population by using several animal population management techniques, either separately or together. These techniques include relocation, public hunting on lands outside the park, habitat management, predator restoration, reproductive intervention, and destruction of animals by NPS personnel or their authorized agents. Where animal populations are reduced, destroyed animals may be left in natural areas of the park to decompose. Live animals or carcasses may be removed from parks according to the provisions of applicable laws, agreements, and regulations, including the granting of preference to Native Americans.

(See Pest Management 4.4.5. Also see Director's Order #18: Wildland fire Management; and #60B)

4.4.2.2 Restoration of Native Plant and Animal Species

The Service will strive to restore extirpated native plant and animal species to parks whenever all of the following criteria are met:

- Adequate habitat to support the species either exists or can reasonably be restored in the park, and if necessary also on adjacent public lands and waters, and, once a natural population level is achieved, the population can be self-perpetuating;
- The species does not, based on an effective management plan, pose a serious threat to the safety of people in parks, park resources, or persons or property outside park boundaries;
- The genetic type used in restoration most nearly approximates the extirpated genetic type; and
- The species disappeared, or was substantially diminished, as a direct or indirect result of human-induced change to the species population or to the ecosystem.

Programs to restore animal species may include confining animals in small field enclosures during restoration efforts, but only until the animals have become accustomed to the new area, or they have become sufficiently established to minimize threats from predators, poaching, disease, or other factors. Programs to restore animal species may also include confining animals in cages for captive breeding to increase the number of offspring for release to the wild or to manage the population's gene pool. Programs to restore plant species may include propagating plants in greenhouses, gardens, or other confined areas to develop propagation materials (propagules) for restoration efforts or to manage a population's gene pool.

(See Restoration of Natural Systems 4.1.5)

4.4.2.3 Management of Threatened or Endangered Plants and Animals

The Service will survey for, protect, and strive to recover all species native to national park system units that are listed under the Endangered Species Act. The Service will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both pro-actively conserve listed species and prevent detrimental effects on these species. To meet these obligations, the Service will:

- Cooperate with both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to ensure that National Park Service actions comply with both the written requirements and the spirit of the Endangered Species Act. It is particularly important that this cooperation includes the full range of activities associated with the Endangered Species Act, including consultation, conferencing, informal discussions, and securing of all necessary scientific and/or recovery permits.
- Undertake active management programs to inventory, monitor, restore, and maintain listed species' habitats, control detrimental non-native species, control detrimental visitor access, and re-establish extirpated populations as necessary to maintain the species and the habitats upon which they depend.
- Manage designated critical habitat, essential habitat, and recovery areas to maintain and enhance their value for the recovery of threatened and endangered species.
- Cooperate with other agencies to ensure that the delineation of critical habitat, essential habitat, and/or recovery areas on park-managed lands provides needed conservation benefits to the total recovery efforts being conducted by all the participating agencies.
- Participate in the recovery planning process, including the provision of members on recovery teams and recovery implementation teams where appropriate.
- Cooperate with other agencies, states, and private entities to promote candidate conservation agreements aimed at precluding the need to list species.
- Conduct actions and allocate funding to address endangered, threatened, proposed, and candidate species.

The National Park Service will inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species, to the greatest extent possible. In addition, the Service will inventory other native species that are of special management concern to parks (such as rare, declining, sensitive, or unique species and their habitats) and will manage them to maintain their natural distribution and abundance.

The Service will determine all management actions for the protection and perpetuation of federally, state, or locally listed species through the park management planning process, and will include consultation with lead federal and state agencies as appropriate.

4.4.2.4 Management of Natural Landscapes

Landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, hurricanes, tornadoes, and fires, will be allowed to recover naturally unless manipulation is necessary to mitigate for excessive disturbance caused by past human effects, or to protect park developments or the safety of people using those developments. Landscape and vegetation conditions altered by human activity may be manipulated where the park management plan provides for restoring the lands to a natural condition. Management activities to restore human-altered landscapes may include, but are not restricted to:

- Removing constructed features, restoring natural topographic gradients, and revegetating with native park species on acquired inholdings and on sites from which previous development is being removed;

In some situations, the Park Service may stock native or exotic animals for recreational harvesting purposes, but only when such stocking will not impair park natural resources or processes, and:

- The stocking is of fish into constructed large reservoirs or other significantly altered large water bodies and the purpose is to provide for recreational fishing; or
- Such stocking is in a national recreation area or preserve that has historically been stocked (in these situations, stocking only of the same species may be continued); or
- Congressional intent for stocking is expressed in statute or a House or Senate report accompanying a statute.

The Service will not stock waters that are naturally barren of harvested aquatic species.

4.4.4 Management of Exotic Species

Exotic species will not be allowed to displace native species if displacement can be prevented.

4.4.4.1 Introduction or Maintenance of Exotic Species

In general, new exotic species will not be introduced into parks. In rare situations, an exotic species may be introduced or maintained to meet specific, identified management needs when all feasible and prudent measures to minimize the risk of harm have been taken, and it is:

- A closely related race, subspecies, or hybrid of an extirpated native species; or
- An improved variety of a native species in situations in which the natural variety cannot survive current, human-altered environmental conditions; or
- Used to control another, already-established exotic species; or
- Needed to meet the desired condition of a historic resource, but only where it is prevented from being invasive by such means as cultivating (for plants), or tethering, herding, or pasturing (for animals). In such cases, the exotic species used must be known to be historically significant, to have existed in the park during the park's period of historical significance, or to have been commonly used in the local area at that time; or
- An agricultural crop used to maintain the character of a cultural landscape; or
- Necessary to provide for intensive visitor use in developed areas, and both of the following conditions exist:
  - Available native species will not meet park management objectives; and
  - The exotic species is managed so it will not spread or become a pest on park or adjacent lands; or
- A sterile, non-invasive plant that is used temporarily for erosion control; or
- Directed by law or expressed legislative intent.

Domestic livestock such as cattle, sheep, goats, horses, mules, burros, reindeer, and llamas are exotic species that are maintained in some parks for purposes of commercial herding, pasturing, grazing, or trailing; for recreational use; or for administrative use for maintaining the historic scene or supporting park operations. The policies applicable to the grazing of commercial domestic livestock are discussed in chapter 8, section 8.6.8. The Service will phase out the commercial grazing of livestock whenever possible, and will manage recreational and administrative uses of livestock to prevent those uses from unacceptably impacting park natural resources.

4.4.4.2 Removal of Exotic Species Already Present

All exotic plant and animal species that are not maintained to meet an identified park purpose will be managed—up to and including eradication—if (1) control is prudent and feasible, and (2) the exotic species:

- Interferes with natural processes and the perpetuation of natural features, native species or natural habitats; or
- Disrupts the genetic integrity of native species; or
- Disrupts the accurate presentation of a cultural landscape; or
- Damages cultural resources; or
- Significantly hampers the management of park or adjacent lands; or
- Poses a public health hazard as advised by the U.S. Public Health Service (which includes the Centers for Disease Control and the NPS Public Health Program); or
- Creates a hazard to public safety.

High priority will be given to managing exotic species that have, or potentially could have, a substantial impact on park resources, and that can reasonably be expected to be successfully controllable. Lower priority will be given to exotic species that have almost no impact on park resources or that probably cannot be successfully controlled.

The decision to initiate management should be based on a determination that the species is exotic. For species determined to be exotic and where management appears to be feasible and effective, superintendents should (1) evaluate the species' current or potential impact on park resources; (2) develop and implement exotic species management plans according to established planning procedures; (3) consult, as appropriate, with federal and state agencies; and (4) invite public review and comment, where appropriate. Programs to manage exotic species will be designed to avoid causing significant damage to native species, natural ecological communities, natural ecological processes, cultural resources, and human health and safety.

(Also see Executive Order # 13112 (Invasive Species))

4.4.5 Pest Management

All park employees, concessioners, contractors, permittees, licensees, and visitors on all lands managed or regulated by the National Park Service will comply with NPS pest management policies.

4.4.5.1 Pests

Pests are living organisms that interfere with the purposes or management objectives of a specific site within a park, or that jeopardize human health or safety. Decisions concerning whether or not to manage a pest or pest population will be influenced by whether the pest is an exotic or a native species. Exotic pests will be managed according to the exotic species policies in section 4.4.4. Native pests will be allowed to function unimpeded, except as noted below. Many fungi, insects, rodents, disease organisms, and other organisms that may be perceived as pests are, in fact, native organisms existing under

Although each resource type is most closely associated with a particular discipline, an interdisciplinary approach is commonly needed to properly define specific treatment and management goals for cultural resources. Policies applicable to the various resource types follow.

(See Park Management 1.4; Park Planning Processes 2.3; Planning 5.2; Cultural Resources 6.3.8. Also see NEPA; Secretary of the Interior's Standards for the Treatment of Historic Properties)

5.3.5.1 Archeological Resources

Archeological resources will be managed in situ, unless the removal of artifacts or physical disturbance is justified by research, consultation, preservation, protection, or interpretive requirements. Preservation treatments will include proactive measures that protect resources from vandalism and looting, and maintain or improve their condition by limiting damage due to natural and human agents. Data recovery actions will be taken only in the context of planning, consultation, and appropriate decision-making. Preservation treatments and data recovery activities will be conducted within the scope of an approved research design. Archeological research will use non-destructive methods of testing and analysis wherever possible. The Park Service will incorporate information about archeological resources into interpretive and educational, and preservation, programs. Artifacts and specimens recovered from archeological resources, along with associated records and reports, will be maintained together in the park museum collection.

(Also see 36 CFR Part 79; Secretary of the Interior's Standards and Guidelines for Archeological Documentation [48 FR 44734-737]; Museum Handbook)

5.3.5.1.1 Preservation

Archeological resources will be maintained and preserved in a stable condition to prevent degradation and loss. The condition of archeological resources will be documented, regularly monitored, and evaluated against initial baseline data. Parks are encouraged to enlist concerned local citizens in site stewardship programs to patrol and monitor the condition of archeological resources. The preservation of archeological components of cultural landscapes, structures, and ruins are also subject to the treatment policies for cultural landscapes, historic and prehistoric structures, and historic and prehistoric ruins.

5.3.5.1.2 Stabilization

Archeological resources subject to erosion, slumping, subsidence, or other natural deterioration will be stabilized using the least intrusive and destructive methods. The methods used will protect natural resources and processes to the maximum extent feasible. Stabilization will occur only after sufficient research demonstrates the likely success of the proposed stabilizing action, and after existing conditions are documented.

5.3.5.1.3 Rehabilitation, Restoration, and Reconstruction

These terms are normally related to the treatment of historic structures and cultural landscapes. The Park Service will not normally undertake the rehabilitation, restoration, or reconstruction of archeological resources or features. Archeological studies undertaken in conjunction with the rehabilitation or restoration of cultural landscapes, structures, or ruins, or with the reconstruction of obliterated cultural landscapes or missing structures, will be guided by the treatment policies for archeological resources, as well as those for the other associated resource types.

5.3.5.1.4 Protection

Archeological resources will be protected against human agents of destruction and deterioration whenever practicable. Archeological resources subject to vandalism and looting will be periodically monitored, and, if appropriate, fencing, warning signs, remote-sensing alarms, and other protective measures will be installed. Training and public education programs will be developed to make park staff and the public aware of the value of the park's archeological resources, and the penalties for destroying them. For public safety reasons, local citizens who are monitoring resources under site stewardship programs will be instructed to report incidents of vandalism and looting to law enforcement personnel for response.

(See Volunteers in Parks 7.6.1; Shared Responsibilities 8.3.3)

5.3.5.1.5 Archeological Data Recovery

Archeological data recovery is permitted if justified by research or interpretation needs. Significant archeological data that would otherwise be lost as a result of resource treatment projects or uncontrollable degradation or destruction will be recovered in accordance with appropriate research proposals and preserved in park museum collections. Data will be recovered to mitigate the loss of significant archeological data due to park development, but only after:

- The redesign, relocation, and cancellation of the proposed development have all been considered and ruled out as infeasible through the planning process;
- The park development has been approved; and
- The project has provided for data recovery, cataloging, and the initial preservation of recovered collections.

(See Planning 5.2)

5.3.5.1.6 Earthworks

Appropriate—and, when feasible, native—vegetation will be maintained when necessary to prevent the erosion of prehistoric and historic earthworks, even when the historic condition might have been bare earth. Because earthwork restorations and reconstructions can obliterate surviving remains and are often difficult to maintain, other means of representing and interpreting the original earthworks will receive first consideration.

(See Management of Native Plants and Animals 4.4.2; Management of Exotic Species 4.4.4)

5.3.5.1.7 Submerged Cultural Resources

Historic shipwrecks and other submerged cultural resources will be protected, to the extent permitted by law, in the same manner as terrestrial archeological resources. Protection activities involve inventory, evaluation, monitoring, interpretation, and establishing partner ships to provide for the management of historic shipwrecks and other submerged cultural resources in units of the national park system. The Service will not allow treasure hunting or commercial salvage activities at or around historic shipwrecks or other submerged cultural resources

- Historic features that are primary attractions for park visitors will generally not be recommended as suitable for wilderness designation. However, an area that attracts visitors primarily for the enjoyment of solitude and unconfined recreation in a primitive setting may also contain cultural resource features and still be included in wilderness. Historic trails may serve and be maintained as part of the wilderness trail system, as identified and coordinated within an approved wilderness management plan and the park's cultural resource plan. Structures of historical significance need not be deleted from wilderness area proposals. A recommendation may be made to include a historic structure in wilderness if (1) the structure would be only a minor feature of the total wilderness proposal; and (2) the structure will remain in its historic state, without development.
- Overflights do not make an area unsuitable for wilderness designation. The nature and extent of any overflight impacts, and the extent to which the impacts can be mitigated, would need to be addressed in subsequent wilderness studies.

6.2.1.3 The Assessment Process

The Service will involve the public in the wilderness suitability assessment process through notification of its intentions to conduct the assessment and publication of its determination, either as "suitable" or as "nonsuitable" for further wilderness study. Notification will include the issuance of news releases to local and regional newspapers, and the publication of a final suitability determination in the Federal Register. The final determination of an area's suitability, or nonsuitability, as wilderness must be approved by the Director before publication of the final suitability determination in the Federal Register. For areas determined to be non-suitable for wilderness designation, the wilderness preservation provisions in the National Park Service Management Policies are no longer applicable.

6.2.2 Wilderness Studies

Lands and waters found to possess the characteristics and values of wilderness, as defined in the Wilderness Act and determined suitable pursuant to the wilderness suitability assessment, will be formally studied to develop the recommendation to Congress for wilderness designation. The National Park Service will continue to undertake wilderness studies of all lands that have been determined to be suitable as a result of the wilderness suitability assessment. Also, studies will be made of lands for which subsequent legislation directs that wilderness studies be completed.

Wilderness studies will be supported by appropriate documentation of compliance with NEPA and NHPA. The Council on Environmental Quality requires environmental impact statements for wilderness studies that will result in recommendations for designations (i.e., proposals for legislation to designate as wilderness).

6.2.2.1 Potential Wilderness

A wilderness study may identify lands that are surrounded by or adjacent to lands proposed for wilderness designation but that do not themselves qualify for immediate designation due to temporary, non-conforming, or incompatible conditions. The wilderness recommendation forwarded to the Congress by the President may identify these lands as "potential" wilderness for future designation as wilderness when the non-conforming use has been removed or eliminated. If so authorized by Congress, these potential wilderness areas will become designated wilderness upon the Secretary's determination, published in the Federal Register, that they have finally met the qualifications for designation by the cessation or termination of the non-conforming use.

6.2.2.2 Proposed Wilderness

The findings and conclusions of a formal wilderness study will be forwarded from the Director to the Department of the Interior (Assistant Secretary's Office) as "proposed" wilderness. The proposed wilderness recommendation will identify park lands that are being recommended for immediate wilderness designation, as well as any other lands identified as "potential" wilderness.

6.2.3 Recommended Wilderness

The Secretary of the Interior is responsible for recommending to the President those lands under his/her jurisdiction that qualify for inclusion within the national wilderness preservation system. The Secretary performs this function through the Assistant Secretary's Office by reviewing NPS proposed wilderness and either approving or revising the proposal. The final result is forwarded by the Secretary of the Interior to the President for his consideration. The President is then responsible for transmitting to both houses of Congress his recommendations with respect to wilderness designation. These recommendations must be accompanied by maps and boundary descriptions. The National Park Service will track the status in Congress of the wilderness designation process.

6.2.4 Designated Wilderness

After the President's formal transmittal of the Secretary's wilderness recommendation to the Congress, Congress considers the President's recommendation, and may subsequently enact the legislation needed to include the area within the national wilderness preservation system as "designated" and/or "potential" Wilderness. The National Park Service will assist the Department and Congress in this process as requested.

6.3 Wilderness Resource Management

6.3.1 General Policy

For the purposes of applying these policies, the term "wilderness" will include the categories of suitable, study, proposed, recommended, and designated wilderness. Potential wilderness may be a subset of any of these five categories. The policies apply regardless of category.

In addition to managing these areas for the preservation of the physical wilderness resources, planning for these areas must ensure that the wilderness character is likewise preserved. This policy will be applied to all planning documents affecting wilderness.

The National Park Service will take no action that would diminish the wilderness suitability of an area possessing wilderness characteristics until the legislative process of wilderness designation has been completed. Until that time, management decisions pertaining to lands qualifying as wilderness will be made in expectation of eventual wilderness designation. This policy also applies to potential wilderness, requiring it to be

managed as wilderness to the extent that existing non-conforming conditions allow. The National Park Service will seek to remove from potential wilderness the temporary, non-conforming conditions that preclude wilderness designation. All management decisions affecting wilderness will further apply the concepts of "minimum requirements" for the administration of the area regardless of wilderness category.

6.3.2 Responsibility

National Park Service responsibility for carrying out wilderness preservation mandates will be shared by the Director, regional directors, and superintendents of parks with suitable, study area, proposed, recommended, and designated wilderness. Interagency cooperation and coordination and training responsibilities will also be carried out at the Washington, D.C., region, and park levels. Specific wilderness management responsibilities will be assigned at each of these administrative levels to carry out these responsibilities effectively and to facilitate efforts establishing agency and interagency consistency in wilderness management techniques.

Superintendents will provide the information needed to prepare an annual wilderness report to Congress and to report to the Director on the status of wilderness management in the national park system. Based on this information, the Associate Director for Operations and Education will provide the Directorate with recommendations and advice to permanently establish a system of accountability, consistency, and continuity for National Park Service wilderness management.

6.3.3 Consistency

The National Park Service will seek to achieve consistency in wilderness management objectives, techniques, and practices on both an agency and an interagency basis. Accordingly, the National Park Service will seek to maintain effective intra-agency and interagency communications, and will encourage, sponsor, and participate in intra-agency and inter-agency training and workshops designed to promote the sharing of ideas, concerns, and techniques related to wilderness management. However, the need for interagency consistency will in no way diminish any established National Park Service wilderness standards and values.

6.3.4 Wilderness-related Planning and Environmental Compliance

Policies on wilderness planning and compliance include the following:

6.3.4.1 Zoning for Wilderness

When necessary, all categories of wilderness may be zoned for visitor experiences and resource conditions consistent with their wilderness values within the established management zoning system for each park. However, management zoning or other land use classifications cannot, and will not, diminish or reduce the maximum protection to be afforded lands with wilderness values. Transition zones adjacent to wilderness may be identified to help protect wilderness values, but no transitional or "buffer" zones are appropriate within wilderness boundaries.

6.3.4.2 Wilderness Management Planning

The superintendent of each park containing wilderness resources will develop and maintain a wilderness management plan or equivalent planning document to guide the preservation, management, and use of these resources. The wilderness management plan will identify desired future conditions, as well as establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts to wilderness resources.

The park's wilderness management plan may be developed as a separate document or as an action component of another planning document. Wilderness management plans will be supported by appropriate documentation of compliance with NEPA and NHPA. The plan will be developed with public involvement, and will contain specific, measurable management objectives that address the preservation and management of natural and cultural resources within wilderness as appropriate to achieve the purposes of the Wilderness Act and other legislative requirements.

(See Carrying Capacity 8.2.1)

6.3.4.3 Environmental Compliance

Proposals having the potential to impact wilderness resources will be evaluated in accordance with National Park Service procedures for implementing NEPA. Those procedures include the use of categorical exclusions, environmental assessments (EAs), and/or environmental impact statements (EISs). Administrative actions impacting wilderness must be addressed in either the EA or EIS accompanying the approved wilderness management plan, or as a separate environmental compliance document.

Managers contemplating the use of aircraft or other motorized equipment or mechanical transportation within wilderness must consider impacts to the character, esthetics, and traditions of wilderness before considering the costs and efficiency of the equipment.

In evaluating environmental impacts, the National Park Service will take into account wilderness characteristics and values, including the primeval character and influence of the wilderness; the preservation of natural conditions (including the lack of man-made noise); and assurances that there will be outstanding opportunities for solitude, that the public will be provided with a primitive and unconfined type of recreational experience, and that wilderness will be preserved and used in an unimpaired condition. Managers will be expected to appropriately address cultural resources management considerations in the development and review of environmental compliance documents impacting wilderness resources.

(Also see Director's Order #12: Conservation Planning and Environmental Impact Analysis)

6.3.5 Minimum Requirement

All management decisions affecting wilderness must be consistent with the minimum requirement concept. This concept is a documented process used to determine whether administrative activities affecting wilderness resources or the visitor experience are necessary, and how to minimize impacts. The minimum requirement concept will be applied as a two-step process that determines:

- Whether the proposed management action is appropriate or necessary for administration of the area as wilderness and does not pose a significant impact to wilderness resources and character; and
- The techniques and types of equipment needed to ensure that impact to wilderness resources and character is minimized.

In accordance with this policy, superintendents will apply the minimum requirement concept to the context of wilderness management planning, as well as to all other administrative practices, proposed special uses, scientific activities, and equipment use in wilderness. When determining minimum requirement, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

While park managers have flexibility in identifying the method used to determine minimum requirement within the approved wilderness management plan, the method used must clearly weigh the benefits and impacts of the proposal, document the decision-making process, and be supported by an appropriate environmental compliance document. Parks with no approved wilderness management plan must develop a separate process to determine minimum requirement until the plan is finally approved. Parks will complete a minimum requirement analysis on those administrative practices and equipment uses that have the potential to impact wilderness resources or values. The minimum requirement concept cannot be used to rationalize permanent roads or inappropriate or unlawful uses in wilderness.

Administrative use of motorized equipment or mechanical transport will be authorized only:

- If determined by the superintendent to be the minimum requirement needed by management to achieve the purposes of the area as wilderness, including the preservation of wilderness character and values; or
- In emergency situations (search and rescue) involving the health or safety of persons actually within the area. Such management activities will be conducted in accordance with all applicable regulations, policies, and guidelines, including minimum requirement protocols as practicable.

Such management activities will also be conducted in accordance with all applicable regulations, policies, and guidelines and, where practicable, will be scheduled to avoid creating adverse resource impacts or conflicts with visitor use.

6.3.6 Scientific Activities in Wilderness

The statutory purposes of wilderness include scientific activities, and these activities are encouraged and permitted when consistent with the Service's responsibilities to preserve and manage wilderness.

6.3.6.1 General Policy

The National Park Service has a responsibility to support appropriate scientific activities in wilderness, and to use science to improve wilderness management. The Service recognizes that wilderness can and should serve as an important resource for long-term research into, and study, and observation of, ecological processes and the impact of humans on these ecosystems. The National Park Service further recognizes that appropriate scientific activities may be critical to the long-term preservation of wilderness.

Scientific activities are to be encouraged in wilderness. Even those scientific activities (including inventory, monitoring, and research) that involve a potential impact to wilderness resources or values (including access, ground disturbance, use of equipment, and animal welfare) should be allowed when the benefits of what can be learned outweigh the impacts on wilderness resources or values. However, all such activities must also be evaluated using the minimum requirement concept and include documented compliance that assesses impacts against benefits to wilderness. This process should ensure that the activity is appropriate and utilizes the minimum tool required to accomplish project objectives. Scientific activities involving prohibitions identified in section 4(c) of the Wilderness Act (16 USC 1133(c)) may be conducted within wilderness when:

- The desired information is essential for the understanding health, management or administration of wilderness, and the project cannot be reasonably modified to eliminate or reduce the nonconforming wilderness use(s); or if it increases scientific knowledge, even when this serves no immediate wilderness management purposes, provided it does not compromise wilderness resources or character. The preservation of wilderness resources and character will be given significantly more weight than economic efficiency and/or convenience.
- Compliance with NEPA (including completion of documented categorical exclusions, environmental assessments/findings of no significant impact, or environmental impact statements/records of decision) and other regulatory compliance (including compliance with section 106 of NHPA (16 USC 470f)) are accomplished and documented.
- All scientific activities will be accomplished in accordance with terms and conditions adopted at the time the research permit is approved. Later requests for exceptions to the Wilderness Act will require additional review and approval.
- The project will not significantly interfere with other wilderness purposes (recreational, scenic, educational, conservation, or historical) over a broad area or for a long period of time.
- The minimum requirement concept is applied to implementation of the project.

Research and monitoring devices (e.g., video cameras, data loggers, meteorological stations) may be installed and operated in wilderness if (1) the desired information is essential for the administration and preservation of wilderness, and cannot be obtained from a location outside of wilderness without significant loss of precision and applicability; and (2) the proposed device is the minimum requirement necessary to accomplish the research objective safely.

Park managers will work with researchers to make National Park Service wilderness area research a model for the use of low-impact, less intrusive techniques. New technology and techniques will be encouraged if they are less intrusive and

cause less impact. The goal will be for studies in National Park Service wilderness to lead the way in "light on the resource" techniques.

Devices located in wilderness will be removed when determined to be no longer essential. Permanent equipment caches are prohibited within wilderness. Temporary caches must be evaluated using the minimum requirement concept.

All scientific activities, including the installation, servicing, removal, and monitoring of research devices, will apply minimum requirement concepts and be accomplished in compliance with Management Policies, Director's Orders, and procedures specified in the park's wilderness management plan.

(See Studies and Collections 4.2; Social Science Studies 8.11)

6.3.6.2 Monitoring Wilderness Resources:

In every park containing wilderness, the conditions and long-term trends of wilderness resources will be monitored to identify the need for, or effects of, management actions. The purpose of this monitoring will be to ensure that management actions and visitor impacts on wilderness resources and character do not exceed standards and conditions established in an approved park plan.

As appropriate, wilderness monitoring programs may assess physical, biological, and cultural resources, and social impacts. Monitoring programs may also need to assess potential problems that may originate outside the wilderness, in order to determine the nature, magnitude, and probable source of those impacts.

6.3.7 Natural Resources Management

The National Park Service recognizes that wilderness is a composite resource with interrelated parts. Without natural resources, especially indigenous and endemic species, a wilderness experience would not be possible. Natural resources are critical, defining elements of the wilderness resource, but need to be managed within the context of the whole ecosystem. Natural resource management plans will be integrated with, and cross-reference, wilderness management plans. Pursuing a series of independent component projects in wilderness, such as single-species management, will not necessarily accomplish the over-arching goal of wilderness management. Natural resources management in wilderness will include and be guided by a coordinated program of scientific inventory, monitoring, and research.

The principle of non-degradation will be applied to wilderness management, and each wilderness area's condition will be measured and assessed against its own unimpaired standard. Natural processes will be allowed, insofar as possible, to shape and control wilderness ecosystems. Management should seek to sustain the natural distribution, numbers, population composition, and interaction of indigenous species. Management intervention should only be undertaken to the extent necessary to correct past mistakes, the impacts of human use, and influences originating outside of wilderness boundaries. Management actions, including the restoration of extirpated native species, the altering of natural fire regimes, the controlling of invasive alien species, the management of endangered species, and the protection of air and water quality, should be attempted only when the knowledge and tools exist to accomplish clearly articulated goals.

(See Chapter 4: Natural Resource Management. Also see Director's Order #77 series on natural resources management)

6.3.8 Cultural Resources

Cultural resources that have been included within wilderness will be protected and maintained according to the pertinent laws and policies governing cultural resources, using management methods that are consistent with the preservation of wilderness character and values. These laws include the Antiquities Act and the Historic Sites, Buildings and Antiquities Act, as well as subsequent historic preservation legislation, including NHPA, ARPA, and NAGPRA. The American Indian Religious Freedom Act (AIRFA) reaffirms the first Amendment rights of Native Americans to access national park lands for the exercise of their traditional religious practices. The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation projects provide direction for protection and maintenance. Cemeteries or commemorative features, such as plaques or memorials, that have been included in wilderness may be retained (including approved access to these sites), but no new cemeteries or additions to existing cemeteries may be made unless specifically authorized by federal statute, existing reservations, or retained rights. Native American human remains that were removed from wilderness areas and are subject to NAGPRA repatriation may be re-interned at, or near, the site from which they were removed. Native American religious areas and other ethnographic and cultural resources will be inventoried and protected. Native Americans will be permitted access within wilderness for sacred or religious purposes consistent with the intent of AIRFA, the Wilderness Act, and other applicable authorities provided by federal statutes and Executive orders.

(See Chapter 5: Cultural Resource Management)

6.3.9 Fire Management

Fire management activities conducted in wilderness areas will conform to the basic purposes of wilderness. The park's fire management and wilderness management plans must identify and reconcile the natural and historic roles of fire in the wilderness, and will provide a prescription for response, if any, to natural and human-caused wildfires. If a prescribed fire program is implemented, these plans will also include the prescriptions and procedures under which the program will be conducted within wilderness.

Actions taken to suppress wildfires will use the minimum requirement concept, and will be conducted in such a way as to protect natural and cultural resources and to minimize the lasting impacts of the suppression actions. Information on developing a fire management program in wilderness is contained in Director's Order#18: Wildland Fire Management.

(See Fire Management 4.5.)

FY 2001 FY 2005

Strategic Plan

National Park Service

U.S. DEPARTMENT OF THE INTERIOR

National Park Service Goals at a Glance

DOI Goals	NPS Goal Category	NPS Mission Goals
DOI Goal 1: Protect the Environment and Preserve Our Nation's Natural and Cultural Resources	**Goal Category I:** Preserve Park Resources	**Ia.** Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
		Ib. The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
DOI Goal 2: Provide Recreation for America	**Goal Category II:** Provide for the Public Enjoyment and Visitor Experience of Parks	**IIa.** Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
		IIb. Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
DOI Goal 1: Protect the Environment and Preserve Our Nation's Natural and Cultural Resources **DOI Goal 2:** Provide Recreation for America	**Goal Category III:** Strengthen and Preserve Natural and Cultural Resources and Enhance Recreational Opportunities Managed by Partners	**IIIa.** Natural and cultural resources are conserved through formal partnership programs.

NPS Long-term Goals: By September 30, 2005

Ia1. Disturbed Lands/Exotic Plant Species: Ia1A — 10.1% of targeted parklands, disturbed by development or agriculture as of 1999 (22,500 of 222,300 acres) are restored; and Ia1B — exotic vegetation on 6.3% of targeted acres of parkland (167,500 of 2,656,700) acres is contained.

Ia2. Threatened and Endangered Species: Ia2A — 19% of the 1999 identified park populations (84 of 442) of federally listed threatened and endangered species with critical habitat on parklands or requiring NPS recovery actions have improved status; and Ia2B — an additional 18.1% (80 of 442) have stable populations.

Ia2X. Native Species of Special Concern: [Park-determined percentage of] populations of plant and animal species of special concern (e.g., state-listed threatened or endangered species, endemic or indicator species or native species classified as pests) are at scientifically acceptable levels. Optional Goal.

Ia3. Air Quality: Air quality in 70% of reporting park areas has remained stable or improved.

Ia4. Water Quality: 85% of 265 Park units have unimpaired water quality.

Ia5. Historic Structures: 50% (12,113 of 24,225) of the historic structures listed on the 1999 List of Classified Structures are in good condition.

Ia6. Museum Collections: 73.4% of preservation and protection standards for park museum collections are met.

Ia7. Cultural Landscapes: 33.1% of the 2,067 cultural landscapes on the 1999 Cultural Landscapes Inventory with condition information are in good condition (119 of 359).

Ia8. Archeological Sites: 50% of the recorded archeological sites with condition assessments are in good condition (FY 1999 baseline: 7,470 of 14,940).

Ia9. Geological Resources: Ia9A — Paleontological Resources: 20% of known paleontological localities in parks are in good condition; and Ia9B — Cave Floors: 72,500 square feet of cave floors in parks are restored.

Ib1. Natural Resource Inventories: Acquire or develop 87% (2,203) of the 2,527 outstanding data sets identified in 1999 of basic natural resource inventories for all parks.

Ib2. Cultural Resource Baselines: Ib2A — Archeological sites inventoried and evaluated are increased by 30% (from FY99 baseline of 48,188 sites to 62,644); Ib2B — Cultural landscapes inventoried and evaluated at Level II are increased by 136.4% (from FY99 baseline of 110 to 260); Ib2C — 100% of the historic structures have updated information (24,225 of FY99 baseline of 24,225); Ib2D — Museum objects cataloged are increased by 35.9% (from FY99 baseline 37.3 million to 50.7 million); Ib2E — Ethnographic resources inventory is increased by 634.5% (from FY99 baseline 400 to 2,938); and Ib2F — 31% of parks have historical research that is current and completed to professional standards (117 of 379 parks).

Ib3. Vital Signs: 80% of 265 parks with significant natural resources have identified their vital signs for natural resource monitoring.

Ib4. Geological Resources: Geological processes in 53 parks (20% of 265 parks) are inventoried and human influences that affect those processes are identified.

Ib5. Aquatic Resources: The NPS has completed an assessment of aquatic resource conditions in 265 parks.

IIa1. Visitor Satisfaction: 95% of park visitors are satisfied with appropriate park facilities, services, and recreational opportunities.

IIa2. Visitor Safety: The visitor accident/incident rate will be at or below 7.96 per 100,000 visitor days (a 16% decrease from the FY 1992–FY 1996 baseline of 9.48 per 100,000 visitor days).

IIb1. Visitor Understanding and Appreciation: 86% of visitors understand and appreciate the significance of the park they are visiting.

IIb1X. Educational Programs: [Park determined percentage] of [park determined target number] of students participating in NPS formal educational programs understand America's cultural and natural heritage as preserved by the National Park Service and its Programs. Optional Goal.

IIIa1. Properties Designated: IIIa1A — National Historic Landmark Designations: An additional 6.6% (150) properties are designated as National Historic Landmarks (2,277 to 2,427); IIIa1B — National Register Listings: An additional 11% (7,800) significant historical and archeological properties are listed in the National Register of Historic Places (71,019 to 78,819); IIIa1C — Federal Agency Inventories: An additional 30.2% (221,800) significant archeological properties in Federal ownership are inventoried and evaluated (733,200 to 955,000 contributing properties); IIIa1D — State/Tribal/Local Inventories: An additional 19.7% (925,000) significant historical and archeological properties are either inventoried and evaluated, or officially designated by States, Tribes, and Certified Local Governments (4,701,000 to 5,626,000 contributing properties); and IIIa1E — National Natural Landmarks Designated: The number of National Natural Landmarks is increased by 10% (59) from the 1998 level (587 to 646).

National Park Service Goals at a Glance

DOI Goals	NPS Goal Category	NPS Mission Goals
DOI Goal 1: Protect the Environment and Preserve Our Nation's Natural and Cultural Resources **DOI Goal 2:** Provide Recreation for America	**Goal Category III:** Strengthen and Preserve Natural and Cultural Resources and Enhance Recreational Opportunities Managed by Partners	**IIIa.** Natural and cultural resources are conserved through formal partnership programs.
		IIIb. Through partnerships with other federal, state, and local agencies and nonprofit organizations, a nationwide system of parks, open space, rivers, and trails provides educational, recreational, and conservation benefits for the American people.
		IIIc. Assisted through federal funds and programs, the protection of recreational opportunities is achieved through formal mechanisms to ensure continued access for public recreational use.
	Goal Category IV: Ensure Organizational Effectiveness	**IVa.** The National Park Service uses current management practices, systems, and technologies to accomplish its mission.
		IVb. The National Park Service increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.

NPS Long-term Goals: By September 30, 2005

IIIa2. Properties Protected: IIIa2A — National Historic Landmark Protection: 90% of National Historic Landmarks (2,184 of 2,427 designated landmarks) are in good condition; IIIa2B — Federal Protection: 1% of federally recognized historical and archeological properties (19,700 of 2,223,000 contributing properties) are protected through NPS administered programs or assistance; IIIa2C — State/Tribal/Local Protection: 3% of significant historical and archeological properties (140,000 of 4,681,000 contributing properties) recognized by States, Tribes, or certified local governments are protected through their administered programs or assistance; and IIIa2D — National Natural Landmarks Protection: The number of damaged or threatened National Natural Landmarks is reduced by 7% based on level of reduction achieved in 1998.

IIIa3. Customer Satisfaction: 90% of users are satisfied with historic preservation-related technical assistance, training, and educational materials provided by NPS.

IIIaX. Park Partnerships: The number of satisfactorily completed projects under formal agreements that assist partners in protecting their resources or serving their visitors is increased by [park-determined percentage]. Optional Goal.

IIIb1. Conservation Assistance: An additional 4,200 miles of trails, an additional 6,600 miles of protected river corridor, and an additional 223,200 acres of park and open space, over the 1997 totals, are conserved with NPS partnership assistance.

IIIb2. Community Satisfaction: 85% of communities served are satisfied with NPS partnership assistance in providing recreation and conservation benefits on lands and waters.

IIIc1. Recreational Properties: 100% of the 34,602 recreational properties assisted by the Land and Water Conservation Fund, the Urban Park and Recreation Recovery Program, and the Federal Lands to Parks Program are protected and remain available for public recreation.

IVa1. Data Systems: 66% (25 of 38) of the major NPS data systems are integrated/interfaced.

IVa2. Workforce Stewardship: IVa2A — 75% of NPS employees are satisfied with their job (as measured through employee satisfaction surveys); and IVa2B — 75% of NPS employees believe the organization is functioning effectively (as measured through customer service and organizational effectiveness surveys).

IVa3. Workforce Development and Performance: IVa3A — 100% of employee performance agreements are linked to appropriate strategic and annual performance goals and position competencies; IVa3B — 95% of NPS employees demonstrate that they fully meet their competency requirements.

IVa4. Workforce Diversity: Increase the Servicewide representation of underrepresented groups over the 1999 baseline: IVa4A — by 25% in the 9 targeted occupational series in the permanent workforce; IVa4B — by 25% of women and minorities in the temporary and seasonal workforce; IVa4C — by 10% of individuals with disabilities in the permanent workforce; and IVa4D — by 10% of individuals with disabilities in the seasonal and temporary workforce.

IVa5. Employee Housing: 50% of employee housing units listed in poor or fair condition in 1997 assessments are rehabilitated to good condition, replaced, or removed.

IVa6. Employee Safety: IVa6A — The NPS employee lost time injury rate will be at or below 4.49 per 200,000 labor hours worked (100 FTE); and IVa6B — the Servicewide total number of hours of Continuation of Pay (COP) will be at or below 51,100 hours.

IVa7. Line Item Construction: 100% of line item projects funded by September 30, 1998, and each successive fiscal year, meet 90% of cost, schedule, and construction parameters.

IVa8. Land Acquisition: The average time between the appropriation and offer of just compensation is 171 days (a 5% decrease from 1997 level of 180 days).

IVa9. Environmental Leadership: IVa9A — 100% of NPS units will undergo an environmental audit to determine baseline performance by September 30, 2002; and IVa9B — 100% of parks/offices and concessions operations have fully implemented the regulatory recommendations arising from environmental audits, resulting in more sustainable planning and operations.

IVb1. Volunteer Hours: Increase by 44.7% the number of volunteer hours (from 3.8 million hours to 5.5 million hours).

IVb2. Donations and Grants: IVb2A — Cash donations are increased by 3.6% (from $14,476,000 in 1998 to $15,000,000); IVb2B — Value of donations, grants, and services from Friends Groups and other organizations is increased to $50,000,000; and IVb2C — Value of donations, grants, and services from Cooperating Associations is increased by 35% (from $19,000,000 in 1997 to $25,600,000).

IVb3. Concession Returns: Returns from park concession contracts are 10% of gross concessioner revenue.

IVb4. Fee Receipts: Receipts from park entrance, recreation, and other fees are increased by 33.1% over 1997 level (from $121,000,000 to $161,000,000).

IVbX. Park Partnerships: The number of projects satisfactorily completed by partners under formal agreement that protect park resources or serves the park visitors is increased by [park-determined percentage]. Optional Goal..

This *General Management Plan* for Grand Canyon National Park guides the management of resources, visitor use, and general development at the park over a 10- to 15-year period. The primary purpose of the plan is to provide a foundation from which to protect park resources while providing for meaningful visitor experiences. A secondary purpose is to encourage compatible activities on adjacent lands so as to minimize adverse effects on the park.

The direction for future park management is based on the laws establishing the park and the National Park Service (NPS), the purpose of the park, and its significant resources, as described below. These elements in turn are the foundation for park visions and management objectives. Collectively, these pieces provide the context and philosophical direction for the *General Management Plan.*

The most pressing issue in the park today is the impact created by the annual crush of nearly 5 million visitors and their private cars on the few developed areas along the canyon rims. The roads and facilities in developed areas of the park were never designed to handle this volume of use. The result has been the gradual degradation of the visitor experience and unacceptable impacts on the park's natural and cultural resources. No comprehensive management plan is in place that provides direction for the park when dealing with general visitor use or that guides appropriate development in the park.

While this plan provides overall direction for park management, the specific actions needed to implement the plan will be provided in subsequent plans. Where appropriate, the park's existing resource or issue-specific plans, and those being revised, are adopted by this plan (these plans are described beginning on page 57). Needed parkwide management plans (such as a cave management plan) are identified in the appropriate sections of this document.

The focus of this *General Management Plan* is on the developed areas of the park

- South Rim — Hermits Rest, Grand Canyon Village, and Desert View
- North Rim — Bright Angel Point and Walhalla Plateau
- Tuweep
- Corridor trails — primarily the Bright Angel Trail, the North and South Kaibab Trails, the River Trail, and the Old Bright Angel Trail

This *General Management Plan* is the culmination of a four-year process that has included extensive efforts to involve local citizens, American Indian tribes, and public and private agencies. The environmental impacts of implementing this plan were analyzed in a *Draft General Management Plan and Environmental Impact Statement,* which was on public review from March 13 to May 11, 1995. An abbreviated *Final General Management Plan and Environmental Impact Statement* was released for public review on July 21, 1995. A record of decision supporting the selection of the proposed action as the approved plan was signed on August 21, 1995.

Park Purpose

The purpose of Grand Canyon National Park is based on the legislation establishing the park and the legislation governing the National Park Service.

As a place of national and global importance, Grand Canyon National Park is to be managed to

- preserve and protect its natural and cultural resources and ecological processes, as well as its scenic, aesthetic, and scientific values
- provide opportunities for visitors to experience and understand the environmental interrelationships, resources, and values of the Grand Canyon without impairing the resources

Park Significance

Grand Canyon National Park is nationally or internationally significant for the following reasons.

World Heritage Site

As a world heritage site, the Grand Canyon is recognized as a place of universal value, containing superlative natural and cultural features that should be preserved as part of the heritage of all people. The Grand Canyon is unusual in meeting both natural and cultural resource criteria for designation as a world heritage site.

Natural Resources / Natural Ecosystem Processes

The great biological diversity of the park includes examples of five of the seven life zones and elements of three of the four deserts in North America (the Great Basin, Sonoran, and Mojave).

The park serves as an ecological refuge, with relatively undisturbed remnants of dwindling ecosystems (such as boreal forest and desert riparian communities), and numerous rare, endemic, or specially protected (threatened/endangered) plant and animal species.

As stated in the establishing legislation, the Grand Canyon is the "greatest eroded canyon in the United States." It is considered one of the finest examples in the world of arid-land erosion.

The Grand Canyon is neither the world's longest nor deepest canyon, but its volume is immense, averaging 4,000 feet deep for its entire length of 277 miles, 6,000 feet deep at its deepest point, and 15 miles wide at its widest.

The geologic record of the Grand Canyon is particularly well-exposed and includes a rich and diverse fossil record. The canyon also contains a great diversity of geological features and rock types.

Numerous caves in the park contain extensive and significant geological, paleontological, archeological, and biological resources.

Natural Resources / Research

Six research natural areas have been designated in the park (8,845 acres total) to provide opportunities for nondestructive research in areas relatively uninfluenced by humans.

A national natural landmark occurs partially within the park, which encourages recognition and protection of the ponderosa pine habitat of the Kaibab squirrel — a classic example of the process of variation through geographic isolation.

The park is known for nationally significant research in a number of fields (e.g., geology, geomorphology, paleontology, ecology, air quality, aircraft effects, and noise).

The park serves as a natural gene pool, because of its biological diversity and unique conditions.

Cultural Resources

Six American Indian groups, represented by eight tribal governments, have close and sacred cultural ties to the Grand Canyon, with some considering the canyon their original homeland and place of origin.

Over 4,500 years of human occupation have resulted in an extensive archeological record.

The park contains a large number of historic and prehistoric properties and districts that are nationally and internationally significant. Many are eligible for or listed on the National Register of Historic Places; many are also designated as national historic landmarks.

The Grand Canyon contains nationally significant examples of rustic architecture.

The park has hundreds of miles of established prehistoric and historic routes and trails.

Scenic Qualities and Values

The Grand Canyon has internationally recognized scenic vistas, qualities, and values. With ever-changing and colorful scenery of enormous proportions, it is widely considered one of the world's most beautiful natural areas.

The great variety of scenery includes forests, deserts, canyons, plains, plateaus, volcanic features, and streams and waterfalls.

The Grand Canyon is an excellent place for night sky viewing.

The Grand Canyon's class 1 air quality is extremely important to its scenic quality (i.e., visibility, colors, details).

Natural Quiet and Solitude

The Grand Canyon is recognized as a place with unusual and noticeable natural quiet, and direct access to numerous opportunities for solitude.

Spiritual/Inspirational Qualities

All of the natural, cultural, and scenic qualities of the Grand Canyon, coupled with the canyon's vast size, give rise to inspirational/spiritual values and a sense of timelessness.

Recreational Opportunities

A wide diversity of resource-based recreational opportunities and support services help visitors experience, enjoy, and appreciate the park.

The vast majority of the park provides opportunities for wilderness experiences. Hundreds of miles of trails and routes provide access to park resources and diverse recreational opportunities and experiences. The Bright Angel Trail, Kaibab Trail, and River Trail are designated national recreation trails as part of the national trails system. The Arizona Trail also passes through the park.

The Colorado River, as it flows through the park, provides opportunities for one of the world's premier river experiences, including one of the longest stretches of navigable white water on earth.

Potential Designations

Over 1 million acres in the park meet the criteria for wilderness designation as part of the national wilderness preservation system. If combined with over 400,000 additional acres of proposed or designated wilderness contiguous to the park boundary, this area could become one of the largest, primarily desert wilderness areas in the United States.

The Colorado River and most of its tributaries in the park meet the criteria for wild river designation as part of the national wild and scenic rivers system.

GMP 1995

Management Objectives

The management objectives for Grand Canyon National Park, which are based on the park visions, set the direction for future park management. The objectives describe desired conditions to be achieved.

International Significance

- Manage the park to preserve its integrity as a world heritage site with natural and cultural resources of national and international significance.

Natural and Cultural Resources

- Preserve, protect, and interpret the park's natural and scenic resources and values, and its ecological processes.
- Preserve, manage, and interpret park cultural resources (archeological, ethnographic, architectural, and historic resources, trails, and cultural landscapes) for the benefit of present and future generations.
- Preserve, protect, and improve air quality and related values such as visibility.
- Manage visitor use, development, and support services to protect the park's resources and values.
- Preserve and protect the genetic integrity and species composition within the park, consistent with natural ecosystem processes.
- To the maximum extent possible, restore altered ecosystems to their natural conditions. In managing naturalized ecosystems, ensure the preservation of native components through the active management of nonnative components and processes.
- Manage ecosystems to preserve critical processes and linkages that ensure the preservation of rare, endemic, and specially protected (threatened/endangered) plant and animal species.
- Protect the natural quiet and solitude of the park, and mitigate or eliminate the effects of activities causing excessive or unnecessary noise in, over, or adjacent to the park.
- Preserve natural spring and stream flows and water quality. Withdraw only the minimum water necessary to meet park purposes. To the maximum extent feasible, strive to meet increases in water demand by conserving and reusing water.
- Provide opportunities for scientific study and research focused on the Grand Canyon, consistent with resource protection and park purposes.
- Inventory, monitor, and maintain data on park natural and cultural resources and values, and utilize this information in the most effective ways possible to facilitate park management decisions to better preserve the park.
- Clearly delineate and maintain the park boundary to protect park resources and values.
- Identify and evaluate all cultural properties within the park for inclusion on the National Register of Historic Places.
- Collect ethnographic data and develop ethnohistories for the Havasupai, Hopi, Hualapai, Navajo, Southern Paiute, and Zuni peoples concerning their associations with the Grand Canyon, as appropriate, in order to preserve, protect, and interpret park resources and values important to diverse American Indian cultures, including significant, sacred, and traditional use areas.

Wilderness and Wild River Management

- Manage areas meeting the criteria for wilderness designation as wilderness. Actively pursue the designation of these lands as part of the national wilderness preservation system.
- Manage the Colorado River corridor through Grand Canyon National Park to protect and preserve the resource in a wild and primitive condition. Actively pursue the designation of eligible segments of the Colorado River and its tributaries as part of the national wild and scenic rivers system.

Visitor Experience

- Provide a diverse range of quality visitor experiences, as appropriate, based on the resources and values of the Grand Canyon, compatible with the protection of those resources and values.
- Provide access that is appropriate and consistent with the character and nature of each landscape unit and the desired visitor experience.
- Consistent with park purposes and the characteristics of each landscape unit, preserve

Interpretive Talk on the South Rim

and protect the maximum opportunities in every landscape unit of the park for visitors to experience the solitude, natural conditions, primitiveness, remoteness, and inspirational value of the Grand Canyon.

- Provide equal access to programs, activities, experiences, and recreational opportunities for individuals with disabilities, as appropriate and consistent with the levels of development and inherent levels of access in areas within the park.

- Provide a wide range of interpretive opportunities and information services to best assist, inform, educate, and challenge visitors.

- Educate and influence the public through positive action to preserve and protect the world they live in, including but not limited to the park.

- Provide a safe, efficient, and environmentally sensitive transportation system for visitors, employees, and residents, consistent with management zoning and resource considerations. Emphasize nonmotorized modes of transportation wherever feasible.

- Develop visitor use management strategies to enhance the visitor experience while minimizing crowding, conflicts, and resource impacts.

- Provide visitor and employee facilities and services, as necessary and appropriate, in or adjacent to areas dedicated to those uses or in appropriate disturbed areas.

Facility Design

- Consistent with its purpose, strive to make Grand Canyon National Park a model of excellence in sustainable design and management through such means as energy efficiency, conservation, compatibility with historic setting and architecture, recycling, accessibility, and the use of alternative energy sources.

- Encourage appropriate use and adaptive reuse of historic structures, while preserving historic integrity.

- Ensure that development and facilities within the park are necessary for park purposes.

- Design high-quality facilities that exemplify visual consistency and appropriateness.

- Ensure that park developments and operations do not adversely affect park resources and environments, except where absolutely necessary to provide reasonable visitor access and experiences.

Regional Issues

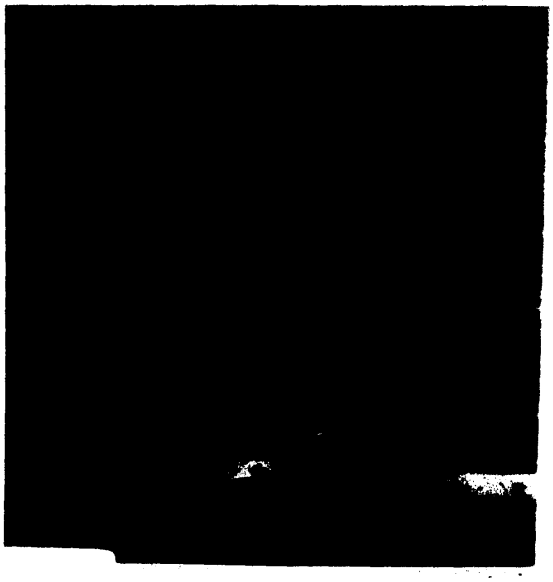
- Understand, assess, and consider the effects of park decisions outside the park as well as inside.

- Upon request, work cooperatively to assist local American Indians in planning, develop-

Undeveloped Area Management Objectives

Undeveloped areas are considered to be all areas within the park boundaries not within the areas described for the South Rim, North Rim, Tuweep, or corridor trails. The following objectives are in addition to the overall park objectives.

- Manage and monitor visitor use and park resources in the park's undeveloped areas to preserve and protect natural and cultural resources and ecosystem processes, and to preserve and maintain a wilderness experience or, where an area is not proposed for wilderness, a primitive experience.
- Establish indicators and standards for desired visitor experiences and resource conditions, monitor the condition of those indicators on a regular basis, and take action to meet the standards if they are not being met.
- Provide a variety of primitive recreational opportunities consistent with wilderness and NPS policies on accessibility. In deciding which opportunities would be provided in the undeveloped areas of the park, consider recreational opportunities available outside the park, as well as opportunities available in developed areas of the park.
- Conduct administrative activities, including research, search-and-rescue, emergencies, and fire management, in a manner that is consistent with NPS policies regarding wilderness management and the use of the minimum tool in wilderness areas.
- Maintain roads designated open to public or administrative motor vehicle use in undeveloped areas in an unpaved condition without major improvements. Only consider improvements that reduce resource impacts in keeping the road minimally open for vehicle use. Revegetate all roads not designated for vehicle use, or convert them to trails as appropriate.
- Consistent with the above goals, reduce conflicts among undeveloped area users, including river, hiker, stock, motorized and nonmotorized users.
- Provide a wilderness river experience on the Colorado River (this objective will not affect decisions regarding the use of motorboats on the river).



III. MANAGEMENT OBJECTIVES OF THE COLORADO RIVER MANAGEMENT PLAN

The management objectives of the Colorado River Management Plan acknowledge the natural, cultural, and experiential components which constitute the unique quality of a Grand Canyon river experience, including; solitude and natural quiet, hiking opportunities, the whitewater adventure, unique scenery and geologic features, wildlife and vegetative ecosystems in a natural condition, archaeological and historic features, and social and group interactions while on the river trip. These management objectives are governed by the preeminent NPS mandate of preserving the natural and cultural resources of the Colorado River within Grand Canyon National Park.

The following objectives (not in priority order) are designed to provide general guidance to park managers both conceptually and in the practical context of making decisions. Where applicable, certain management objectives are further defined and quantified in the Limits of Acceptable Change section (Appendix B) of this plan.

1) Research and Monitoring Program--Establish, design, and implement an integrated, long-term monitoring program to assess changes in the status of natural, cultural, and experiential resources.

   a) This long-term monitoring program will require an integrated and standardized data base, statistical analyses, and management decision-making process.
   b) This program will require definition of present resource status, and these data will serve as the baseline against which changes will be measured.
   c) Results from the monitoring program will be reviewed each year to assist in evaluating the effectiveness of operational procedures.

2) Social Science Research--Initiate social science research to develop visitor profiles and user expectations for the Colorado River whitewater experience.

3) Glen Canyon Dam Operations--Advocate and support operational objectives for the Glen Canyon Dam which are most compatible with protection of the intrinsic resources of the Colorado River within Grand Canyon National Park. Furthermore, promote seasonal water releases which are consistent with the requirements of a safe, high quality, whitewater rafting experience. The attainment of NPS mandates and management objectives, relative to managing the Colorado River, is dependent on implementation of alternative management of Glen Canyon Dam; adequate development of which is in turn dependent on the study of operational alternatives determined by the Glen Canyon Environmental Studies (GCES) and the NEPA process.

4) Off-river Activities--Allow for visitation to attraction sites, for hiking side canyons, and for general off-river time versus on-river time.

5) Natural Experience--Provide the opportunity to experience solitude, quiet, and the unique and natural environment of the canyon.

6) Safety--Maximize river safety by determining and enforcing regulations regarding boat operations and equipment standards. These regulations must be adequate to minimize injuries and accidents due to equipment failure or craft design.

7) Fishing--Allow fishing as a recreational activity only if it does not adversely impact or jeopardize any threatened or endangered species inhabiting the river or dependent on river resources. Such species include humpback chub, and bald eagles.

8) Research--All scientific research will be in compliance with the research guidelines for the National Park Service and Grand Canyon National Park. To ensure compliance, researchers using the Colorado River will be required to make research available to the National Park Service in a timely manner.

9) Pre-trip Information--Provide NPS-approved trip information to confirmed clients of park concessioners which accurately describes trip size, trip length, and boat capacity. Concessioners will be required to provide this information to all passengers, thus aiding the planning process by comparing visitor trip expectations to their actual experiences.

10) Crowding and Congestion--If desired, parties will have the opportunity to avoid crowded areas and/or attraction sites, regardless of season, and find other places they do not have to share with any other group. Within existing user day allocations and seasonal distribution patterns, river users must expect to share high-use areas with at least one other group during the primary season. If deemed necessary and functionally effective, a computerized launch model may be used to reduce the frequency of trip contact to levels consistent with the park's general objectives of reducing crowding at attraction sites and of reducing competition for overnight camps.

11) Health, Sanitation, and Water Quality Guidelines--Implement and enforce all state and local public health and sanitation standards for all trips on the river. Maintain, to the extent possible, water quality in side streams and river to comply with state, county, and national health standards.

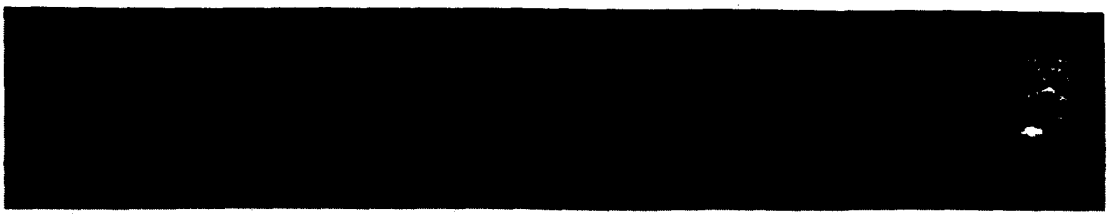
12) Commercial Guide Education--Continue to encourage concessioner support and guide participation in a yearly, park-sponsored Guide's Educational Seminar. This will enhance knowledge of park regulations and Annual Commercial Operating Requirements, as well as enhance their knowledge of the natural and cultural history of the park and the river corridor.

13) Spectrum of Opportunities--Maintain the opportunity for visitors to select commercial or noncommercial river trips offered on a variety of watercraft powered either by oars or motors.

Management Plans

Table C-1
This table describes the resource management and related plans mentioned in the RMP, their status, and need.

Air Quality Management Plan			X
Aircraft Management Plan			X
Backcountry Management Plan	1988	X	
Cave Resource Management Plan		Draft, 1997	
Colorado River Management Plan	1989	X	
Corridor Management Plan			X
Cultural Landscape Management Plan			X
Fire Management Plan	1995	Draft, 1998	
Geologic Hazard Management Plan			X
Grand Canyon Long-Term Monitoring and Research Plan			X
Grand Canyon Land Protection Plan	1996		
Habitat Restoration Plan		Draft, 1997	
Interpretive Prospectus	1996		
Paleontological Resource Management Plan			X
Resource Management Plan	1996		2000
Vegetation Management Plan			X
Water Resource Management Plan	1984	X	
Wetland Preservation Plan			X
Wilderness Management Plan		Draft, 1997	
Wildlife Management Plan			X



Policy Place
The Office of Policy manages the Policy Place web site. There, you can find information about:

- NPS Directives System, including Management Policies, Director's Orders, and other policy guidance,
- the National Leadership Council and all the Journals that serve as records of their meetings for the NPS work force, and
- the Advisory/Operating Committees for the NPS, including the National Park System Adivsory Board.

Contact the NPS Office of Policy for comments and questions regarding this site.

NPS Budget
This site has links to Budget related publications, the Green Book, historical budget information, budget systems, and other related sites.

Contact the NPS Budget Office for comments and questions regarding this site.

2000/2005 NPS Strategic Plan
This document provides the agency's framework and process for strategic planning and reporting on measurable outcomes, focusing on the results achieved rather than on the amount of effort expended. It integrates the Government Performance and Results Act requirements into its planning, budget, reporting, and evaluation processes.

Records Management
This site provides information on the Records Disposition Schedule, NARA Programs, NPS Contacts, and the Federal Register.

Management Accountability
Management accountability is the expectation that managers are responsible for the quality and timeliness of program performance, increasing productivity, controlling costs and mitigating adverse aspects of agency operations, and assuring that programs are managed with integrity and in compliance with applicable law. Here you will find information on laws related to management accountability and NPS contacts.

Contact the Office of Audits and Accountability for comments and questions regarding this site.

Property Management Program
This website is designed to facilitate support to personnel within the National Park Service who are responsible for performing a variety of personal and real property management functions and make critical information readily available. It serves as a one stop shopping for property management and provides information on Fixed Assets, Frequently Asked Questions, policies, forms, and software.

Contact the NPS Property Management Office for comments and questions regarding this site.

Environmental Leadership
This web site is for you to utilize as sort of a "Green Toolbox" as you gather information, share your knowledge and experiences and further the use of sustainable energy and the practices of resource conservation in your area. One thing to remember is that this toolbox will be filled with the information you need, it is therefore yours to use, and feel free to interact so the site will remain alive, usefull and provide all the tools you require.