Management Policies 2001



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Management of National Park Service Programs

This volume of *Management Policies* focuses exclusively on management of the national park system. Beyond managing the national park system, the National Park Service administers a broad range of programs that serve the conservation and recreation needs of the nation and the world. Examples include the:

- National Register of Historic Places
- National Historic Landmarks Program
- National Natural Landmarks Program
- Land and Water Conservation Fund Grants Program
- Historic American Building Survey
- Historic American Engineering Record
- American Battlefield Protection Program
- National Maritime Heritage Grants Program
- Rivers, Trails and Conservation Assistance Program
- Tribal Heritage Preservation Grants Program

Although these programs operate mainly outside the national parks, they form a vital part of the National Park Service mission. Information about the policies and procedures that govern these programs will be incorporated into a companion volume which will be issued as soon as practicable. Until the companion volume is available, information may be obtained from the appropriate NPS program managers (who are generally located in Washington, D.C.) or by visiting the NPS web site at www.nps.gov.

U. S. Department of the Interior

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes. We:

- encourage and provide for the appropriate management, preservation, and operation of the Nation's public lands and natural resources for use and enjoyment both now and in the future;
- carry out related scientific research and investigations in support of these objectives;
- develop and use resources in an environmentally sound manner, and provide an equitable return on these resources to the American taxpayer; and
- carry out trust responsibilities of the U.S. Government with respect to American Indians and Alaska Natives.

National Park Service

The National Park Service is a bureau within the Department of the Interior. We preserve unimpaired the natural and cultural resources and values of the National park system for the enjoyment, education, and inspiration of this and future generations. We also cooperate with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

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.

In carrying out their responsibilities under the 1916 National Park Service¹ Organic Act and other pertinent statutes, all NPS officials and employees must be knowledgeable about the laws, regulations, and policies that pertain to their work. The property clause of the U.S. Constitution, which is the supreme law of the United States, gives Congress the authority to develop laws governing the management of the national park system. The property clause specifically directs that "The Congress will have the Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States" (article IV, section 3). Once laws are enacted, authority for interpreting and implementing them is delegated to appropriate levels of government. In carrying out this function, the National Park Service, like other federal agencies, develops policy to interpret the ambiguities of the law and to fill in the details left unaddressed by Congress in statutes.

Hierarchy of Authorities

The management of the national park system and NPS programs is guided by the Constitution, public laws, treaties, proclamations, Executive orders, regulations, and directives of the Secretary of the Interior and the Assistant Secretary for Fish and Wildlife and Parks. NPS policy must be consistent with these higher authorities, and with appropriate delegations of authority. Many of statutes and other guidance affecting the various facets of NPS administration and management are cited for reference purposes throughout *Management Policies*. Other laws, regulations, and policies related to the administration of federal programs, although not cited, may also apply. For example, many, but not all, of the legislative exceptions of the Alaska National Interest Lands Conservation Act (ANILCA) are cited at different places throughout *Management Policies*. The additional legislative exceptions of ANILCA, although not cited, must also be considered in the interpretation and application of these policies, as must all other applicable legislative requirements. It is especially important that superintendents and other park staff review their park's enabling legislation to determine it contains explicit guidance that would prevail over Service-wide policy.

Policy Development

Policy sets the framework and provides direction for all management decisions. This direction may be general or specific; it may prescribe the process through which decisions are made, how an action is to be accomplished, or the results to be achieved. Policy initiatives may originate as a sudden, urgent response to an unanticipated problem or issue, or through a slow, evolutionary process as the Service gains increased experience or insight regarding a problem or issue. Sometimes the initiative does not originate within the Service, but rather with persons or organizations outside the Service who have a strong interest in how the Service manages the parks. However, NPS policy is usually developed through a concerted workgroup and consensus-building team effort involving extensive field review, consultation with NPS senior managers, and review and comment by affected parties and the general public.

All policy must be articulated in writing and be approved by a National Park Service official who has been delegated authority to issue the policy. Policy must be published or otherwise made available to the public—particularly those whom it affects—and those who must implement it in

¹ The terms "National Park Service," "Park Service," "Service," and "NPS" are used interchangeably in this document.

the Washington office, regional offices, and parks. Unwritten or informal "policy," and various understandings of NPS traditional practices, will not be recognized as official policy.

Compliance and Accountability

Service-wide policy is articulated by the Director of the National Park Service. Adherence to policy is mandatory unless specifically waived or modified in writing by the Secretary, the Assistant Secretary, or the Director. Waivers and modifications will be considered on a case-by-case basis, and previous waivers or modifications will not necessarily be regarded as precedents for future waivers or modifications. Park superintendents will be held accountable for their, and their staff's, adherence to Service-wide policy. A request for a waiver or modification of policy must include a written justification and be submitted to the Director through the Office of Policy, which will coordinate with appropriate program offices.

The Directives System

This volume of NPS *Management Policies* is the basic Service-wide policy document of the National Park Service, superseding the 1988 edition. It is the highest of three levels of guidance documents in the NPS Directives System. The Directives System is designed to provide NPS management and staff with clear and continuously updated information on NPS policy and required and/or recommended actions, as well as any other information that will help them manage parks and programs effectively.

Management Policies will be revised at appropriate intervals to consolidate Service wide policy decisions, or to respond to new laws and technologies, new understandings of park resources and the factors that affect them, or changes in American society. Interim updates or amendments may be accomplished through Director's Orders (the second level of the Directives System), which also serve as a vehicle to clarify or supplement Management Policies to meet the needs of NPS managers. Any previously dated statement of policy not consistent with these Management Policies, or with a Director's Order that updates, amends, or clarifies policy, is to be disregarded.

Under the Directives System, the most detailed and comprehensive guidance on implementing Service wide policy is found in "level 3" documents, which are usually in the form of handbooks or reference manuals issued by associate directors. These documents provide NPS field employees with a compilation of legal references, operating policies, standards, procedures, general information, recommendations, and examples to assist them in carrying out *Management Policies* and Director's Orders. Level 3 documents may not impose any new Service-wide requirements unless the Director has specifically authorized them to do so, but may reiterate or compile requirements (i.e., laws, regulations, policies) that have been imposed by higher authorities.

It is important to note that the Directives System is a relatively new creation of the National Park Service, retaining NPS *Management Policies*, but replacing (on a phased schedule) the guidelines, special directives, and staff directives issued under the former system. Many Director's Orders planned for completion were not yet approved when this edition of *Management Policies* was published. Anyone who needs additional information about a Director's Order that has not yet been approved should contact the NPS program manager responsible for the particular subject matter, or the Office of Policy in Washington, DC. (See Appendix C for a listing of Director's Orders.) Another minor issue associated with timing is that

a few of the policy statements made in this edition of Management Policies are not entirely consistent with existing regulations. In these cases, it is the Service's intent to revise the inconsistent regulations to more fully comport with the new policy statements. However, until the regulations are formally revised through the rulemaking procedure, they will remain in effect—even though they no longer accurately reflect NPS policy.

Other Sources of Guidance

Instructions, guidance, and directives of regional or otherwise limited application supplementary to, and in conformance with, Service-wide policies may be issued by regional directors or associate directors within formal delegations of authority. Superintendents may issue, within formal delegations of authority, park-specific instructions, procedures, directives, and other supplementary guidance (such as hours of operation or dates for seasonal openings), provided the guidance does not conflict with Service-wide policy.

National Park Service Program Policies

This volume addresses only those policies applicable to management of the national park system. A second volume—to be added at a later date—will address policies applicable to NPS-administered programs that serve the conservation and recreation needs of the nation, but are not directly related to the national park system. Examples include the National Register of Historic Places; the Land and Water Conservation Fund grants program; the Historic American Buildings Survey; the American Battlefield Protection Program; the National Maritime Heritage Grants Program; the Rivers, Trails and Conservation Assistance Program; and the Tribal Heritage Preservation Grants Program.

1 The Foundation

Beginning with Yellowstone, the idea of a national park was an American invention of historic consequences. The areas that now comprise the national park system, and those that will be added in years to come, are cumulative expressions of a single national heritage. The National Park Service must manage park resources and values in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

1.1 The National Park Idea

The world's first national park—Yellowstone—was created in 1872, at which time Congress set aside more than one million acres as "a public park or pleasuring ground for the benefit and enjoyment of the people." The legislation assigned control of the new park to the Secretary of the Interior, who would be responsible for issuing regulations to provide for the "preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders, within the park, and their retention in their natural condition." Other park management functions were to include the development of visitor accommodations, the construction of roads and bridle trails, the removal of trespassers, and protection "against the wanton destruction of the fish and game found within the park" (16 USC 21-22).

This idea of a national park was an American invention of historic consequences, marking the beginning of a world-wide movement that has subsequently spread to more than 100 countries and 1,200 national parks and conservation preserves. However, when Yellowstone National Park was created, no concept or plan existed upon which to build a system of such parks. The concept now described as the national park system, which embraces, nationwide, a wide variety of natural and cultural resources, evolved slowly over the years—often through the consolidation of federal land management responsibilities.

As interest grew in preserving the great scenic wonders of the West, efforts were also under way to protect the sites and structures associated with early Native American culture, particularly in the Southwest. The Antiquities Act of 1906 authorized the President "to declare by public proclamation [as national monuments] historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest" (16 USC 431).

In 1916, Congress created the National Park Service in the Department of the Interior to "promote and regulate the use of the federal areas known as national parks, monuments, and reservations" (16 USC 1). (The terms "National Park Service," "Park Service," "Service," and "NPS" are used interchangeably in this document.)

1.2 The National Park System

The number and diversity of parks within the national park system grew as a result of a government reorganization in 1933, another following World War II, and yet another during the 1960s. Today there are more than 375 units in the national park system. These units are variously designated as national parks, monuments, preserves, lakeshores, seashores, wild and scenic rivers, trails, historic sites, military parks, battlefields, historical parks, recreation areas, memorials, and parkways. Regardless of the many names and official designations of the park lands that make up the national park system, all represent some nationally significant aspect of our natural or cultural heritage. As the physical remnants of our past, and great scenic and natural places that continue to evolve—repositories of outstanding recreation opportunities—class rooms of our heritage—and the legacy we leave to future generations—they warrant the highest standard of protection.

1.3 Criteria for Inclusion

Congress has declared in the NPS General Authorities Act of 1970 that areas comprising the national park system are cumulative expressions of a single national heritage. Potential additions

to the national park system should therefore contribute in their own special way to a system that fully represents the broad spectrum of natural and cultural resources that characterize our nation. The National Park Service is responsible for conducting professional studies of potential additions to the national park system when specifically authorized by an Act of Congress, and for making recommendations to the Secretary of the Interior, the President, and Congress. Several laws outline criteria for units of the national park system, and for additions to the national wild and scenic rivers system and the national trails system. To receive a favorable recommendation from the Service, a proposed addition to the national park system must (1) possess nationally significant natural or cultural resources; (2) be a suitable addition to the system; (3) be a feasible addition to the system; and (4) require direct NPS management, instead of alternative protection by other public agencies or the private sector. These criteria are designed to ensure that the national park system includes only the most outstanding examples of the nation's natural and cultural resources. They also recognize that there are other management alternatives for preserving the nation's outstanding resources.

1.3.1 National Significance

NPS professionals, in consultation with subject matter experts, scholars, and scientists, will determine whether a resource is nationally significant. An area will be considered nationally significant if it

- is an outstanding example of a particular type of resource;
- possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation's heritage;
- offers superlative opportunities for public enjoyment, or for scientific study;
- and retains a high degree of integrity as a true, accurate, and relatively unspoiled example of a resource.

National significance for cultural resources will be evaluated by applying the National Historic Landmarks process contained in 36 CFR Part 65.

1.3.2 Suitability

An area is considered suitable for addition to the national park system if it represents a natural or cultural resource type that is not already adequately represented in the national park system, or is not comparably represented and protected for public enjoyment by other federal agencies; tribal, state, or local governments; or the private sector.

Adequacy of representation is determined on a case- by- case basis by comparing the potential addition to other comparably managed areas representing the same resource type, while considering differences or similarities in the character, quality, quantity, or combination of resource values. The comparative analysis also addresses rarity of the resources; interpretive and educational potential; and similar resources already protected in the national park system or in other public or private ownership. The comparison results in a determination of whether the proposed new area would expand, enhance, or duplicate resource-protection or visitor-use opportunities found in other comparably managed areas.

1.3.3 Feasibility

To be feasible as a new unit of the national park system, an area must (1) be of sufficient size and appropriate configuration to ensure sustainable resource protection and visitor enjoyment

(taking into account current and potential impacts from sources beyond proposed park boundaries); and (2) be capable of efficient administration by the NPS at a reasonable cost.

In evaluating feasibility, the Service considers a variety of factors, such as: size; boundary configurations; current and potential uses of the study area and surrounding lands; land ownership patterns; public enjoyment potential; costs associated with acquisition, development, restoration, and operation; access; current and potential threats to the resources; existing degradation of resources; staffing requirements; local planning and zoning for the study area; the level of local and general public support; and the economic/socioeconomic impacts of designation as a unit of the national park system.

The feasibility evaluation also considers the ability of the National Park Service to undertake new management responsibilities in light of current and projected constraints on funding and personnel.

An overall evaluation of feasibility will be made after taking into account all of the above factors. However, evaluations may sometimes identify concerns or conditions, rather than simply reach a "yes" or "no" conclusion. For example, some new areas may be feasible additions to the national park system only if landowners are willing to sell; or the boundary encompasses specific areas necessary for visitor access; or state or local governments will provide appropriate assurances that adjacent land uses will remain compatible with the study area's resources and values.

1.3.4 Direct NPS Management

There are many excellent examples of the successful management of important natural and cultural resources by other public agencies, private conservation organizations, and individuals. The National Park Service applauds these accomplishments, and actively encourages the expansion of conservation activities by state, local, and private entities, and by other federal agencies. Unless direct National Park Service management of a studied area is identified as the clearly superior alternative, the Service will recommend that one or more of these other entities assume a lead management role, and that the area not receive national park system status.

Studies will evaluate an appropriate range of management alternatives and will identify which alternative or combination of alternatives would, in the professional judgment of the Director, be most effective and efficient in protecting significant resources and providing opportunities for appropriate public enjoyment. Alternatives for NPS management will not be developed for study areas that fail to meet any one of the four criteria for inclusion listed in section 1. 3.1.

In cases where a study area's resources meet criteria for national significance but do not meet other criteria for inclusion in the national park system, the Service may instead recommend an alternative status, such as "affiliated" area. To be eligible for "affiliated area" status, the area's resources must: (1) meet the same section 1.3.1 standards for national significance that apply to units of the national park system; (2) require some special recognition or technical assistance beyond what is available through existing NPS programs; (3) be managed in accordance with the policies and standards that apply to units of the national park system; and (4) be assured of sustained resource protection, as documented in a formal agreement between the NPS and the non-federal management entity. Designation as a "heritage area" is another option that may be recommended. Heritage areas are distinctive landscapes that do not necessarily meet the same

standards of national significance as national park areas. Either of these two alternatives would recognize an area's importance to the nation without requiring or implying management by the National Park Service.

1.4 Park Management

1.4.1 The Laws Generally Governing Park Management

The most important statutory directive for the National Park Service is provided by interrelated provisions of the NPS Organic Act of 1916, and the NPS General Authorities Act of 1970, including amendments to the latter law enacted in 1978.

The key management-related provision of the Organic Act is:

[The National Park Service] shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. (16 USC 1)

Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970, and again through enactment of a 1978 amendment to that law (the "Redwood amendment," contained in a bill expanding Redwood National Park, which added the last two sentences in the following provision). The key part of that act, as amended, is:

Congress declares that the national park system, which began with establishment of Yellowstone National Park in 1872, has since grown to include superlative natural, historic, and recreation areas in every major region of the United States, its territories and island possessions; that these areas, though distinct in character, are united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage; that, individually and collectively, these areas derive increased national dignity and recognition of their superlative environ mental quality through their inclusion jointly with each other in one national park system preserved and managed for the benefit and inspiration of all the people of the United States; and that it is the purpose of this Act to include all such areas in the System and to clarify the authorities applicable to the system. Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System, as defined in section 1c of this title, shall be consistent 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.

Environmental leadership will be demonstrated in all aspects of NPS activities, including policy development; park planning; all aspects of park operations; land protection; natural and cultural resource management; wilderness management; interpretation and education; facilities design, construction, and management; and commercial visitor services. In demonstrating environmental leadership, the Service will fully comply with the letter and the spirit of NEPA, and continually assess the impact its operations have on natural and cultural resources so that it may identify areas for improvement. The Service will institutionalize an assessment process, through a Service-wide environmental auditing program, that will evaluate a broad array of NPS activities for meeting the highest standards of environmental protection and compliance. The program will also screen for opportunities to implement sustainable practices, and tangibly demonstrate the highest levels of environmental ethic.

(See Facility Planning and Design 9.1.1)

1.7 Managing Information

The future of the Service as an accountable organization, and the future of individual parks, depends heavily on (1) the availability, management, and dissemination of comprehensive information, and (2) the Service's success in long-term preservation and management of, and access to that information. NPS information resources exist in a variety of different media, including paper records, electronic documents, maps, databases, photography, video, and audio. The NPS will implement professional-quality programs to preserve, manage, and integrate these

resources, and to make them accessible. The Service will also use tools and technologies that will enhance:

- Information capture in permanent and durable forms.
- Information management that is required by NPS policy and by legal and professional standards
- Management of electronic, textual, and audiovisual information resources, including still images, for continuous accessibility by NPS staff and the public.
- Internet and World Wide Web capabilities.
- Geographic information systems (GIS).
- The understanding and management of the nation's natural and cultural resources.

1.7.1 Information Sharing

The Service is committed to the widest possible sharing and availability of knowledge, and to fostering discussion about the national park system, America's natural and cultural heritage found in national parks, and the national experiences and values they represent. Most information shared with the public is presumed to be in the "public domain," and therefore available to anyone who is interested. The only exceptions to information sharing are where disclosure could jeopardize specific park resources or donor agreements, or violate legal or confidentiality requirements.

1.7.2 Proprietary Information

When producing or acquiring new works (such as images, graphic designs, logos, writing, or Web sites) through acquisition by donation, contracting, partnerships, or other means, the NPS will acquire the appropriate copyrights and any necessary releases, such as model or interview releases, whenever there is a current or anticipated need for unrestricted access to those works. The Service will respect the rights of owners of copyrights to control how their works are used, and will comply with "fair use" standards when information or works are not licensed for dissemination.

(Also see Director's Order #67: Copyrights and Trademarks)

1.7.3 Information Confidentiality

While it is the general policy of the NPS to share information widely, the Service also realizes that providing information about the location of park resources may sometimes place those resources at risk of harm, theft, or destruction. This can occur, for example, with regard to caves, archeological sites, and rare plant and animal species. Some types of personnel and law enforcement matters are other examples of information that may be inappropriate for release to the public. Therefore, information will be withheld when the Service foresees that disclosure would be harmful to an interest protected by an exemption under the Freedom of Information Act (FOIA).

Information will also be withheld when the NPS has entered into a written agreement (e. g., deed of gift, interview release, or similar written contract) to withhold data for a fixed period of time at the time of acquisition of the information. Such information will not be provided unless required by FOIA or other applicable law, a subpoena, a court order, or a federal audit. NPS managers will use these exemptions sparingly, and only to the extent allowed by law. In general, if information is withheld from one requesting party, it must be withheld from anyone else who requests it, and if information is provided to one requesting party, it must be provided to anyone

else who requests it. Procedures contained in Director's Order #66: FOIA and Protected Resource Information, will be followed to document any decisions to release information or to withhold information from the public.

(See Natural Resources Information 4.1.3; Studies and Collections 4.2; Caves 4.8.2.2; Research 5.1; Confidentiality 5.2.3; Interpretation and Education Services Beyond Park Boundaries 7.5.2. Also see Director's Orders #5: Paper and Electronic Communications, #19: Records Management, #84: NPS Library Programs, and #70: Internet and Intranet Publishing. Also see Reference Manual 53, Chapter 5)

1.8 Accountability

1.8.1 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 the adverse aspects of agency operations, and for assuring that programs are managed with integrity and in compliance with applicable law.

The National Park Service will comply with OMB Circular A-123 and the Federal Managers' Financial Integrity Act of 1982 (31 USC 3512(d)), which require that all federal agencies and individual managers take systematic and proactive measures to (1) develop and implement appropriate, cost-effective management controls for results- oriented management; (2) assess the adequacy of management controls in federal programs and operations; (3) identify needed improvements; (4) take corresponding corrective action; and (5) report annually on management controls.

The concept of management accountability will be applied to all strategies, plans, guidance, and procedures that govern programs and operations throughout the Service, including those at the park level, the program center level, and the Service-wide level. The Service will, through its organization, policies, and procedures, implement systems of controls to reasonably ensure that:

- Programs achieve their intended results;
- Resources are used consistent with the NPS mission;
- Programs and resources are protected from fraud, waste, abuse, and mismanagement;
- Laws and regulations are followed; and
- Reliable and timely information is obtained, maintained, reported, and used for decision-making.

1.8.2 Government Performance and Results Act

As the business system for the National Park Service, performance management will be used to set goals and track accomplishments. Service-wide strategic plans, annual performance plans, and annual performance reports will be prepared, distributed, used, and analyzed for management accountability. These requirements are based on the Government Performance and Results Act of 1993 (GPRA). In accordance with GPRA:

Strategic plans will be developed and updated at all organizational levels Service- wide. These plans will drive budgeting and resource allocation decisions, and represent the Service's performance agreement with the American people.

- The superintendent of each park will prepare and make available to the public a 5-year strategic plan, an annual performance plan, and an annual performance report. The strategic plan and annual performance plan will reflect NPS policies and goals stated in the Service-wide Strategic Plan. The park annual performance report will show accomplishments or results toward stated goals to evaluate organizational and individual performance. NPS GPRA goals must be consistent with these Management Policies.
- Park superintendents and other Park Service managers will implement a performance management system that focuses on achieving, through daily operations, the desired conditions or results identified in the plans.

(See Park Annual Performance Planning and Annual Performance Reporting 2.3.4)

1.9 Partnerships

The Service has had many successful relationships with individuals; organizations; tribal, state, and local governments; and other federal agencies that have helped fulfill the NPS mission. Through these relationships, the Service has received valuable assistance in the form of educational programs, living history demonstrations, search and rescue operations, fundraising campaigns, habitat restoration, ecosystem management, and a host of other activities. These relationships—generally referred to as "partnerships"—have produced countless benefits for the Service and for the national park system. Benefits often extend into the future, because many people who participate as partners connect more strongly with the parks and commit themselves to long-term stewardship. The Service will continue to welcome and actively seek partnership activities with individuals, organizations, and others who share the Service's commitment to protecting park resources and values. The Service will embrace any partnership opportunity that will help accomplish the NPS mission, provided that personnel and funding requirements do not make it impractical for the Service to participate, and provided that the partnership activity would not (1) violate legal or ethical standards; (2) otherwise reflect adversely on the NPS mission and image; or (3) imply an unwillingness by the Service to perform an inherently governmental function.

In the spirit of partnership, the Service will also seek opportunities for cooperative management agreements with state or local agencies that will allow for more effective and efficient management of the parks, as authorized by section 802 of the National Parks Omnibus Management Act of 1998 (16 USC 1a-2(1)).

Park superintendents may encounter partnership proposals from groups or organizations who wish to offer advice on park management issues. While the NPS encourages consultation and other forms of public involvement, the Federal Advisory Committee Act (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.

¹ This Part 1 of Management Policies focuses only on management of the national park system. Other guidance documents will address the many NPS partnership activities that extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

(See Public Involvement 2.3.1.6; Partnerships 4.1.4; Studies and Collections 4.2; Independent Research 5.1.2; Agreements 5.2.2; Interpretive and Educational Partnerships 7.6; Volunteers in Parks 7.6.1; Cooperating Associations 7.6.2; Enforcement Authority 8.3.4; Commercial Visitor Services Chapter 10; also see Director's Orders #7: Volunteers in Parks; #20: Agreements, #21: Donations and Fundraising; #27: Challenge Cost-Share Program; #32: Cooperating Associations; NPS Guide to the Federal Advisory Committee Act)

1.10 An Enduring Message

The need for management policies in the National Park Service was first articulated by Secretary of the Interior Franklin K. Lane in a letter to the first Director of the National Park Service, Stephen T. Mather, on May 13, 1918.

Secretary Lane stated that administrative policy should adhere to three broad principles based on the 1916 Organic Act:

First, that the national parks must be maintained in absolutely unimpaired form for the use of future generations as well as those of our own time; second, that they are set apart for the use, observation, health, and pleasure of the people; and third, that the national interest must dictate all decisions affecting public or private enterprise in the parks.

Today's national parks have become important to our nation in more ways than Secretary Lane could possibly have imagined. However, his guiding principles remain fundamentally valid, and serve as a useful reminder of the need for a sustained commitment to park resource protection. The Service's commitment to protecting the national parks is embodied in this 2001 edition of *Management Policies*

2 Park System Planning

Park planning helps define which types of resource conditions, visitor experiences, and management actions will best achieve the mandate to preserve resources unimpaired for the enjoyment of future generations. National Park Service planning processes will flow from broad-scale general management planning, through progressively more specific strategic planning, implementation planning, and annual performance planning and reporting.

2.1 General Principles

2.1.1 Logical Decision-making

The National Park Service will use planning to bring logic, analysis, public involvement, and accountability into the decision-making process. Park planning and decision-making will be conducted as a continuous, dynamic cycle, from broad visions shared with the public to individual, annual work assignments and evaluations. Each park will be able to demonstrate to decision-makers, staff, and the public how decisions relate to one another in terms of a logical, trackable rationale.

2.1.2 Scientific, Technical, and Scholarly Analysis

Decisions regarding the treatment and use of park resources will utilize scientific, technical, and scholarly analysis. Analysis will be interdisciplinary and tiered, focusing first on the park as a whole (including its global, national, and regional contexts) and then on site- specific details. At key points of planning and decision-making, the Park Service will identify reasonable alternatives, and will analyze and compare their differences with respect to their consistency with the park purpose, the quality of visitor experiences, the impacts on park resources, short- and long-term costs, and environmental consequences that may extend beyond park boundaries.

2.1.3 Public Participation

Public participation in planning and decision-making will ensure that the Park Service fully understands and considers the public's interests in the parks, which are part of their national heritage, cultural traditions, and community surroundings. The Service will actively seek out and consult with existing and potential visitors, neighbors, people with traditional cultural ties to park lands, scientists and scholars, concessioners, cooperating associations, gateway communities, other partners, and government agencies. The Service will work cooperatively with others to improve the condition of parks; to enhance public service; and to integrate parks into sustainable ecological, cultural, and socioeconomic systems.

(See Public Involvement 2.3.1.6; Consultation 5.2.1)

2.1.4 Goal Orientation

Managers will be held accountable for identifying and accomplishing measurable long-term goals and annual goals as incremental steps leading toward fully carrying out the park mission. Such planning is a critical and essential part of the National Park Service performance management system that is designed to improve the Service's performance and results. Park staff will monitor resource conditions and visitor experiences, and plan, track, and report performance. If goals are not being met, management teams will seek to understand why, and take appropriate actions. The broadest goals will be periodically reassessed, taking into account new knowledge or previously unforeseen circumstances, and then the planning cycle will then be re-initiated at the appropriate point.

(See Park Management 1.4)

2.2 Major Elements of NPS Park Planning and Decision-making

A documented logical, trackable rationale for decisions will be created through several levels of planning, which are complementary, and become increasingly detailed. The process will begin with determining why the park was established and what resource conditions and visitor

experiences should exist there, and will then become increasingly focused on how resource conditions should be achieved. The planning framework for each park will contain the following elements:

- The park's mission, and the broad, park-wide mission goals. The park's mission includes the park's purpose and significance, based on the park's enabling legislation or Presidential proclamation, and any laws and Executive orders that apply to the national park system or to the individual park unit. Mission goals will articulate the ideals that the NPS will strive to achieve in the park. Park mission goals tier off, or flow from, the overall goals for the national park system.
- Specific management prescriptions in the park general management plan (GMP). Management prescriptions will (1) clearly define the desired natural and cultural resource conditions and visitor experiences to be achieved and maintained over time; and (2) identify the kinds and levels of management activities, visitor use, and development that are appropriate for maintaining the desired conditions. Management prescriptions will be applied parkwide by resource topic (such as prescriptions related to air quality, regardless of where it occurs in the park), and by specific geographic area as a management zone.
- Objective, measurable, long-term goals in the park strategic plan. The long-term goals will define the resource conditions and visitor experiences to be achieved in the near future, for which the superintendent will be accountable. These goals are based on an assessment of the park's natural and cultural resources; park visitors' experiences; and the park's performance capability, given available personnel, funding, and external factors.
- Implementation programs and implementation details in implementation plans (as appropriate). These will describe what actions are needed for achieving the mission and longterm goals, and specifically how they will be conducted.
- An annual performance plan, consisting of annual goals and an annual work plan that will guide park efforts for a fiscal year.
- An annual performance report, consisting of an accounting of annual results in relation to annual goals.

All of these elements will be interrelated in a single framework for planning and decision-making. Within this framework, actions will relate directly to goals, and goals will relate directly to the mission of the park. Annual goals and work plans will relate to long-term (five-year) goals, while long-term goals will relate to the park's mission, management prescriptions, and the broadest decisions about what the Service ultimately hopes to achieve.

Park superintendents and regional directors will be responsible for ensuring that planning is properly conducted within the foregoing planning framework, and for making management decisions supported by planning and analysis. However, many parks will initially lack some elements of a logical, trackable rationale as described here, and updating plans to bring them into conformance will take time. In the interim, management will be guided by the park strategic plan and other current approved plans. No major new development, or other major commitment of park land or other natural or cultural resources, will be authorized without an approved general management plan (GMP).

2.3 Levels of Park Planning

The elements necessary for a logical, trackable rationale for decision-making will be created and updated through four closely interrelated planning processes: (1) general management planning; (2) park strategic planning; (3) implementation planning; and (4) annual performance planning. The order of these processes will generally flow from broad-scale general management planning through progressively more specific strategic planning, implementation planning, and annual performance planning and reporting.

When determining a plan's scope, it will be important to distinguish which issues can most appropriately be addressed by general management planning, and which can be most appropriately addressed by more detailed strategic or implementation planning. Each level of planning has a distinctive function, and all levels are designed to interrelate with a minimum of duplication and confusion. At each level, plans will be written to make the linkages and relationships among the planning levels apparent to readers.

Environmental analysis of alternatives and public involvement required under section 102(C) of NEPA (42 USC 4332 (C)) will be conducted at any level of planning in which the decisions to be made constitute a major federal action significantly affecting the quality of the human environment. Normally, NEPA analysis and public participation will be done at the general management planning level, when the overall direction for the park's future is decided, and again at the implementation planning level, before funding and resources are committed to carry out specific actions (see 2. 3. 1 and 2. 3. 4, below). In keeping with the Council on Environmental Quality guidelines for NEPA compliance, environmental analysis for more specific programs or actions will follow, or flow from, earlier NEPA documents for the broader GMP.

(Also see Director's Orders #2: Park Planning, and #12: Conservation Planning and Environmental Impact Analysis)

2.3.1 General Management Planning

The Service will maintain an up-to-date GMP for each unit of the national park system. The purpose of each GMP will be to ensure that the park has a clearly defined direction for resource preservation and visitor use. This basic foundation for decision-making will be developed by an interdisciplinary team, in consultation with relevant offices within the Service, other federal and state agencies, other interested parties, and the general public. The GMP will be based on full and proper utilization of scientific information related to existing and potential resource conditions, visitor experiences, environmental impacts, and relative costs of alternative courses of action.

General management planning will constitute the first phase of tiered planning and decision-making. It will focus on why the park was established, and what management prescriptions (i.e., resource conditions, visitor experiences, and appropriate types of management actions) should be achieved and maintained over time. The GMP will take the long view, which may project many years into the future, when dealing with the time frames of natural and cultural processes. The plan will consider the park in its full ecological, scenic, and cultural contexts as a unit of the national park system and as part of a surrounding region. The GMP will also establish a common management direction for all park divisions and districts. This integration will help avoid inadvertently creating new problems in one area while attempting to solve problems in another.

(See Decision-making Requirements to Avoid Impairments 1.4.7)

2.3.1.1 Statutory Requirements

GMPs will meet all statutory requirements contained in 16 USC 1a-7(b), and will include:

- The types of management actions required for the preservation of park resources;
- The types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
- Visitor carrying capacities, and implementation commitments, for all areas of the park; and
- Potential modifications to the external boundaries of the park—if any—and the reasons for the proposed changes.

(See Visitor Carrying Capacity 8.2.1)

2.3.1.2 Decision-making Elements

Decision-making elements will consist of the mission, mission goals, and management prescriptions described previously in section 2.2.

2.3.1.3 Management Zoning

Each park's GMP will include a map that delineates zones or districts that correspond to management prescriptions. This delineation of management prescriptions is called management zoning. Most parks will have several different prescriptions for resource condition, visitor experience, and appropriate management activities to reflect the suitability of specific areas for those uses. For example, highly sensitive natural areas might tolerate little, if any, visitor use, while other areas may accommodate much higher levels of use. Even in historic structures, one floor might be most appropriate for exhibits, while another could accommodate offices or administrative uses. Some prescriptions may apply parkwide, but the delineation of management zones will illustrate where there are differences in intended resource conditions, visitor experience, and management activity.

2.3.1.4 Planning Team

An interdisciplinary team, including park managers and technical experts, will prepare GMPs. Planning teams will consult with park staff, Service leadership, other agencies with jurisdiction by virtue of law or expertise, other knowledgeable persons, and the public concerning future management of park resources. The planning team will advise the park superintendent and the regional director. The regional director is the official responsible for approving GMPs. Subsequent plans may be approved by the superintendent.

2.3.1.5 Science and Scholarship

Decisions documented in GMPs and other planning products, including environmental analysis and documentation, will be based on current scientific and scholarly understanding of park ecosystems and cultural contexts, and the socioeconomic 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 conditions and management prescriptions governing most of the area covered by the plan remain essentially unchanged from those present when the plan was originally approved. Amendments or revisions to an existing GMP will be accompanied by a supplemental environmental impact statement or other suitable NEPA analysis and public involvement.

(See Chapter 1: the Foundation; Chapter 3: Land Protection; Chapter 4: Natural Resource Management; Chapter 5: Cultural Resource Management; Chapter 6: Wilderness Preservation and Management; Chapter 8: Use of the Parks; Chapter 9: Park Facilities; Chapter 10: Commercial Visitor Services. Also see Director's Orders #2: Park Planning; and #12: Conservation Planning and Environmental Impact Analysis)

2.3.2 Strategic Planning

Strategic planning, required by GPRA, will be conducted for the National Park Service as a whole, and every park, program, and central office will have its own strategic plan. Parks, programs, and central offices will engage in strategic planning as a way to manage overall performance, and to thereby achieve better results in their mission of preserving resources and providing for visitor enjoyment. Through managing for performance, parks will identify their long-term goals, establish their annual performance targets, track their progress, and report their accomplishments toward meeting the Service-wide, and the park's, long-term goals.

A park's strategic plan will be based on the park's mission goals, GMP, and the Service-wide strategic plan. Strategic plans will address both Service-wide and local outcomes, and will be approved by the superintendent, with the regional director's concurrence.

2.3.2.1 Strategic Plan Contents

To fulfill the purposes of GPRA for implementing performance management in the National Park Service, strategic plans will contain the following elements:

- Mission statement;
- Mission goals (the same "anchoring" elements found in the GMP); Long-term goals;
- A short description of the strategies chosen to accomplish the goals;
- A description of how the annual goals will relate to the long-term goals (if it is not obvious);
- An identification of the key external factors that could significantly affect achievement of the goals;
- A description of the program/ operation evaluations used in establishing or revising goals, with a schedule for future evaluations;
- A section listing the consultations with stakeholders and others; and A list of those who developed the plan.

Because information in park strategic plans is extracted for compilation within the Service- wide strategic plan, these plans must contain similar information.

2.3.2.2 Eight-step Performance Management Process

Performance management will be implemented according to the eight- step performance management process developed by the Park Service. Analysis will focus on understanding the condition of the natural and cultural resources being managed; the experiences of visitors; and the capabilities of the park to perform, given the infrastructure, budget and staffing that can reasonably be expected during the planning period. Managers will consider how the park mission and long-term goals might be pursued in the foreseeable future. The answers to that question will determine the park's workload, budget, and staffing allocations for the next two to five years.

2.3.2.3 Relationship Between the Strategic Plan and the GMP

The park's strategic plan will be consistent with the GMP, building on the GMP mission, mission goals, and management prescriptions. Parks that lack a current GMP as a base for their GPRA strategic planning effort will work from their existing plans and an updated mission statement and mission goals. For GMPs that are not current, parks will identify and fill gaps in their overall planning framework as quickly as is feasible.

Although it shares some elements in common with a GMP, a park's strategic plan will not be a substitute for a GMP. A strategic plan is focused on a shorter time frame than a GMP; targets

more measurable results; and does not usually require the comprehensive resource analysis, consultation, and compliance required for a GMP. Through strategic planning, park staffs will continuously re-evaluate the adequacy of the park's GMP as a foundation for addressing issues, and they may identify the need for a new or revised GMP.

Should a park decide, through its strategic planning process, that a major shift in direction or emphasis is needed, then the strategic plan will identify the need for a new GMP, or a GMP addendum or amendment. Strategic plans may also identify the need for more detailed implementation plans. General management planning and implementation planning are the appropriate processes for incorporating the requirements of NEPA and NHPA to consider impacts on the natural, cultural, and socioeconomic environments.

2.3.3 Implementation Planning

Implementation planning will focus on how to implement activities and projects needed to achieve the management prescriptions identified in the GMP and in the complementary long-term goals in the park strategic plan. Developing plans of action for dealing with complex, technical, and sometimes controversial issues often requires a level of detail and thorough analysis beyond that appropriate at the GMP or strategic plan levels. Implementation planning will provide this level of detail and analysis.

There are two elements of implementation plans that may be combined or addressed separately:

Implementation programs will identify the scope, sequence, and mid-level cost estimates of projects needed to achieve park management prescriptions and long- term goals. Implementation details will concentrate on individual projects, and specify the techniques, disciplines, equipment, infrastructure, schedule, and funding necessary to accomplish outcomes targeted in the strategic plan.

2.3.3.1 Implementation Programs

Implementation programs for a park will provide a systemized course of action that can serve as a bridge between the broad direction provided in the GMP and decisions on impending actions provided in performance management. Implementation programs may include special emphasis plans, such as a park resource management plan, comprehensive interpretive plan, cultural landscape report, land protection plan, visitor use plan, or wilderness management plan. Integrated, interdisciplinary approaches to implementation programs will be encouraged.

2.3.3.2 Implementation Details

Implementation plan details may vary widely, and may direct a finite project (such as reintroducing an extirpated species or developing a trail) or a continuous activity (such as maintaining a historic structure or managing fire within a natural system). Examples of implementation details include management plans for specific species and habitats, site designs, off-road-vehicle management plans, and interpretive media plans. Implementation details will generally be deferred until the activity or project under consideration has attained sufficient priority to indicate that action will be taken within the next two to five years, and will then be included in an annual work plan. This will help ensure that decisions about how to best achieve a certain goal are relevant, timely, and based on current data.

2.3.3.3 Implementation Plan Development

Technical specialty teams under the direction of the program leader in the park (usually a division chief) or in the regional office will develop implementation plans, and the park superintendent will approve the plans. However, individual projects will be approved for implementation only in the performance management process, to ensure their integration with other park programs and initiatives.

Development of an implementation plan may overlap general management planning and performance management, if appropriate for the purposes of planning efficiency or public involvement. However, the decisions needed at the general management planning level and the strategic planning level will precede—and direct—more detailed decisions regarding projects and activities to accomplish goals. Major actions or commitments aimed at changing resource conditions or visitor use in a park, and major new development or rehabilitation, must be consistent with an approved GMP and be linked to long-term goals in a current strategic plan. Even if they are conducted simultaneously, the GMP and an implementation program will be contained in separate documents, or separate parts of a single document.

2.3.3.4 Environmental Analysis

Any decisions calling for actions having the potential to significantly affect the human environment will require a formal analysis of alternatives, in compliance with NEPA and related legislation, including NHPA. Because many issues involving environmental quality and cultural resources will be resolved through implementation planning, rather than general management planning, the NEPA and NHPA section 106 processes begun during general management planning will often be continued as part of implementation planning.

(See Park Management 1.4; Chapter 3: Land Protection; Chapter 4: Natural Resource Management; Chapter 5: Cultural Resource Management; Chapter 6: Wilderness Preservation and Management; Chapter 8: Use of the Parks; Chapter 9: Park Facilities; Chapter 10: Commercial Visitor Services. Also see Director's Orders #2: Park Planning, and #12: Conservation Planning and Environmental Impact Analysis)

2.3.4 Park Annual Performance Planning and Reporting

Each park will prepare annual performance plans articulating annual goals for each fiscal year, and annual performance reports describing the progress made in meeting the annual goals. The development of the annual performance plan and report will be synchronized with NPS budget development.

2.3.4.1 Annual Performance Plans

Annual performance plans will contain the following elements to aid in decision- making: (1) annual goals (the outcomes expected to be achieved that fiscal year) that are based on, and represent, one-year increments of a park's long-term goals; and (2) an annual work plan (inputs and outputs for the fiscal year) that breaks out park activities to achieve the annual goals, and that includes budget and staffing.

Annual performance plans have significant budgetary and personnel implications and need to be carefully prepared. Future-year annual performance plans will be developed in conjunction with budget requests (recurring and nonrecurring), and are considered privileged information until the budget is made public by the President. Because they incorporate decisions made through other planning processes, annual plans do not require public involvement or consultation, but they

must be made available to the public. The annual performance report will specifically address park performance as affected by budget change.

2.3.4.2 Annual Performance Reports

Annual performance reports will consist of two main parts: (1) a report on the progress made toward meeting the last fiscal year's annual performance plan; and (2) an analysis of the present fiscal year's annual performance plan. The analysis will identify the continuing goals (carryovers) from the last fiscal year, and discuss why the park did not accomplish one or more of its annual goals in the past fiscal year and describe the steps being taken to accomplish such goals in the future.

The park annual performance report will relate to the Service-wide annual performance report, where applicable, in order to aggregate park results at the Service-wide level. The annual performance reporting is timed to provide Congress with information on past performance as it considers an agency's budget request and annual performance plan. Information from annual performance reports will also be used as the basis for personnel appraisals. Accountability for results should be within an employee's ability to effect results.

3 Land Protection

The National Park Service will use all available authorities to protect lands and resources within units of the national park system, and will seek to acquire as promptly as possible non-federal lands and interests in land that have been identified for acquisition. When lands within a park unit's authorized boundaries have not been acquired, the Service will cooperate with federal agencies; tribal, state, and local governments; non-profit organizations; and property owners to provide appropriate protection measures. Cooperation with these entities will also be pursued and other available land protection tools will be employed when threats to resources originate outside boundaries.

3.1 General

The National Park Service is required by its Organic Act to protect and preserve unimpaired the resources and values of the national park system while providing for public use and enjoyment. A number of park units have non-federally owned lands within their authorized boundaries. When non-federal lands exist within park boundaries, acquisition of those lands and/ or interests in those lands is often necessary to protect and manage natural and cultural resources. When acquisition is necessary and appropriate, the Park Service will acquire those lands and/ or interests as promptly as possible. Practical, cost-effective alternatives will be considered and pursued by the Service to advance protection and management goals.

The boundaries of most park units are not based strictly on ecological processes or other resource protection principles, and park units are increasingly subject to impacts from external sources. Examples include air and water pollution, and the loss of scenic vistas, natural quiet, and wildlife habitat. To fulfill National Park Service protection responsibilities, strategies and actions beyond park boundaries may be employed. External threats may be addressed by using available tools such as gateway community planning and partnership arrangement; NPS educational programs; and participation in the planning processes of federal agencies and tribal, state, and local governments. Strong fulfillment of Service responsibilities is required by NEPA, NHPA, and other applicable laws to minimize impacts on park resources and values.

3.2 Land Protection Methods

The Park Service may employ a variety of different methods, as appropriate, for protecting park resources. These methods will be considered in the land protection planning process for each unit. Examples include:

- Acquisition of fee simple real property interest, possibly with arrangements for some rights to be reserved;
- Acquisition of less-than-fee real property interests, such as easements or rights-of-way; and
- Cooperative approaches, such as cooperative agreements, participation in regional consortiums, local planning and zoning processes, or other measures that do not involve federal acquisition of any interest in real property.

Federal fee simple ownership (all of the rights associated with real property) provides the Service with the greatest ability to protect and manage resources and provide for public use and enjoyment. Less-than-fee interests (some of the rights associated with real property) require a federal commitment to monitor and enforce the Service's interest in the affected property. Acquisition of less- than- fee interests may be appropriate in instances in which the Service needs only a specific interest in land, or in which it needs to restrict uses of the land in order to protect resource values but full fee ownership is not required.

Acquisition of fee simple interests is a critically important and effective land protection method for lands within unit boundaries. The Service may employ, as appropriate, a broad strategy to protect land and resources, including innovative techniques; partnerships; participation in the planning and decision-making processes of other federal agencies; and vigilance at the regional and local levels of government, at which non-federal land use decisions are generally made.

Some park units created by Congress have been specifically authorized to continue historical or traditional activities such as farming, ranching, or low-density residential uses. Congress may also restrict the method of acquisition or prohibit acquisition without owner consent. In all cases, the Park Service will acquire the lands and/ or interests in land only by the method or methods authorized.

When non-federal land is identified for acquisition, the Service will make every reasonable effort to reach an agreement with the owner on the purchase price. If an agreement cannot be reached, the Service will take further steps in accordance with authorities and congressional directions that apply to the unit in question. Condemnation is generally considered only as a last resort. However, acquisition by condemnation is sometimes necessary to establish just compensation, to clear a title, or to prevent imminent damage or unacceptable threat to park resources and values.

3.3 Land Protection Plans

Planning for the protection of park lands will be integrated into the planning process for park management. Land protection plans (LPPs) should be prepared to determine and publicly document what lands or interests in land need to be in public ownership, and what means of protection are available to achieve the purposes for which the unit was created. These plans will be prepared for each unit of the national park system containing non-federal land or interests in land within its authorized boundary. A thorough review of a park's authorizing statutes and complete legislative history will be conducted as part of the land protection planning process.

Land acquisition priorities will be guided by a park unit's land protection plan. Superintendents will ensure that LPPs are developed, and periodically reviewed and updated as necessary, to identify what land or interests in land needs to be in public ownership to carry out park purposes. These purposes and the desired conditions for resources and visitor experiences are normally defined in the park's general management plan. Strategic plans define what results can be accomplished in the foreseeable future—usually a five-year period. LPPs will be coordinated with general management plans, strategic plans, and other plans for resource management and visitor use. Decisions about acquisition within park boundaries will consider the relationship between the park and its adjacent lands. Superintendents have the responsibility to be aware of uses or activities that are planned for lands around the park that may have impacts on park resources and opportunities for visitor enjoyment.

An LPP should be simple and concise, and document: (1) what lands or interests in land need to be in public ownership; (2) what means of protection are available to achieve park purposes as established by Congress; (3) the protection methods and funds that will be sought or applied to protect resources and to provide for visitor use and park facility development; and (4) acquisition priorities. Historic structures and objects on the land under consideration within the LPP will be evaluated for their relevance to the park mission and the scope of the park museum collection. The LPP will specify those structures and objects that need to be in public ownership, and identify the appropriate source of funding. Personal property not identified for acquisition should be removed by the property owner. For acquisition of water rights, see chapter 4, section 4.6.2.

When appropriate, the LPP may serve as a vehicle for addressing land protection issues external to a park's boundaries. When external impacts or opportunities are addressed, plans will clearly

distinguish between the authorities related to land acquisition and the authorities for the Service to cooperate with other entities beyond the park boundary.

3.4 Addressing Threats from External Sources

Superintendents will be aware of and monitor state government programs for managing state-owned submerged lands and resources within NPS units. When there is potential for such programs to adversely impact park resources or values, superintendents will make their concerns known to appropriate state governmental officials, and encourage compatible land uses that avoid or mitigate potential adverse impacts. When federal acquisition of state-owned submerged lands and resources within NPS units is not feasible, the NPS will seek to enter into cooperative agreements with state governments to ensure the adequate protection of park resources and values.

External threats may originate with proposed uses outside a park that may adversely impact park resources or values. Superintendents will therefore be aware of and monitor land use proposals and changes to adjacent lands, and their potential impacts. They will also seek to encourage compatible adjacent land uses to avoid or to mitigate potential adverse effects. Superintendents will make their concerns known, and, when appropriate, actively participate in the planning and regulatory processes of neighboring jurisdictions, including other federal, tribal, state, and local governments.

In working cooperatively with surrounding landowners and managers a superintendent might, for example, comment on potential zoning changes for proposed development projects, or brief the public and officials about park resources and related studies that are relevant to proposed zoning or other changes. Superintendents should seek advice from the appropriate NPS program managers and the Solicitor's Office when dealing with complicated external land protection issues and threats, especially those with potential Service-wide controversy or consequences.

In some cases—such as air or water pollution—the source of a significant threat may be far removed from the park's boundaries. In such cases, the Park Service will coordinate at the regional or national level in making its concerns known, and in seeking a remedy to the problem. Threats to parks from external sources should be identified and addressed in the general management plan or in other planning documents. The result will be enhanced public awareness of the far-reaching impacts of these threats, and an increased likelihood of remedial actions by those who are responsible.

(See External Threats to Park Resources and Values 1.5; Evaluating Environmental Impacts 4.1.3; Partnerships 4.1.4; Biological Resource Management 4.4; Removal of Exotic Species Already Present 4.4.4.2; Water Resource Management 4.6; Air Resource Management 4.7; Geologic Resource Management 4.8; Soundscape Management 4.9; Lightscape Management 4.10; Stewardship 5.3. Also see Director's Order #25: Land Protection, and Reference Manual 25)

3.5 Boundary Adjustments

The boundary of a national park may be modified only as authorized by law. For many parks, such statutory authority is included in the enabling legislation or subsequent legislation specifically authorizing a boundary revision. Where park-specific authority is not available, the

Land and Water Conservation Fund (LWCF) Act of 1965, as amended, provides an additional, but limited, authority to adjust boundaries.

The act provides for boundary adjustments that essentially fall into three distinct categories: (1) technical revisions; (2) minor revisions based upon statutorily defined criteria; and (3) revisions to include adjacent real property acquired by donation, purchased with donated funds, transferred from any other federal agency, or obtained by exchange. Adjacent real property is considered to be land located contiguous to but outside the boundary of a national park system unit.

As part of the planning process, the NPS will identify and evaluate boundary adjustments that may be necessary or desirable in order to carry out the purposes of the park unit. Boundary adjustments may be recommended to:

- Protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes;
- Address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads; or
- Otherwise protect park resources that are critical to fulfilling park purposes.

If the acquisition will be made using appropriated funds, and is not merely a technical boundary revision, the criteria set forth by Congress at 16 USC 4601-9(c) (2) must be met. All recommendations for boundary changes must meet the following two criteria:

- The added lands will be feasible to administer, considering their size, configuration, and ownership, and hazardous substances, costs, the views of and impacts on local communities and surrounding jurisdictions, and other factors such as the presence of exotic species; and
- Other alternatives for management and resource protection are not adequate.

These criteria apply conversely to recommendations for the deletion of lands from the authorized boundaries of a park unit. For example, before recommending the deletion of land from a park boundary, a finding would have to be made that the land did not include a significant resource, value, or opportunity for public enjoyment related to the purposes of the park. Full consideration should be given to present and future park needs before a recommendation is made to delete lands from the authorized boundaries of a park unit. Actions consisting solely of deletions of land from existing park boundaries require an act of Congress.

3.6 Land Acquisition Authority

The National Park Service acquires lands or interests in land within parks when authorized to do so by an act of Congress or by Presidential proclamation. Although acquisition outside authorized boundaries is generally prohibited, certain statutes provide limited system-wide authority for minor boundary changes and the acceptance of donated lands adjacent to a park's boundaries. There is no single statute authorizing land acquisition. There are, however, several laws that provide limited acquisition authority that is applicable system-wide. For most parks, acquisition authority is provided by statutes specific to the park. The Park Service land acquisition process and land protection planning process will comply with all applicable legislation, congressional guidelines, Executive orders, and Department of the Interior policies. For delegations of authority for land acquisition, see Director's Order #25: Land Protection.

3.7 Land Acquisition Funding

When the acquisition of lands and/ or interests in land within a park boundary is necessary, the NPS will consider acquisition by: purchase with appropriated or donated funds; exchange; donation; bargain sale; transfer or withdrawal from public domain; or condemnation. Funding for land acquisition within the national park system is derived primarily from the LWCF. LWCF monies are restricted to uses associated with the acquisition of land and/ or interests in land within the authorized boundaries of NPS units. As outlined in Department of the Interior policy, the federal portion of the LWCF will be used to acquire the lands, waters, and interests therein necessary to achieve the Service's natural, cultural, wildlife, and recreation management objectives. To implement this policy, the fund will be used in accordance with management objectives for each park unit based on the NPS mission and congressional mandates, and with an analysis of long-range goals for resource protection, safe public access, and park management. As further required by departmental policy, the Service will, to the extent consistent with statutory authorities:

- Identify what lands or interests in land within unit boundaries need to be in federal ownership to achieve management unit purposes consistent with public objectives;
- Use to the maximum extent practical, cost-effective alternatives to the direct federal purchase
 of privately owned lands, and, when acquisition is necessary, acquire or retain only the
 minimum interests determined by park officials to be necessary to meet management
 objectives;
- Cooperate with landowners, other federal agencies, tribal, state, and local governments, and the private sector to manage land for public use or protect it for resource conservation; and
- Formulate, or revise as necessary, plans for land acquisition and resource use or protection to ensure that sociocultural impacts are considered, and that the most outstanding areas are adequately managed.

4 Natural Resource Management

The National Park Service will preserve the natural resources, processes, systems, and values of units of the national park system in an unimpaired condition, to perpetuate their inherent integrity and to provide present and future generations with the opportunity to enjoy them.

The National Park Service will strive to understand, maintain, restore, and protect the inherent integrity of the natural resources, processes, systems, and values of the parks. The Service recognizes that natural processes and species are evolving, and will allow this evolution to continue, minimally influenced by human actions. The natural resources, processes, systems, and values that the Service preserves are described generally in the 1916 NPS Organic Act and in the enabling legislation or Presidential proclamation establishing each park. They are described in greater detail in management plans specific to each park. Natural resources, processes, systems, and values found in parks include:

- Physical resources such as water, air, soils, topographic features, geologic features, paleontological resources, natural soundscapes, and clear skies;
- Physical processes such as weather, erosion, cave formation, and wildland fire;
- Biological resources such as native plants, animals, and communities;
- Biological processes such as photosynthesis, succession, and evolution;
- Ecosystems; and
- Highly valued associated characteristics such as scenic views.

In this chapter, natural resources, processes, systems, and values are all included in the term "natural resources." The term "natural condition" is used here to describe the condition of resources that would occur in the absence of human dominance over the landscape.

The Service manages the natural resources of parks to maintain them in an unimpaired condition for future generations in accordance with NPS-specific statutes, including the NPS Organic Act and the National Parks Omnibus Management Act of 1998; general environmental laws such as the Clean Air Act, the Clean Water Act, the Endangered Species Act of 1973, NEPA, and the Wilderness Act; Executive orders; and applicable regulations.

Activities that take place outside park boundaries and that are not managed by the Service sometimes have profound effects on the Service's ability to protect natural resources inside parks. The Service must act to protect natural resources from impacts caused by external activities by working cooperatively with federal, state, and local agencies; Native American authorities; user groups; adjacent landowners; and others to identify and achieve broad natural resource goals. By working cooperatively through both formal and informal lines of communication and consultation, the Service will better achieve park management objectives and the protection of park natural resources.

(See Park Management 1.4; External Threats and Opportunities 1.5; Partnerships 4.1.4)

4.1 General Management Concepts

As explained in chapter 1 of these *Management Policies*, preserving park resources and values unimpaired is the core, or primary, responsibility of NPS managers. The Service cannot conduct or allow activities in parks that would impact park resources and values to a level that would constitute impairment. To comply with this mandate, park managers must determine in writing whether proposed activities in parks would impair natural resources. Park managers must also take action to ensure that ongoing NPS activities do not cause the impairment of park natural resources. In cases of doubt as to the impacts of activities on park natural resources, the Service will decide in favor of protecting the natural resources.

Natural resources will be managed to preserve fundamental physical and biological processes, as well as individual species, features, and plant and animal communities. The Service will not attempt to solely preserve individual species (except threatened or endangered species) or individual natural processes; rather, it will try to maintain all the components and processes of naturally evolving park ecosystems, including the natural abundance, diversity, and genetic and ecological integrity of the plant and animal species native to those ecosystems. Just as all components of a natural system will be recognized as important, natural change will also be recognized as an integral part of the functioning of natural systems. By preserving these natural components and processes in their natural condition, the Service will prevent resource degradation, and therefore avoid any subsequent need for resource restoration. In managing parks to preserve naturally evolving ecosystems, and in accordance with requirements of the National Parks Omnibus Management Act of 1998, the Service will utilize the findings of science and the analyses of scientifically trained resource specialists in decision-making.

The Service will not intervene in natural biological or physical processes, except:

- When directed by Congress;
- In some emergencies in which human life and property are at stake;
- To restore natural ecosystem functioning that has been disrupted by past or ongoing human activities; or
- When a park plan has identified the intervention as necessary to protect other park resources or facilities.

Any such intervention will be kept to the minimum necessary to achieve the stated management objectives.

Natural systems in the national park system, and the human influences upon them, will be monitored to detect change. The Service will use the results of monitoring and research to understand the detected change and to develop appropriate management actions.

Biological or physical processes altered in the past by human activities may need to be actively managed to restore them to a natural condition or to maintain the closest approximation of the natural condition in situations in which a truly natural system is no longer attainable. Prescribed burning and the control of ungulates when predators have been extirpated are two examples. The extent and degree of management actions taken to protect or restore park ecosystems or their components will be based on clearly articulated, well-supported management objectives and the best scientific information available.

There may be situations in which an area may be closed to visitor use to protect the natural resources (for example, during an animal breeding season) or for reasons of public safety (for example, during a wildland fire). Such closures may be accomplished under the superintendent's discretionary authority, and will comply with applicable regulations (36 CFR 1.5 and 1.7).

(See The Prohibition on Impairment of Park Resources and Values 1.4.4; General Management Planning 2.3.1; Facility Planning and Design 9.1.1)

4.1.1 Planning for Natural Resource Management

Each park will prepare and periodically update a long-range (with at least one to two decades in view) comprehensive strategy for natural resource management, as appropriate. This long-range

strategy will describe the comprehensive program of activities needed to achieve the desired future conditions for the park's natural resources. It will integrate the best available science, and will prescribe activities such as inventories, research, monitoring, restoration, mitigation, protection, education, and management of resource uses. The strategy will also describe the natural-resource-related activities needed to achieve desired future conditions for cultural resources (such as historic landscapes) and visitor enjoyment.

Similarly, planning for park operations, development, and management activities that might affect natural resources will be guided by high-quality, scientifically acceptable information, data, and impact assessment. Where existing information is inadequate, the collection of new information and data may be required prior to decision-making. Long-term research or monitoring may also be necessary to correctly understand the effects of management actions on natural resources whose function and significance are not clearly understood.

(See Decision- making Requirements to Avoid Impairments 1.4.7; General Management Planning 2.3.1; Land Protection Plans 3.3; Cultural Landscapes 5.3.5.2; Chapter 8: Use of the Parks; NPS-conducted or NPS-sponsored Inventory, Monitoring, and Research Studies 4.2.1; Chapter 9: Park Facilities)

4.1.2 Natural Resource Information

Information about natural resources that is collected and developed will be maintained in perpetuity. All forms of information collected through inventorying, monitoring, research, assessment, traditional knowledge, and management actions will be managed to professional and NPS archival and library standards.

Most information about park natural resources will be made broadly available to park employees, the scientific community, and the public. Pursuant to provisions of the National Parks Omnibus Management Act, the Service will withhold information about the nature and specific location of sensitive park natural resources—specifically mineral, paleontological, endangered, threatened, rare, or commercially valuable resources—unless the Service determines, in writing, that disclosure of the information would further the purposes of the park, would not create an unreasonable risk of harm, theft, or destruction of resources, and would be consistent with other applicable laws.

Under the Freedom of Information Act (FOIA), the NPS may be able to withhold sensitive natural resource data and information used in ongoing law enforcement investigations or subject to national security clearance classification. The Service may be able to withhold data provided through interim project reporting, pending the completion of relevant projects and the receipt of final project reports, as specified in approved scientific research and collecting permits and associated research proposals if the release of information will cause foreseeable harm to the interests of the NPS. Information that is made available to the public (that is, not withheld under FOIA or other laws) will remain searchable and accessible under the professional and NPS archival and library standards.

(See Information Confidentiality 1.7.3; Confidentiality 5.2.3. Also see Director's Order #66: FOIA and Protected Resource Information; Museum Handbook 24-Part II)

4.1.3 Evaluating Impacts on Natural Resources

Planning, environmental evaluation, and public involvement regarding management actions that may affect the natural resources of the National Park System are essential for carrying out the Service's responsibilities to present and future generations. The Service will ensure that the environmental costs and benefits of proposed operations, development, and resource management are fully and openly evaluated before taking actions that may impact the natural resources of parks. This evaluation must include appropriate participation by the public; the application of scholarly, scientific, and technical information in the planning, evaluation, and decision-making processes; the use of NPS knowledge and expertise through interdisciplinary teams and processes; and the aggressive incorporation of mitigation measures, pollution prevention techniques, and other principles of sustainable park management.

Every environmental assessment and environmental impact statement produced by the Service will include an analysis of whether the impacts of a proposed activity constitute impairment of park natural resources and values. Every finding of no significant impact, record of decision, and National Historic Preservation Act Section 106 memorandum of agreement signed by the NPS will contain a discrete certification that the impacts of the proposed activity will not impair park natural resources and values.

(See Park Management 1.4; Implementation Planning 2.3.3; NPS-conducted or -sponsored Inventory, Monitoring, and Research Studies 4.2.1. Also see Director's Order #12: Conservation Planning and Environmental Impact Analysis)

4.1.4 Partnerships

The Service will pursue opportunities to improve natural resource management within parks and across administrative boundaries by cooperating with public agencies, appropriate Native American representatives, and private landowners. The Service recognizes that cooperation with other land managers can accomplish ecosystem stability and other resource management objectives when the best efforts of a single manager might fail. Therefore, the Service will develop agreements with federal, tribal, state, and local governments and organizations, and private landowners, when appropriate, to coordinate plant, animal, water, and other natural resource management activities in ways that maintain and protect, not compromise, park resources and values. Such cooperation may include park restoration activities, research on park natural resources, and the management of species harvested in parks. Such cooperation 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 and collections to be obtained. Although studies involving physical impacts to park resources or the removal of objects or specimens may be permitted, studies and collecting activities that will lead to the impairment of park resources and values are prohibited.

Scientific natural resource collecting activities are governed by 36 CFR 2. 5. A very limited number of other types of natural resource collecting are governed by 36 CFR 2. 1. In most cases, only small quantities may be collected. The repeated collection of materials to ensure a continuing source of supply for research or propagation is prohibited, unless the proposed activity clearly requires repeated collection, as might be the case with a monitoring or park restoration program.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Managing Information 1.7; Research 5.1; Resource Access and Use 5.3.5.3.1; Collecting Natural Products 8.8; Consumptive Uses 8.9; Social Science Studies 8.11. Also see Director's Order #74: Studies and Collecting; Director's Order #78: Social Science)

4.2.1 NPS-conducted or -sponsored Inventory, Monitoring, and Research Studies The Service will:

- Identify, acquire, and interpret needed inventory, monitoring, and research, including applicable traditional knowledge, to obtain information and data that will help park managers accomplish park management objectives provided for in law and planning documents.
- Define, assemble, and synthesize comprehensive baseline inventory data describing the natural resources under its stewardship, and identify the processes that influence those resources.
- Use qualitative and quantitative techniques to monitor key aspects of resources and processes at regular intervals.
- Analyze the resulting information to detect or predict changes, including interrelationships with visitor carrying capacities, that may require management intervention, and to provide reference points for comparison with other environments and time frames.
- Use the resulting information to maintain—and, where necessary, restore—the integrity of natural systems.

The Service may support studies to (among other things):

- Ensure a systematic, current, and fully adequate park information base;
- Provide a sound basis for policy, guidelines, and management actions;
- Develop effective strategies, methods, and technologies to restore disturbed resources, and to predict, avoid, or minimize adverse impacts on natural and cultural resources, and on visitors and related activities;
- Ensure that plans and actions reflect contemporary knowledge about the natural and cultural context of special natural areas, cultural landscapes, and natural resources having traditional cultural meaning and value to associated human groups;
- Determine the causes and potential resolution of natural resource management problems;
- Understand the ceremonial and traditional resource management practices of Native American tribes, subsistence uses by rural Alaska residents, and traditional uses by groups with demonstrated ties to particular natural resources of parks;
- Further understand park ecosystems and related human social systems, including visitors and gateway communities, and document their components, condition, and significance; and
- Ensure that the interpretation of the natural resources and issues of parks reflects current standards of scholarship relating to the history, science, and condition of the resources.

Superintendents may authorize National Park Service staff to carry out routine inventory, monitoring, study, and related duties without requiring an NPS scientific research and collecting permit. With or without an NPS permit, Service staff will comply appropriately with professional standards and with general and park-specific research and collecting permit conditions. All research and data and specimen collection conducted by NPS employees will be appropriately documented and carried out in accordance with all laws, regulations, policies, and professional standards pertaining to survey, inventory, monitoring, and research. Service staff will be expected to make their findings available to the public, such as by publication in professional journals or presentation in interpretive programs.

Park inventory, monitoring, and research needs and specific research objectives will be identified in the appropriate management plans for each park, or in park, regional, or Service-wide program plans.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Natural Resource Information 4.1.2; Restoration of Natural Systems 4.1.5; Weather and Climate 4.7.2; Miscellaneous Management Facilities 9.4.5)

4.2.2 Independent Studies

Non-NPS studies conducted in parks are not required to address specifically identified NPS management issues or information needs. However, these studies, including data and specimen collection, require an NPS scientific research and collecting permit. The studies must conform to National Park Service policies and guidelines regarding the collection and publication of data, the conduct of studies, wilderness restrictions, and park-specific requirements identified in the terms and conditions of the permit. Projects will be administered and conducted only by fully qualified personnel, and will conform to current standards of scholarship. Park Service scientific research and collecting permits may include requirements that permittees provide for parks, within agreed-upon time frames, copies of appropriate field notes, cataloging and other data, information about the data, progress reports, interim and final reports, and publications derived from the permitted activities.

(See Independent Research 5.1.2)

4.2.3 Natural Resource Collections

Natural resource collections include non-living and living specimens. Guidance for collecting and managing specimens and associated field records can be found in the Code of Federal Regulations (36 CFR 2.5) and NPS guidance documents, including the museum handbook. Non-living specimens and their associated field records are managed as museum collections. Living collections will be managed in accordance with the provisions of a park's management plan, the Animal Welfare Act, and other appropriate requirements.

Field data, objects, specimens, and features obtained for preservation during inventory, monitoring, research, and study projects, together with associated records and reports, will be managed over the long term within the museum collection. Specimens that are not authorized for consumptive analysis will be labeled and cataloged into an appropriate cataloging system in accordance with applicable regulations (36 CFR 2. 5).

(See Paleontological Resources and Their Contexts 4.8.2.1; Collecting Natural Products 8.8; Consumptive Uses 8.9; Natural and Cultural Studies, Research, and Collection Activities 8.10; Social Science Studies 8.11. Also see Director's Order #24: Museum Management)

4.2.4 Collection Associated with the Development of Commercial Products

Extractive use of park resources for commercial purposes is prohibited except when specifically authorized by law or in the exercise of valid existing rights.

The collection of non-living or living material, or parts thereof, to support research that may lead to the development of commercial products is permitted only in limited circumstances, and is managed under appropriate federal authority. Permits for such collecting may be issued only after the applicant has signed a cooperative research and development agreement (CRADA) that includes equitable benefit sharing for the park research and resource management effort. CRADAs are subject to review by the Director and the Office of the Solicitor. Permits for collections associated with the development of commercial products are subject to NEPA compliance.

4.3 Special Designations

The Service recognizes that special designation labels apply to parts or all of some parks to highlight the additional management considerations that those designated areas warrant. These labels include Research Natural Area, Experimental Research Area, Wilderness Area, National Wild and Scenic River, National Natural Landmark, Biosphere Reserve, and World Heritage Site. These designations do not reduce the Service's authority for managing the parks, although in some cases they may create additional management requirements.

4.3.1 Research Natural Areas

Research Natural Areas contain prime examples of natural resources and processes, including significant genetic resources, that have value for long-term observational studies or as control areas for manipulative research taking place outside the parks. Superintendents recommend areas of parks to their regional director, who is authorized to designate them as Research Natural Areas. Superintendents cooperate with other federal land managers in identifying park sites for designation, and in planning research and educational activities for this interagency program.

Activities in Research Natural Areas generally will be restricted to non-manipulative research, education, and other activities that will not detract from an area's research values.

4.3.2 Experimental Research Areas

Experimental Research Areas are specific tracts that are set aside and managed for approved manipulative research. Manipulative research is defined as research in which conscious alteration of existing conditions is part of the experiment. The limited situations that may warrant establishment of Experimental Research Areas are identified in *Natural Resources Reference Manual 77*. Superintendents recommend areas of the park to their regional director, who is authorized to designate them as Experimental Research Areas.

4.3.3 Wilderness Areas

See chapter 6.

4.3.4 National Wild and Scenic Rivers System

Parks containing one or more river segments listed in the national rivers inventory maintained by the NPS, or that have characteristics that might make them eligible for the National Wild and Scenic Rivers System, will comply with section 5(d)(1) of the Wild and Scenic Rivers Act, which instructs each federal agency to assess whether those rivers are suitable for inclusion in the system. Such assessments, and any resulting management requirements, may be incorporated into a park's general management plan or other management plan. No management actions may be taken that could adversely affect the values that qualify a river for inclusion in the National Wild and Scenic Rivers System.

(See Wild and Scenic Rivers 2.3.10. Also see Wild and Scenic Rivers Act)

4.3.5 National Natural Landmarks

Park sites that are among the best examples of a type of biotic community or geological feature in its physiographic province may be nominated to the Secretary of the Interior for inclusion in the National Registry of Natural Landmarks. As the agency responsible for maintaining the registry, the Service has developed criteria for eligibility (36 CFR Part 62).

4.3.6 Biosphere Reserves

Biosphere Reserves are sites that are part of a world-wide network of natural reserves recognized for their roles in conserving genetic resources; facilitating long-term research and monitoring; and encouraging education, training, and the demonstration of sustainable resource use. A Biosphere Reserve is usually representative of a biogeographic province.

Parks may be nominated for recognition as Biosphere Reserves, or as constituents of Biosphere Reserves. Specific guidance for recognition is provided by the United States Man and Biosphere (MAB) program based on the general guidance of the United Nations Education, Scientific, and Cultural Organization (UNESCO). Working within the MAB program, the Service may assist in determining the suitability and feasibility of including parks in U. S. Biosphere Reserves, may participate in research and educational activities, and may furnish information on its Biosphere Reserves for inclusion in domestic and international information systems.

The designation of park lands as Biosphere Reserves, or as constituents of Biosphere Reserves, does not alter the purposes for which the parks were established, change the management requirements, or reduce NPS jurisdiction over parks. To the extent practicable, superintendents of parks that are recognized as Biosphere Reserves will incorporate biosphere reserve objectives into general management plans, implementation plans, action plans, and park interpretive programs. Superintendents will pursue opportunities to use the biosphere reserve designation as a framework for local, regional, and international cooperation.

4.3.7 World Heritage Sites

Parks containing natural features believed to possess "outstanding universal value to mankind" may be nominated to the World Heritage List. U. S. recommendations are approved by an interagency panel chaired by the Assistant Secretary for Fish and Wildlife and Parks, based on criteria promulgated by the World Heritage Committee. These criteria and the rules for U. S. participation in the Convention Concerning the World Cultural and Natural Heritage are published in 36 CFR Part 73. Once an area is designated a world heritage site, the Service will recognize the designation in public information and interpretive programs. Designation as a World Heritage Site will not alter the purposes for which the parks were established, change the management requirements, or reduce NPS jurisdiction over parks.

(See World Heritage List Designation 5.1.3.2.3)

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

The National Park Service will maintain as parts of the natural ecosystems of parks all native plants and animals. The term "plants and animals" refers to all five of the commonly recognized kingdoms of living things and includes such groups as flowering plants, ferns, mosses, lichens, algae, fungi, bacteria, mammals, birds, reptiles, amphibians, fishes, insects, worms, crustaceans, and microscopic plants or animals. The Service will achieve this maintenance by:

- Preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur;
- Restoring native plant and animal populations in parks when they have been extirpated by past human-caused actions; and

• Minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.

4.4.1.1 Plant and Animal Population Management Principles

The individual plants and animals found within parks are genetically parts of species populations that may extend across both park and non-park lands. As local populations within a group of populations naturally fluctuate in size, they become vulnerable to natural or human-caused extirpation during periods when their numbers are low. The periodic disappearance of local populations is common in some species, and the regional persistence of these species depends upon the natural recolonization of suitable habitat by individuals from the remaining local populations. Thus, providing for the persistence of a species in a park may require maintaining a number of local populations, often both within and outside the park.

In addition, some populations of vertebrate and invertebrate animals, such as bats, caribou, warblers, marine turtles, frogs, salmon, whales, and butterflies, migrate at regular intervals into and out of parks. For these migratory populations, the parks provide only one of the several major habitats they need, and survival of the species in parks also depends on the existence and quality of habitats outside the parks. The Service will adopt park resource preservation, development, and use management strategies that are intended to maintain the natural population fluctuations and processes that influence the dynamics of individual plant and animal populations, groups of plant and animal populations, and migratory animal populations in parks.

In addition to maintaining all native plant and animal species and their habitats inside parks, the Service will work with other land managers to encourage the conservation of the populations and habitats of these species outside parks whenever possible. To meet its commitments for maintaining native species in parks, the Service will cooperate with states, tribal governments, the U. S. Fish and Wildlife Service, and the National Marine fisheries Service, as appropriate, to:

- Participate in local and regional scientific and planning efforts, identify ranges of populations
 of native plants and animals, and develop cooperative strategies for maintaining or restoring
 these populations in the parks;
- Suggest mutually beneficial harvest regulations for lands and waters outside the parks for populations that extend across park boundaries, such as resident deer or fishes; for shortdistance seasonal migrant populations, such as elk or fishes; or for long-distance migrant populations, such as salmon;
- Develop data, through monitoring, for use in plant and animal management programs (such as local land management decision-making for assessing resident plant and animal population trends, and in international management negotiations for such far-ranging seasonal migrants as geese, whales, and marine turtles);
- Present information about species life cycles, ranges, and population dynamics in park interpretive programs for use in increasing public awareness of management needs for all species, both resident and migrant, that occur in parks; and
- Prevent the introduction of exotic species into units of the National Park System, and remove populations of these species that have already become established in parks.

4.4.1.2 Genetic Resource Management Principles

The Service will strive to protect the full range of genetic types (genotypes) of native plant and animal populations in the parks by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.

The restoration of native plants and animals will be accomplished using organisms taken from populations as closely related genetically and ecologically as possible to park populations, preferably from similar habitats in adjacent or local areas. Deviations from this general policy may be made where 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;

- Restoring natural processes and conditions to areas disturbed by human activities such as fire suppression;
- Rehabilitating areas disturbed by visitor use or by the removal of hazard trees; and
- Maintaining open areas and meadows in situations in which they were formerly maintained by natural processes that now are altered by human activities.

Landscape revegetation efforts will use seeds, cuttings, or transplants representing species and gene pools native to the ecological portion of the park in which the restoration project is occurring. Where a natural area has become so degraded that restoration with gene pools native to the park has proven unsuccessful, improved varieties or closely related native species may be used.

Landscape restoration efforts will use geological materials and soils obtained in accordance with geological and soil resource management policies. Landscape restoration efforts may use, on a temporary basis, appropriate soil fertilizers or other soil amendments so long as that use does not unacceptably alter the physical, chemical, or biological characteristics of the soil and biological community, and does not degrade surface or ground waters.

(See Restoration of Natural Systems 4.1.5; Cultural Landscapes 5.3.5.2)

4.4.2.5 Maintenance of Altered Plant Communities

In altered plant communities managed for a specified purpose, plantings will consist of species that are native to the park or that are historically appropriate for the period or event commemorated. Communities altered to maintain habitat for threatened or endangered species may only use native plants, and the manipulation of existing plants will be carried out in a manner designed to enhance the recovery of the threatened or endangered species, or the recovery of the natural functioning of the plant and animal community of which the endangered species is a natural part. Use of exotic plants must conform to exotic species policy. Use of non-natural plantings in altered communities may be permitted under any of the following conditions:

- In localized, specific areas, screen plantings may be used to protect against the undesirable impacts of adjacent land uses, provided that the plantings do not result in the invasion of exotic species.
- Where necessary to preserve and protect the desired condition of specific cultural resources and landscapes, plants and plant communities generally will be managed to reflect the character of the landscape that prevailed during the historic period. Efforts may be made to extend the lives of specimen trees dating from the historic period being commemorated. An individual tree or shrub known to be of historic value that is diseased beyond recovery and has become hazardous will be removed and may be replaced. While specimen trees or shrubs that need to be perpetuated are still healthy, their own progeny will be propagated from seeds or through vegetative reproduction, such as cuttings.
- Where cultivated crop plants may be needed for livestock or agricultural uses that are allowed as part of the cultural landscape, authorized by federal law, or retained as a property right.
- Where needed for intensive development areas. Such plantings will use native or historic species and materials to the maximum extent possible. Certain native species may be fostered for esthetic, interpretive, or educational purposes.

Exotic species may not be used to vegetate vista clearings in otherwise-natural vegetation.

Limited, recurring use of soil fertilizers or other soil amendments may be allowed only as needed to maintain the desired condition of the altered plant community, and only where such use does not unacceptably alter the physical, chemical, or biological characteristics of the soil and biological community, and does not degrade surface or ground waters.

(See Management of Exotic Species 4.4.4; Cultural Landscapes 5.3.5.2)

4.4.3 Harvest of Plants and Animals by the Public

Public harvesting of designated species of plants and animals, or their components, may be allowed in park units when:

- Hunting, trapping, subsistence use, or other harvesting is specifically authorized by statute or regulation and not subsequently prohibited by regulation;
- Harvest of certain plant parts or unoccupied seashells for personal consumption or use is specifically authorized by the superintendent in accordance with 36 CFR 2. 1(c)(1);
- Recreational fishing is not specifically prohibited; or
- Commercial fishing is specifically authorized by statute or regulation.

Where harvesting is allowed and subject to NPS control, the Service will allow harvesting only when the monitoring requirement contained in section 4.4.2 and the criteria in section 4.4.2.1, above, have been met, and the Service has determined that the harvesting will not unacceptably impact park resources or natural processes, including the natural distributions, densities, age-class distributions, and behavior of:

- Harvested species;
- Native species that the harvested species use for any purpose; or
- Native species that use the harvested species for any purpose.

The Service will manage harvesting programs, and any associated habitat management programs intended to restore and maintain habitats supporting harvested plant or animal populations, to conform with applicable federal and state regulations and in consultation and cooperation, as appropriate, with individual states or tribal governments.

Habitat manipulation for harvested species may include the restoration of a disturbed area to its natural condition so it can become self-perpetuating, but will not include the artificial manipulation of habitat to increase the numbers of a harvested species above its natural range in population levels.

The Service may encourage the intensive harvesting of exotic species in certain situations when needed to meet park management objectives.

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, alreadyestablished exotic species; or made this a bullet
- 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 natural conditions and are natural elements of the ecosystem. Also, native pests that were evident in pesticide-free times are traditional elements in park cultural settings:

The Service may control native pests to:

- Conserve threatened, rare, or endangered species, or unique specimens or communities;
- Preserve, maintain, or restore the historical integrity of cultural resources;
- Conserve and protect plants, animals, and facilities in developed areas;
- Prevent outbreaks of a pest from invading uninfested areas outside the park; or
- Manage a human health hazard when advised to do so by the U. S. Public Health Service (which includes the Centers for Disease Control and the NPS Public Health Program), or to otherwise protect against a significant threat to human safety.

4.4.5.2 Integrated Pest Management Program

The Service conducts an integrated pest management (IPM) program to reduce risks to the public, park resources, and the environment from pests and pest-related management strategies. IPM is a decision-making process that coordinates knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage, by cost-effective means, while posing the least possible risk to people, resources, and the environment.

The Service, and each park unit, will use an IPM approach to address pest issues. Proposed pest management activities must be conducted according to the IPM process prescribed in Director's Order #77-7: Integrated Pest Management. Pest issues will be reviewed on a case-by-case basis. Controversial issues, or those that have potential to negatively impact the environment, must be addressed through established planning procedures and be included in an approved park management or IPM plan. IPM procedures will be used to determine when to implement pest management actions, and which combination of strategies will be most effective for each pest situation.

Under the Service's IPM program, all pesticide use on lands managed or regulated by the Service, whether that use was authorized or unauthorized, must be reported annually.

4.4.5.3 Pesticide Use

A pesticide, as defined by the Federal Insecticide, Fungicide and Rodenticide Act, is any substance or mixture that is used in any manner to destroy, repel, or control the growth of any viral, microbial, plant, or animal pest. Except as identified in the next paragraph, all prospective users of pesticides in parks must submit pesticide use requests, which will be reviewed on a case-by-case basis, taking into account environmental effects, cost and staffing, and other relevant considerations. The decision to incorporate a chemical, biological, or bio-engineered pesticide into a management strategy will be based on a determination by a designated IPM specialist that it is necessary, and that all other available options are either not acceptable or not feasible.

Insect repellents, bear deterrent sprays, and insecticides applied to persons or to livestock must conform to NPS policies and approval procedures, except that pesticides used under the following conditions do not require approval:

- Cleansers and disinfectants used in restrooms and restaurants;
- Personal insect repellents, insecticides, and bear deterrent sprays that employees or park visitors personally obtain and use to meet personal needs; or
- Insect repellents and insecticides applied to personally owned pets and pack and saddle stock.

4.4.5.4 Biological Control Agents and Bio-engineered Products

The application or release of any bio-control agent or bioengineered product relating to pest management activities must be reviewed by designated IPM specialists in accordance with Director's Order #77-7, and conform to the exotic species policies in section 4.4.4.

4.4.5.5 Pesticide Purchase and Storage

Pesticides must not be stockpiled. No pesticides may be purchased unless they are authorized and expected to be used within one year from the date of purchase. Pesticide storage, transport, and disposal will comply with procedures established by (1) the Environmental Protection Agency; (2) the individual states in which parks are located; and (3) Director's Order #30A:

Hazardous and Solid Waste Management, Director's Order #77-1: Wetland Protection, and Director's Order 77-7.

(See Planning for Natural Resource Management 4.1.1; Genetic Resource Management Principles 4.4.1.2; Management of Exotic Species 4.4.4)

4.5 Fire Management

Naturally ignited fire is a process that is part of many of the natural systems that are being sustained in parks. Human-ignited fires often cause the unnatural destruction of park natural resources. Wildland fire may contribute to or hinder the achievement of park management objectives. Therefore, park fire management programs will be designed to meet park resource management objectives while ensuring that firefighter and public safety are not compromised.

Each park with vegetation capable of burning will prepare a fire management plan and will address the need for adequate funding and staffing to support its fire management program. The plan will be designed to guide a program that responds to the park's natural and cultural resource objectives; provides for safety considerations for park visitors, employees, neighbors, and developed facilities; and addresses potential impacts to public and private property adjacent to the park. An environmental assessment developed in support of the plan will consider the effects on air quality, water quality, health and safety, and natural and cultural resource management objectives. Preparation of the plan and environmental assessment will include collaboration with adjacent communities, interest groups, state and federal agencies, and tribal governments.

All fires burning in natural or landscaped vegetation in parks will be classified as either wildland fires or prescribed fires. All wildland fires will be effectively managed through application of the appropriate strategic and tactical management options. These options will be selected after comprehensive consideration of the resource values to be protected, firefighter and public safety, and costs. Prescribed fires are those fires ignited by park managers to achieve resource management and fuel treatment objectives. Prescribed fire activities will include monitoring programs that record fire behavior, smoke behavior, fire decisions, and fire effects to provide information on whether specific objectives are met. All parks will use a systematic decision-making process to determine the most appropriate management strategies for all unplanned ignitions, and for any prescribed fires that are no longer meeting resource management objectives.

Parks lacking an approved fire management plan may not use resource benefits as a primary consideration influencing the selection of a suppression strategy, but they must consider the resource impacts of suppression alternatives in their decisions. Until a plan is approved, parks must immediately suppress all wildland fires, taking into consideration park resources and values to be protected, firefighter and public safety, and costs. Parks will use methods to suppress wildland fires that minimize impacts of the suppression action and the fire, and are commensurate with effective control, firefighter and public safety, and resource values to be protected.

Suppression activities conducted within wilderness, including the categories of designated, recommended, potential, proposed, and study areas, will be consistent with the "minimum

requirement" concept identified in Director's Order #41: Wilderness Preservation and Management.

(See General Management Concepts 4.1; Partnerships 4.1.4; Restoration of Natural Systems 4.1.5; Air Resource Management 4.7; Fire Detection, Suppression, and Post-fire Rehabilitation and Protection 5.3.1.2; Fire Management 6.3.9; Visitor Safety 8.2.5.1; Structural Fire Protection and Suppression 9.1.8. Also see Director's Order #18: Wildland Fire Management)

4.6 Water Resource Management

4.6.1 Protection of Surface Waters and Groundwaters

The Service will perpetuate surface waters and groundwaters as integral components of park aquatic and terrestrial ecosystems.

4.6.2 Water Rights

Water for the preservation and management of the national park system will be obtained and used in accordance with legal authorities. The Park Service will consider all available authorities on a case-by-case basis and will pursue those that are the most appropriate to protect water-related resources in parks. While preserving its legal remedies, the Service will work with state water administrators to protect park resources, and will participate in negotiations to seek the resolution of conflicts among multiple water claimants. Water essential for NPS needs will be purchased if it is not otherwise available. NPS consumptive use of water will be efficient and frugal, especially in water-scarce areas.

All rights to the use of water diverted from or used on federal lands within the national park system by the United States or its concessioners, lessors, or permittees will be perfected in the name of the United States.

Park waters—either surface waters or groundwater—will be withdrawn for consumptive use only when such withdrawal is absolutely necessary for the use and management of the park. All park water withdrawn for domestic or administrative uses will be returned to the park watershed system once it has been treated to a degree that ensures that there will be no impairment of park resources.

The Service may enter into contracts providing for the sale or lease of water to persons, states, or their political subdivisions that provide public accommodations or services for park visitors outside the park, but within the immediate vicinity of a park, and that have no reasonable alternative sources of water. The Service will authorize such contracts only if the water transfer does not jeopardize or unduly interfere with the natural or cultural resources of the park, and the government's costs are fully recovered. The Service will generally authorize only short-term, truly emergency, sales or leases of water. The Service will follow the requirements and procedures of Director's Orders #35A and #35B when considering the sale or lease of park water.

(See Decision-making Requirements to Avoid Impairments 1.4.7; External Threats to Park Resources and Values 1.5)

4.6.3 Water Quality

The pollution of surface waters and groundwaters by both point and non-point sources can impair the natural functioning of aquatic and terrestrial ecosystems, and diminish the utility of park waters for visitor use and enjoyment. The Service will determine the quality of park surface and groundwater resources and avoid, whenever possible, the pollution of park waters by human activities occurring within and outside of parks. The Service will:

- Work with appropriate governmental bodies to obtain the highest possible standards available under the Clean Water Act for the protection for park waters;
- Take all necessary actions to maintain or restore the quality of surface waters and ground waters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations; and
- Enter into agreements with other agencies and governing bodies, as appropriate, to secure their cooperation in maintaining or restoring the quality of park water resources.

(See Pest Management 4.4.5; Soil Resource Management 4.8.2.4; Backcountry Use 8.2.2.4; Mineral Exploration and Development 8.7; Grazing by Domestic and Feral Livestock 8.6.8; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2; Waste Management and Contaminant Issues 9.1.6; Facilities for Water Recreation 9.3.4.2. Also see Director's Order #83: Public Health Programs)

4.6.4 Floodplains

In managing floodplains on park lands, the National Park Service will (1) manage for the preservation of floodplain values; (2) minimize potentially hazardous conditions associated with flooding; and (3) comply with the NPS Organic Act and all other federal laws and Executive orders related to the management of activities in flood-prone areas, including Executive Order 11988 (Floodplain Management), NEPA, applicable provisions of the Clean Water Act, and the Rivers and Harbors Appropriation Act of 1899. Specifically, the Service will:

- Protect, preserve, and restore the natural resources and functions of floodplains;
- Avoid the long- and short-term environmental effects associated with the occupancy and modification of floodplains; and
- Avoid direct and indirect support of floodplain development and actions that could adversely affect the natural resources and functions of floodplains or increase flood risks.

When it is not practicable to locate or relocate development or inappropriate human activities to a site outside and not affecting the floodplain, the Service will:

- Prepare and approve a statement of findings, in accordance with procedures described in Director's Order 77-2: Floodplain Management; and
- Use non-structural measures as much as practicable to reduce hazards to human life and property, while minimizing the impact to the natural resources of floodplains; and
- Ensure that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR Part 60).

(See Siting Facilities to Avoid Natural Hazards 9.1.1.6)

4.6.5 Wetlands

The Service will manage wetlands in compliance with NPS mandates and the requirements of Executive Order 11990 (Wetland Protection), the Clean Water Act, and the Rivers and Harbors Appropriation Act of 1899, and the procedures described in Director's Order 77-1: Wetland Protection. The Service will (1) provide leadership and take action to prevent the destruction, loss, or degradation of wetlands; (2) preserve and enhance the natural and beneficial values of wetlands; and (3) avoid direct and indirect support of new construction in wetlands unless there are no practicable alternatives and the proposed action includes all practicable measures to minimize harm to wetlands.

The Service will implement a "no net loss of wetlands" policy. In addition, the Service will strive to achieve a longer term goal of net gain of wetlands across the national park system through restoration of previously degraded or destroyed wetlands.

When natural wetland characteristics or functions have been degraded or lost due to previous or on-going human actions, the Service will, to the extent practicable, restore them to predisturbance conditions.

The Service will conduct or obtain parkwide wetland inventories to help ensure proper planning with respect to the management and protection of wetland resources. Additional, more detailed wetland inventories will be conducted in areas that are proposed for development or are otherwise susceptible to degradation or loss due to human activities.

When practicable, the Service will not simply protect, but will seek to enhance, natural wetland values by using them for educational, recreational, scientific, and similar purposes that do not disrupt natural wetland functions.

For proposed new development or other new activities, plans, or programs that are either located in, or otherwise have the potential for direct or indirect adverse impacts on, wetlands, the Service will employ the following sequence:

- Avoid adverse wetland impacts to the extent practicable;
- Minimize impacts that cannot be avoided; and
- Compensate for remaining unavoidable adverse wetland impacts by restoring wetlands that have been previously destroyed or degraded.

Compensation for wetland impacts or losses will require that at least one acre of wetlands be restored for each acre destroyed or degraded.

Actions proposed by the NPS that have the potential to cause adverse impacts on wetlands must be addressed in an environmental assessment or an environmental impact statement. If the preferred alternative will result in adverse impacts on wetlands, a statement of findings must be prepared and approved in accordance with Director's Order #77-1.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Siting Facilities to Avoid Natural Hazards 9.1.1.6)

4.6.6 Watershed and Stream Processes

The Service will manage watersheds as complete hydrologic systems, and will minimize human disturbance to the natural upland processes that deliver water, sediment, and woody debris to

streams. These processes include runoff, erosion, and disturbance to vegetation and soil caused by fire, insects, meteorologic events, and mass movements. The Service will manage streams to protect stream processes that create habitat features such as floodplains, riparian systems, woody debris accumulations, terraces, gravel bars, riffles, and pools. Stream processes include flooding, stream migration, and associated erosion and deposition.

The Service will achieve the protection of watershed and stream features primarily by avoiding impacts to watershed and riparian vegetation, and by allowing natural fluvial processes to proceed unimpeded. When conflicts between infrastructure (such as bridges and pipeline crossings) and stream processes are unavoidable, NPS managers will first consider relocating or redesigning facilities, rather than manipulating streams. Where stream manipulation is unavoidable, managers will use techniques that are visually non-obtrusive and that protect natural processes to the greatest extent practicable.

(See Floodplains 4.6.4; Shorelines and Barrier Islands; 4.8.1.1; Facility Planning and Design 9.1.1. Also see "Unified Federal Policy for a Watershed Approach to Federal Land and Resource Management," 65 FR 62566, October 18, 2000)

4.7 Air Resource Management

4.7.1 Air Quality

The National Park Service has a responsibility to protect air quality under both the 1916 Organic Act and the Clean Air Act (CAA). Accordingly, the Service will seek to perpetuate the best possible air quality in parks to (1) preserve natural resources and systems; (2) preserve cultural resources; and (3) sustain visitor enjoyment, human health, and scenic vistas. Vegetation, visibility, water quality, wildlife, historic and pre-historic structures and objects, cultural landscapes, and most other elements of a park environment are sensitive to air pollution and are referred to as "air quality-related values." The Service will assume an aggressive role in promoting and pursuing measures to protect these values from the adverse impacts of air pollution. In cases of doubt as to the impacts of existing or potential air pollution on park resources, the Service will err on the side of protecting air quality and related values for future generations.

Superintendents will take actions consistent with their affirmative responsibilities under the CAA to protect air quality-related values in Class I areas. Class I areas are national parks over 6, 000 acres and national wilderness areas over 5,000 acres that were in existence on August 7, 1977. The CAA establishes a national goal of preventing any future, and remedying any existing, human-made visibility impairment in Class I areas. The Service supports that goal, and will take advantage of opportunities created by the CAA to help achieve it.

The CAA also recognizes the importance of integral vistas, which are those views perceived from within Class I areas of a specific landmark or panorama located outside the boundary of the Class I area. Integral vistas have been identified by the Service and are listed in *Natural Resources Reference Manual* 77. There are no regulations requiring special protection of these integral vistas, but the Service will strive to protect these park-related resources through cooperative means.

Although the CAA gives the highest level of air quality protection to Class I areas, it provides many opportunities for the Service to participate in the development of pollution control

programs to preserve, protect, and enhance the air quality of all units of the National Park System. Regardless of Class I designation, the Service will take advantage of these opportunities.

Air resource management requirements will be integrated into NPS operations and planning, and all air pollution sources within parks – including prescribed fire management and visitor use activities – will comply with all federal, state, and local air quality regulations and permitting requirements. Superintendents will make reasonable efforts to notify visitors and employees when air pollution concentrations within an area exceed the national or state air quality standards established to protect public health. Furthermore, because the current and future quality of park air resources depends heavily on the actions of others, the Service will acquire the information needed to effectively participate in decision-making that affects park air quality. The Service will:

- Inventory the air quality-related values associated with each park;
- Monitor and document the condition of air quality and related values;
- Evaluate air pollution impacts, and identify causes;
- Minimize air quality pollution emissions associated with park operations, including the use of prescribed fire and visitor use activities; and
- Ensure healthful indoor air quality in NPS facilities.

External programs needed to remedy existing, and prevent future, impacts on park resources and values from human-caused air pollution will be aggressively pursued by Service participation in the development of federal, state, and local air pollution control plans and regulations. Permit applications for major new air pollution sources will be reviewed, and potential impacts will be assessed. If it is determined that any such new source might cause or contribute to an adverse impact on air quality-related values, the NPS will recommend to the permitting authority that the construction permit be denied or modified to eliminate adverse impacts.

The public's understanding of park air quality issues will be promoted through educational and interpretive programs.

(See External Threats and Opportunities 1.5; Fire Management 4.5; Environmental Monitoring and Control 5.3.1.4; Resource Issue Interpretation and Education 7.5.3; Visitor Safety and Emergency Response 8.2.5; Energy Management 9.1.7)

4.7.2 Weather and Climate

Parks containing significant natural resources will gather and maintain baseline climatological data for perpetual reference.

Because any human attempt to modify weather has the potential to alter the natural conditions in parks, the Service will not conduct weather-modification activities, and will seek to prevent weather-modification activities conducted by others from affecting park weather, climate, and resources.

(See NPS-conducted or NPS-sponsored Inventory, Monitoring, and Research Studies 4.2.1; Miscellaneous Management Facilities 9.4.5)

4.8 Geologic Resource Management

The Park Service will preserve and protect geologic resources as integral components of park natural systems. As used here, the term "geologic resources" includes both geologic features and geologic processes. The Service will (1) assess the impacts of natural processes and human-related events on geologic resources; (2) maintain and restore the integrity of existing geologic resources; (3) integrate geologic resource management into Service operations and planning; and (4) interpret geologic resources for park visitors.

4.8.1 Protection of Geologic Processes

The Service will allow natural geologic processes to proceed unimpeded. Geologic processes are the natural physical and chemical forces that act within natural systems, as well as upon human developments, across a broad spectrum of space and time. Such processes include, but are not limited to, exfoliation, erosion and sedimentation, glaciation, karst processes, shoreline processes, and seismic and volcanic activity. Geologic processes will be addressed during planning and other management activities in an effort to reduce hazards that can threaten the safety of park visitors and staff and the long-term viability of the park infrastructure.

Intervention in natural geologic processes will be permitted only when:

- Directed by Congress;
- Necessary in emergencies that threaten human life and property;
- There is no other feasible way to protect natural resources, park facilities, or historic properties; or
- Intervention is necessary to restore impacted conditions and processes, such as restoring habitat for threatened or endangered species.

4.8.1.1 Shorelines and Barrier Islands

Natural shoreline processes (such as erosion, deposition, dune formation, overwash, inlet formation, and shoreline migration) will be allowed to continue without interference.

Where human activities or structures have altered the nature or rate of natural shoreline processes, the Service will, in consultation with appropriate state and federal agencies, investigate alternatives for mitigating the effects of such activities or structures and for restoring natural conditions. The Service will comply with the provisions of Executive Order 11988 (Floodplain Management) and state coastal zone management plans prepared under the Coastal Zone Management Act of 1972.

Any shoreline manipulation measures proposed to protect cultural resources may be approved only after an analysis of the degree to which such measures would impact natural resources and processes, so that an informed decision can be made through an assessment of alternatives.

Where erosion control is required by law, or where present developments must be protected in the short run to achieve park management objectives, including high-density visitor use, the Service will use the most effective and natural-appearing method feasible, while minimizing impacts outside the target area.

New developments will not be placed in areas subject to wave erosion or active shoreline processes unless (1) the development is required by law; or (2) the development is essential to meet the park's purposes, as defined by its establishing act or proclamation, and

- No practicable alternative locations are available,
- The development will be reasonably assured of surviving during its planned life span, without the need for shoreline control measures, and
- Steps will be taken to minimize safety hazards and harm to property and natural resources.

(See Floodplains 4.6.4; Cultural Resources Chapter 5; Siting Facilities to Avoid Natural Hazards 9.1.1.6. Also see Director's Order #77-2: Floodplain Management)

4.8.1.2 Karst

The Service will manage karst terrain to maintain the inherent integrity of its water quality, spring flow, drainage patterns, and caves. Karst processes (the processes by which water dissolves soluble rock such as limestone) create areas typified by sinkholes, underground streams, caves, and springs.

Local and regional hydrological systems resulting from karst processes can be directly influenced by surface land use practices. If existing or proposed developments do or will significantly alter or adversely impact karst processes, these impacts will be mitigated. Where practicable, these developments will be placed where they will not have an effect on the karst system.

4.8.1.3 Geologic Hazards

Naturally-occurring geologic processes, which the NPS is charged to preserve unimpaired, can be hazardous to humans and park infrastructure. These include earthquakes, volcanic eruptions, mudflows, landslides, floods, shoreline processes, tsunamis, and avalanches. The Service will work closely with specialists at the U. S. Geological Survey and elsewhere, and with local, state, and federal disaster management officials, to devise effective geologic hazard identification and management strategies. Although the magnitude and timing of future geologic hazards are difficult to forecast, park managers will strive to understand future hazards and, once the hazards are understood, minimize their potential impact on visitors, staff, and developed areas. Before interfering with natural processes that are potentially hazardous, superintendents will consider alternatives such as closing an area to visitors or relocating facilities.

The Service will try to avoid placing new visitor and other facilities in geologically hazardous areas. Superintendents will examine the feasibility of phasing out, relocating, or providing alternative facilities for park developments subject to hazardous processes, consistent with other sections of these management policies.

(See Siting Facilities to Avoid Natural Hazards 9.1.1.6)

4.8.2 Management of Geologic Features

The Service will protect geologic features from the adverse effects of human activity, while allowing natural processes to continue. The term "geologic features" describes the products and physical components of geologic processes. Examples of geologic features in parks include rocks, soils, and minerals; geysers and hot springs in geothermal systems; cave and karst systems; canyons and arches in erosional landscapes; sand dunes, moraines, and terraces in

depositional landscapes; dramatic or unusual rock outcrops and formations; and paleontological and paleoecological resources such as fossilized plants or animals, or their traces.

4.8.2.1 Paleontological Resources and Their Contexts

Paleontological resources, including both organic and mineralized remains in body or trace form, will be protected, preserved, and managed for public education, interpretation, and scientific research. The Service will study and manage paleontological resources in their paleoecological context (that is, in terms of the geologic data associated with a particular fossil that provides information about the ancient environment).

Superintendents will establish programs to inventory paleontological resources and systematically monitor for newly exposed fossils, especially in areas of rapid erosion. Scientifically significant resources will be protected by collection or by on-site protection and stabilization. The Service will encourage and help the academic community to conduct paleontological field research in accordance with the terms of a scientific research and collecting permit. Fossil localities and associated geologic data will be adequately documented when specimens are collected. Paleontological resources found in an archeological context are also subject to the policies for archeological resources. Paleontological specimens that are to be retained permanently are subject to the policies for museum objects.

The Service will take appropriate action to prevent damage to, and unauthorized collection of, fossils. To protect paleontological resources from harm, theft, or destruction, the Service will ensure, where necessary, that information about the nature and specific location of these resources remains confidential, in accordance with the National Parks Omnibus Management Act of 1998.

Parks will exchange fossil specimens only with other museums and public institutions dedicated to the preservation and interpretation of natural heritage and qualified to manage museum collections. Fossils to be deaccessioned in an exchange must fall outside of the park's scope of collection statement. Exchanges must follow deaccession procedures in the *Museum Handbook*, Part II, chapter 6.

The sale of original paleontological specimens is prohibited in parks.

The Service generally will avoid purchasing fossil specimens. Casts or replicas should be acquired instead. A park may purchase fossil specimens for the park museum collection only after making a written determination that:

- The specimens are scientifically significant, and are accompanied by detailed locality data and pertinent contextual data;
- The specimens were legally removed from their site of origin, and all transfers of ownership have been legal;
- The preparation of the specimens meets professional standards;
- The alternatives for making these specimens available to science and the public are unlikely;
 and
- Acquisition is consistent with the park's enabling legislation and Scope of Collection Statement, and will ensure the specimens' availability in perpetuity for public education and scientific research.

All National Park Service construction projects in areas with potential paleontological resources must be preceded by a preconstruction surface assessment prior to disturbance. For any occurrences noted, or when the site may yield paleontological resources, the site will be avoided, or the resources will, if necessary, be collected and properly cared for prior to the initiation of the construction disturbance. Areas with potential paleontological resources must also be monitored during construction projects.

(See Natural Resource Information 4.1.2; Studies and Collections 4.2; Independent Research 5.1.2; Artifacts and Specimens 10.2.4.5. Also see 36 CFR 2.5)

4.8.2.2 Caves

As used here, the term "caves" includes karst (such as limestone and gypsum caves) and non-karst caves (such as lava tubes, littoral caves, and talus caves). The Service will manage caves in accordance with approved cave management plans to perpetuate the natural systems associated with the caves, such as karst and other drainage patterns, air flows, mineral deposition, and plant and animal communities. Wilderness and cultural resources and values will also be protected.

No developments or uses, including those that allow for general public entry, such as pathways, lighting, and elevator shafts, will be allowed in, above, or adjacent to caves until it can be demonstrated that they will not unacceptably impact natural cave conditions, including subsurface water movements. Developments already in place above caves will be removed if they are impairing or threatening to impair natural conditions or resources.

Parks will strive to close caves or portions of caves to public use, or to control such use, when such actions are required for the protection of cave resources or for human safety. Some caves or portions of caves may be managed exclusively for research, with access limited to permitted research personnel. All recreational use of undeveloped caves will be governed by a permit system. "Significant" caves will be identified using the criteria established in the 43 CFR Part 37 regulations for the Federal Cave Resources Protection Act of 1988 (FCRPA). As further established by the FCRPA, specific locations of significant cave entrances may be kept confidential and exempted from FOIA requests.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Information Confidentiality 1.7.3; Caves 6.3.11.2)

4.8.2.3 Geothermal and Hydrothermal Resources

Thermal resources within units of the national park system will be protected, preserved, and managed as a critical component of the units' natural resource systems, and for public education, interpretation, and scientific research. Thermal resources, also known as geothermal or hydrothermal systems, are comprised of a subsurface heat source, heat conduit rock formations, and air and/ or water that circulates through the formations and may discharge at the surface, creating features such as geysers, hot springs, mudpots, fumaroles, unique/ rare mineral precipitates and formations, and hydrophilic biotic communities.

Superintendents will strive to maintain the natural integrity of thermal systems, including the movement of air and/ or water through the heated rock, cold water recharge, the proximity of the hot and warm water to the heat source, and the hydrostatic pressure and elevated temperature.

Superintendents will work to prevent impacts caused by the development of thermal resources. Such impacts include the loss of surface thermal features; land subsidence; an increase in seismic activity; the release of noxious gases; noise and surface disturbance from drilling or power plant construction; and the release of polluted water or brines. Because thermal systems may extend well beyond park boundaries, the NPS will work closely with federal, state, and tribal agencies to delineate the full extent of thermal resources, and protect those that occur within parks. In protecting park thermal resources, superintendents should consider authorities available under the Geothermal Steam Act of 1970, as amended; state water rights; and mineral leasing laws.

As required by the Geothermal Steam Act, the NPS will maintain a list of significant thermal features within park units. The criteria and procedures for designating significant thermal resources within parks are specified within the Geothermal Steam Act Amendments of 1988. In cooperation with the U. S. Geological Survey, the NPS will conduct a monitoring program for the designated significant thermal features.

4.8.2.4 Soil Resource Management

The Service will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources. Parks will obtain surveys of soils adequate for the management of park resources. All soil surveys will follow National Cooperative Soil Survey Standards. Products will include soil maps, determinations of the physical and chemical characteristics of soils, and the interpretations needed to guide resource management and development decisions.

Management action will be taken by superintendents to prevent—or if that is not possible, to minimize—adverse, potentially irreversible impacts on soils. Soil conservation and soil amendment practices may be implemented to reduce impacts. Importation of off-site soil or soil amendments may be used to restore damaged sites. Off-site soil normally will be salvaged soil, not soil removed from pristine sites, unless the use of pristine site soil can be achieved without causing any overall ecosystem impairment. Prior to using any off-site materials, parks must develop a prescription, and select the materials that will be needed to restore the physical, chemical, and biological characteristics of original native soils without introducing any exotic species.

When soil excavation is an unavoidable part of an approved facility development project, the Service will minimize soil excavation, erosion, and off-site soil migration during and after the development activity.

When use of a soil fertilizer or other soil amendment is an unavoidable part of restoring a natural landscape or maintaining an altered plant community, the use will be guided by a written prescription. The prescription will be designed to ensure that such use of soil fertilizer or soil amendment does not unacceptably alter the physical, chemical, or biological characteristics of the soil, biological community, or surface or ground waters.

(See Evaluating Environmental Impacts 4.1.3; Natural Re source Collections 4.2.3; Floodplains 4.6.4; Wetlands 4.6.5; Facility Planning and Design 9.1.1)

4.9 Soundscape Management

The National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks. Natural soundscapes exist in the absence of human-caused sound. The natural soundscape is the aggregate of all the natural sounds that occur in parks, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive, and can be transmitted through air, water, or solid materials.

Some natural sounds in the natural soundscape are also part of the biological or other physical resource components of the park. Examples of such natural sounds include:

- Sounds produced by birds, frogs, or katydids to define territories or aid in attracting mates;
- Sounds produced by bats or porpoises to locate prey or navigate;
- Sounds received by mice or deer to detect and avoid predators or other danger; and
- Sounds produced by physical processes, such as wind in the trees, claps of thunder, or falling water.

The Service will restore degraded soundscapes to the natural condition wherever possible, and will protect natural soundscapes from degradation due to noise (undesirable human-caused sound).

Using appropriate management planning, superintendents will identify what levels of human-caused sound can be accepted within the management purposes of parks. The frequencies, magnitudes, and durations of human-caused sound considered acceptable will vary throughout the park, being generally greater in developed areas and generally lesser in undeveloped areas. In and adjacent to parks, the Service will monitor human activities that generate noise that adversely affects park soundscapes, including noise caused by mechanical or electronic devices. The Service will take action to prevent or minimize all noise that, through frequency, magnitude, or duration, adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified as being acceptable to, or appropriate for, visitor uses at the sites being monitored.

(See Use of Motorized Equipment 8.2.3; Overflights and Aviation Uses 8.4)

4.10 Lightscape Management

The Service will preserve, to the greatest extent possible, the natural lightscapes of parks, which are natural resources and values that exist in the absence of human-caused light. The absence of light in caves and at the bottom of deep bodies of water influences biological processes and the evolution of species, such as the blind cave cricket. The phosphorescence of waves on dark nights helps hatchling sea turtles orient to the ocean. The stars, planets, and earth's moon that are visible during clear nights influence humans and many other species of animals, such as birds that navigate by the stars or prey animals that reduce their activities during moonlit nights.

Recognizing the roles that light and dark periods and darkness play in natural resource processes and the evolution of species, the Service will protect natural darkness and other components of the natural lightscape in parks. To prevent the loss of dark conditions and of natural night skies, the Service will seek the cooperation of park visitors, neighbors, and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks. The Service will not use artificial lighting in areas such as sea turtle nesting locations,

where the presence of the artificial lighting will disrupt dark-dependent natural resource components of a park.

The Service will:

- Restrict the use of artificial lighting in parks to those areas where security, basic human safety, and specific cultural resource requirements must be met;
- Utilize minimal impact lighting techniques; and
- Shield the use of artificial lighting where necessary to prevent the disruption of the night sky, natural cave processes, physiological processes of living organisms, and similar natural processes.

The decision about whether or not to install artificial lighting in particular circumstances is left to the discretion of the superintendent, and is made through the planning process.

(See Visitor Safety and Emergency Response 8.2.5, Facility Planning and Design 9.1.1; Integration of Facilities into the Park Environment 9.1.1.2; Energy Management 9.1.7)

4.11 Chemical Information and Odors

The Service will preserve, to the greatest extent possible, the natural flow of natural chemical information and odors, by preventing (1) the release of human-generated chemicals that can block the release, deposition, or perception of natural chemicals; and (2) human actions that disrupt or commingle the pathways through which natural chemicals are dispersed.

Such information and odors are naturally produced and chemically based, and transmit information that is received by living organisms. Natural chemicals involved in the transmission of information are released by animals, plants, and geologic materials. Once released, these chemicals can be transmitted through air and water. Many animals can perceive these natural chemicals and modify their behaviors, such as mating, migration, feeding, predator avoidance, prey selection, and the establishment of social structures, as a response. Specific examples of relationships that involve natural chemical information and odors include, among others:

- Scent posts where one animal deposits one or more chemicals by rubbing, urination, defecation, or other means, and where other animals can detect the passage of the first animal because of the odor produced by a deposited chemical;
- Flowers that produce odors that attract insects, birds, and other animals, with resulting cross-pollination of the flowers and reproduction of the species as the outcome;
- Female insects that release chemicals (pheromones) that attract males, with fertilization of the female's eggs and reproduction of the species as the outcome;
- Stressed trees that emit chemicals that some types of beetles use to find weakened trees,
 which they then successfully can colonize and use as habitat for reproducing themselves; and
- Geologic materials (soils or bedrock) that emit characteristic chemicals that fish can sense and use as guides to find the places in streams where they hatched and where they subsequently return to breed and deposit fertilized eggs, with reproduction of the species as the outcome.

The Service acknowledges that some of its management activities may necessarily alter the natural flow of natural chemical information and odors. The Service may, for example:

- Introduce pesticides or pheromones into parks as part of an integrated pest management program;
- Construct and operate intensive development areas that eliminate animal scent stations and introduce unnatural chemicals;
- Change the vegetation and thereby change the kinds of natural plant chemicals released to the air:
- Move water from one drainage to another through water and sewer systems; or
- Provide for the use of exhaust-emitting motors in the air, on land, and on water.

Whenever the Service engages in activities that disrupt the natural flow of natural chemical information or odors, it will comply with all applicable laws, regulations, and policies, and seek to minimize harm to the environment. In no case will the Service engage in an activity if it will impair park resources or values.

5 Cultural Resource Management

The National Park Service will preserve and foster appreciation of the cultural resources in its custody, and will demonstrate its respect for the peoples traditionally associated with those resources, through appropriate programs of research, planning, and stewardship.

The National Park Service is the steward of many of America's most important cultural resources. These resources are categorized as archeological resources, cultural landscapes, ethnographic resources, historic and prehistoric structures, and museum collections. The Service's cultural resource management program involves:

- Research to identify, evaluate, document, register, and establish basic information about cultural resources and traditionally associated 1 peoples;
- Planning to ensure that management processes for making decisions and setting priorities integrate information about cultural resources, and provide for consultation and collaboration with outside entities; and
- Stewardship to ensure that cultural resources are preserved and protected, receive appropriate treatments (including maintenance), and are made available for public understanding and enjoyment.

The cultural resource management policies of the National Park Service are derived from a suite of historic preservation, environmental, and other laws, proclamations, Executive orders, and regulations. A comprehensive list can be found in the *Cultural Resource Management Handbook* issued pursuant to Director's Order #28. Taken collectively, they provide the Service with the authority and responsibility for managing cultural resources in every unit of the national park system so that those resources may be preserved unimpaired for future generations. Cultural resource management will be carried out in a manner consistent with these legislative and regulatory provisions, and with implementing policies and procedures such as the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Federal Register* (FR) 44716-740), and Standards and Guide lines for Federal Agency Historic *Preservation Programs Pursuant to the National Historic Preservation Act (63 FR 20497-508)*.

Park superintendents and appropriately qualified cultural resource professionals will work together to carry out the Park Service's cultural resource management program. Other NPS staff and volunteers participating in cultural resource research, planning, and stewardship activities will be supervised by full-performance-level cultural resource professionals of the appropriate disciplines. Law enforcement professionals will consult with full-performance-level cultural resource professionals of the appropriate disciplines when investigating cultural resource crimes.

The Service will support its cultural resource professionals in maintaining and improving their disciplinary knowledge and skills and in promoting their professionalism through continuing education, graduate-level courses, seminars, training, teaching, attendance at professional conferences, and other programs sponsored by professional or scholarly institutions. NPS personnel with cultural resource responsibilities will acquire and maintain the knowledge, skills, and abilities necessary to carry out those responsibilities. All occupational groups in or associated with cultural resource research, planning, and stewardship activities will complete the relevant cultural resource competency requirements commensurate with their job and grade.

Park superintendents and cultural resource professionals will ensure that research about and stewardship of cultural resources are carried out only after adequate planning and consultation, cooperation, and communication with interested or affected individuals, groups, and other outside entities.

(See Decision-making Requirements to Avoid Impairments 1.4.7. Also see NHPA [16 USC 470h-4]; Secretary of the Interior's Professional Qualification Standards [48 FR 44738-44739]; Employee Training and Development Planning and Tracking Kit [1996])

5.1 Research

5.1.1 National Park Service Research

The National Park Service will conduct a vigorous interdisciplinary program of research into the cultural resources of each park. The principal goals of such research will be to:

- Ensure a systematic, adequate, and current information base representing the park's cultural resources and traditionally associated peoples, in support of planning, management, and operations;
- Ensure appropriate protection, preservation, treatment, and interpretation of cultural resources, employing the best current scholarship;
- Develop approaches for managing park cultural and natural resources that ensure consideration of the views held by traditionally associated peoples and others, as appropriate;
- Collect data on subsistence and other consumptive uses of park resources in order to reach informed decisions; and
- Develop appropriate technologies and methods for monitoring, protecting, preserving, and treating cultural resources.

Adequate research to support informed planning and compliance with legal requirements will precede any final decisions about the treatment of cultural resources, or about park operations, development, and natural resource management activities that might affect cultural resources. Research will be periodically updated to reflect changing issues, sources, and methods. Research needs will be identified and justified in a park's approved resource management plan.

A written scope of work, research design, project agreement, proposal, or other description of work to be performed will be prepared and approved before any research is conducted. All archeological research, whether for inventory, data recovery, or other purposes, must comply with the Archaeological Resources Protection Act of 1979 (ARPA), the Antiquities Act, and the Native American Graves Protection and Repatriation Act (NAGPRA), as applicable. The National Park Service will not take or allow any action that reduces the research potential of cultural resources without first performing an appropriate level of research, consultation, and documentation. Because research involving physical intervention into cultural resources or the removal of objects or specimens is a destructive process entailing an irretrievable commitment of the resources, and often affecting traditional practices associated with the resources, research in parks will employ non-destructive methods to the maximum extent feasible.

The features of sites, landscapes, and structures will be left in place unless impracticable. Field data, objects, specimens, and features of sites and structures retrieved for preservation during cultural resource research and treatment projects, together with associated records and reports, will be managed within the park museum collection.

Research conducted by NPS personnel, contractors, and cooperative researchers will be subjected to peer review both inside and outside the Service, to ensure that it meets professional standards, reflects current scholarship, and adheres to the principles of conduct for the appropriate discipline. The data and knowledge acquired through research will be recorded on

permanent and durable (long-lived) media, documented in the appropriate Service-wide databases, and placed permanently in park museum and library collections and park files. This information will be made widely available, and be incorporated, as appropriate, into park planning documents, exhibits, and interpretive programs. As appropriate, information will be shared with proper state and tribal historic preservation offices and certified local governments.

Certain research data may be withheld from public disclosure to protect sensitive or confidential information about archeological, historic, or other NPS resources when doing so would be consistent with FOIA. In many circumstances, this will allow the NPS to withhold information about ethnographic resources.

(See Park Planning Processes 2.3; Studies and Collections 4.2; Confidentiality 5.2.3; Research 7.5.4; Native American Use 8.5. Also see 36 CFR Part 800; 43 CFR Parts 3, 7, and 10; NHPA; Secretary of the Interior's Standards and Guidelines for Preservation Planning [48 FR 44716-720]; Secretary of the Interior's Standards and Guidelines for Historical Documentation [48 FR 44728-730]; Director's Order #28: Cultural Resource Management; Cultural Resource Management Handbook 28)

5.1.2 Independent Research

The National Park Service will promote relationships with individuals and organizations qualified to perform research, and encourage them to direct their research toward park management objectives and the broader contexts within which park resources exist. The Park Service will encourage independent researchers to follow the Secretary of the Interior's standards and guidelines and those of the Park Service to the fullest extent possible, and will require that the views of traditionally associated peoples be fully considered.

Research that includes taking plants, fish, wildlife, rocks, or minerals must comply with the permit requirements of 36 CFR 2.5. Permits that would allow cultural resources to be physically disturbed, or allow objects or specimens to be collected, will be issued only when there is compelling evidence that the proposed research is essential to significant research concerns, and that the purpose of the research can be reasonably achieved only by using park resources. As appropriate, permits may require researchers to provide for the long-term preservation and management of any recovered objects and specimens and for their cataloging, together with any associated records, in the NPS museum cataloging system. Independent researchers will be authorized to conduct archeological research on park lands only through the issuance of an ARPA or Antiquities Act permit by the appropriate regional director. This permitting authority cannot be further delegated. As appropriate, parks will also issue other necessary permits, such as a special use permit. Archeological research conducted by independent researchers must comply with NAGPRA, when applicable.

NPS facilities, collections, and assistance will be made available to qualified scholars conducting NPS-authorized research, as long as park operations are not substantially impeded or park resources adversely impacted thereby.

(See Independent Studies 4.2.2; Consultation 5.2.1; Natural and Cultural Studies, Research, and Collection Activities 8.10. Also see 43 CFR Parts 3, 7, and 10)

5.1.3 Identification and Evaluation of Resources

The National Park Service will conduct surveys to identify and evaluate the cultural resources of each park, assessing resources within their larger cultural, chronological, and geographic contexts. The resulting inventories will provide the substantive data required for (1) nominating resources to the National Register of Historic Places; (2) general park planning and specific proposals for preserving, protecting, and treating cultural resources; (3) land acquisition, development, and maintenance activities; (4) interpretation, education, and natural and cultural resource management activities; and (5) compliance with legal requirements.

5.1.3.1 Inventories

The Park Service will (1) maintain and expand the following inventories about cultural resources in units of the national park system, (2) enter information into appropriate related databases, and (3) develop an integrated information system:

- Archeological sites inventory for historic and prehistoric archeological resources and the related Archeological Sites Management Information System (ASMIS) database;
- Cultural landscapes inventory of historic designed landscapes, historic vernacular landscapes, ethnographic landscapes, and historic sites, and the related Cultural Landscapes Automated Inventory Management System (CLAIMS) database;
- Ethnographic Resources Inventory (ERI) of places, including sites, structures, objects, landscapes, and natural resources with traditional cultural meaning and value to associated peoples and other resource users;
- List of Classified Structures (LCS), encompassing historic and prehistoric structures; and
- National Catalog of Museum Objects, encompassing all cultural objects, archival and manuscript materials, and natural history specimens in NPS collections and the related automated version, the Automated National Catalog System (ANCS+ or its successor).

(See Park Planning Processes 2.3; Confidentiality 5.2.3. Also see Secretary of the Interior's Standards and Guidelines for Identification [48 FR 44720-723]; Director's Order #28; Cultural Resource Management Handbook)

5.1.3.2 Evaluation and Categorization

Cultural resources will be professionally evaluated and categorized to assist in management decisions about their treatment and use. Cultural resources will be evaluated for significance using National Register Criteria for Evaluation (36 CFR 60.4), and those meeting the criteria will be nominated for listing. Museum collections are inappropriate for listing and will not be evaluated using these criteria. Some collections in their original structures can be included as contributing elements to a listed structure. As appropriate, cultural resources will be categorized using other management categories established by the National Park Service and listed in the Cultural Resource Management Handbook. Cultural resource professionals will evaluate cultural resources in consultation with the appropriate state and tribal historic preservation officers. Ethnographically meaningful cultural and natural resources, including traditional cultural properties, will be identified and evaluated in consultation with peoples having traditional associations to park resources. Examples of traditionally associated peoples include Acadians, African Americans, Hispanic Americans, and Native Americans. (For editorial convenience, in these Management Policies the term "Native Americans" includes American Indians, Alaskan natives, native peoples of the Caribbean, native Hawaiians, and other native Pacific islanders.) Some ethnographically meaningful resources do not meet National Register Criteria for

Evaluation, but will be inventoried in consultation with traditionally associated peoples and considered in management decisions about treatment and use.

(See Consultation 5.2.1. Also see Secretary of the Interior's Standards and Guidelines for Evaluation [48 FR 44723-726])

5.1.3.2.1 National Register Nomination

Park resources that appear to meet the criteria for the National Register of Historic Places will be nominated—either individually, as components of historic districts, or within multiple property nominations—for listing by the Keeper of the National Register. National historic sites, national historical parks, and other parks significant primarily for their cultural resources are entered automatically in the National Register upon establishment. However, nomination forms will be prepared and submitted to document the qualifying and contributing features of such parks and other National Register-eligible resources within them.

(Also see 36 CFR Parts 60 and 63; Secretary of the Interior's Standards and Guidelines for Registration [48 FR 44726-728]; National Register Bulletins 16A and 16B [Guidelines for Completing National Register of Historic Places Forms])

5.1.3.2.2 National Historic Landmark Designation

Historic and cultural units of the national park system are nationally significant by virtue of their authorizing legislation or Presidential proclamation. National historic landmark designations are appropriate for park cultural resources that meet National historic landmark criteria if the national significance of those resources is not adequately recognized in the park's authorizing legislation or Presidential proclamation. Cultural parks may warrant landmark designation as parts of larger areas encompassing resources associated with their primary themes. Modified National Register forms will be prepared and submitted to nominate such resources for landmark designation by the Secretary of the Interior.

(Also see 36 CFR Part 65)

5.1.3.2.3 World Heritage List Designation

Park cultural properties believed to possess outstanding universal value to humanity may qualify for World Heritage List designation. Proposals for the nomination of such resources by the United States will be prepared and submitted to document the case for this designation by the United Nations Educational, Scientific and Cultural Organization.

(See World Heritage Sites 4.3.7. Also see 36 CFR Part 73)

5.2 Planning

Effective park stewardship requires informed decision-making about a park's cultural resources. This is best accomplished through a comprehensive planning process. Effective planning is based on an understanding of what a park's cultural resources are, and why those resources are significant. To gain this understanding, the Service must obtain baseline data on the nature and types of cultural resources, and their (1) distribution; (2) condition; (3) significance; and (4) local, regional, and national contexts. Cultural resource planning, and the resource evaluation process that is part of it, will include consultation with cultural resource specialists and scholars having relevant expertise; traditionally associated peoples; and other stakeholders. Current

scholarship and needs for research are considered in this process, along with the park's legislative history and other relevant information.

Planning decisions will follow analysis of how proposals might affect the values that make resources significant, and the consideration of alternatives that might avoid or mitigate potential adverse effects. Planning will always seek to avoid harm to cultural resources, and consider the values of traditionally associated groups. To ensure that approaches and alternatives for resource preservation have been identified and considered, planning processes that could affect cultural resources must include cultural resource specialists, traditionally associated peoples, and other stakeholders, and provide them with appropriate notification about opportunities to become involved.

The general management planning process will include goals and strategies for research on, consultation about, and stewardship of cultural resources, and for research on and consultation with traditionally associated and other peoples. Planning for park operations, development, and natural resource management activities will integrate relevant concerns and program needs for identifying, evaluating, monitoring, protecting, preserving, and treating cultural resources.

Superintendents will ensure full consideration of the park's cultural resources and values in all proposals for operations, development, and natural resource programs, including the management of wilderness areas. When proposed undertakings may adversely affect national historic sites, national battlefields, and other predominantly cultural units of the national park system that were established in recognition of their national historical significance, superintendents will provide opportunities for the same level of review and consideration by the Advisory Council on Historic Preservation and the Secretary of the Interior that the Advisory Council's regulations require for undertakings that may adversely affect national historic landmarks (36 CFR 800. 10).

Each park will prepare and periodically update cultural resource components of the park's management plans. Resource plans will define and program activities needed to identify, evaluate, manage, monitor, protect, preserve, and treat the park's cultural resources, as well as provide for their enjoyment and understanding by the public.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Strategic Planning 2.3.2; Implementation Planning 2.3.3. Also see Executive Order 13007; Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act [63 FR 20496-508]; Secretary of the Interior's Standards and Guidelines for Preservation Planning [48 FR 44716-720]; Secretary of the Interior's Standards for the Treatment of Historic Properties)

5.2.1 Consultation

The National Park Service is committed to the open and meaningful exchange of knowledge and ideas to enhance (1) the public's understanding of park resources and values, and the policies and plans that affect them; and (2) the Service's ability to plan and manage the parks by learning from others. Open exchange requires that the Service seek and employ ways to reach out to, and consult with, all those who have an interest in the parks.

Each park superintendent will consult with outside parties having an interest in the park's cultural resources or in proposed NPS actions that might affect those resources, and provide

them with opportunities to learn about, and comment on, those resources and planned actions. Consultation may be formal, as when it is required pursuant to NAGPRA or Section 106 of the NHPA, or it may be informal when there is not a specific statutory requirement. Consultation will be initiated, as appropriate, with tribal, state, and local governments; state and tribal historic preservation officers; the Advisory Council on Historic Preservation; other interested federal agencies; traditionally associated peoples; present-day park neighbors; and other interested groups.

Consultations on proposed Park Service actions will take place as soon as practical, and in an appropriate forum that ensures, to the maximum extent possible, effective communication and the identification of mutually acceptable alternatives. The Service will establish and maintain continuing relationships with outside parties to facilitate future collaboration, formal consultations, and the ongoing informal exchange of views and information on cultural resource matters.

Since national parks embody resources and values of interest to a national audience, efforts to reach out and consult must be national in scope. But the Service will be especially mindful of consulting with traditionally associated peoples—those whose cultural systems or ways of life have an association with park resources and values that pre-dates establishment of the park. Traditionally associated peoples may include park neighbors, traditional residents, and former residents who remain attached to the park area despite having relocated. Examples of traditionally associated peoples include American Indians in the contiguous 48 states, Alaska Natives, African Americans at Jean Lafitte, Asian Americans at Manzanar, and Hispanic Americans at Tumacocori.

In particular, it is essential to consult traditionally associated peoples about:

- Proposed research on, and stewardship of, cultural and natural resources with ethnographic meaning for the groups;
- Development of park planning and interpretive documents that may affect resources traditionally associated with the groups;
- Proposed research that entails collaborative study of the groups;
- Identification, treatment, use, and determination of affiliation of objects subject to NAGPRA;
- Repatriation of Native American cultural items or human remains based on requests by affiliated groups in accordance with NAGPRA;
- Planned excavations and proposed responses to inadvertent discoveries of cultural resources that may be culturally affiliated with the groups;
- Other proposed NPS actions that may affect the treatment and use of, and access to, cultural and natural resources with known or potential cultural meaning for the groups; and
- Designation of National Register, national historic landmark, and world heritage sites.

Consultation with federally recognized American Indian tribes will be on a government-to-government basis. The Service will notify appropriate tribal authorities (such as tribal historic preservation officers) about proposed actions when first conceived, and by subsequently consulting their appointed representatives whenever proposed actions may affect tribal interests, practices, and traditional resources (such as places of religious value).

When engaging in the consultation process, group meetings may be held only for the purpose of exchanging views and information, and to solicit individual advice on proposed NPS actions. NPSs may not hold meetings to obtain consensus advice from a group unless the group is chartered pursuant to the Federal Advisory Committee Act (FACA). FACA does not apply to inter-governmental meetings held exclusively between NPS officials and elected officers of tribal governments (or their designated employees with authority to act on their behalf) acting in their official capacities, when the meetings relate to intergovernmental responsibilities or administration.

(See Ethnographic Resources 5.3.5.3. Also see ARPA; NAGPRA; NEPA; NHPA [16 USC 470f]; 36 CFR Part 800; 40 CFR Parts 1500-1508; 41 CFR Part 101;, 43 CFR Parts 7 and 10; Executive Memorandum on Government-to-Government Relations with Native American Tribal Governments; Executive Order 13007; Executive Order 13175; 512 Department of the Interior Manual [DM] 2; Director's Order #71: Relationships with Indian Tribes; NPS Guide to the Federal Advisory Committee Act)

5.2.2 Agreements

The National Park Service will seek to establish mutually beneficial agreements with interested groups to facilitate collaborative research, consultation, park planning, training, and cooperative management approaches with respect to park cultural resources and culturally important natural resources. The goal of the NPS is to allow traditionally associated peoples to exercise traditional cultural practices in parks to the extent allowable by law, and consistent with the criteria listed in section 8.2. To the extent this goal can be legally reached through agreements, park superintendents should do so.

Whenever parks have cultural resources that are owned or managed by others, agreements will clarify how the resources are to be managed. Agreements will provide ways for periodically reviewing their effectiveness and making mutually agreed-upon modifications, and for avoiding and resolving disagreements and disputes. All agreements will conform to the requirements of Director's Order #20: Agreements.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Partnerships 1.9; Partnerships 4.1.4; Park Structures Owned or Managed by Others 5.3.5.4.8; Submerged Cultural Resources 5.3.5.1.7; Native American Use 8.5; Consumptive Uses 8.9. Also see Executive Order 13007; 36 CFR 2.1)

5.2.3 Confidentiality

Sensitive or confidential information is sometimes acquired during consultations and during other research, planning, and stewardship activities. Under certain circumstances, and to the extent permitted by law, information about the specific location, character, nature, ownership, or acquisition of cultural resources on park lands will be withheld from public disclosure. If a question arises about withholding information, and disclosure could result in a significant invasion of privacy or a risk of harm to a cultural resource, the Park Service will consult the provisions of ARPA (16 USC 470hh); the National Parks Omnibus Management Act (16 USC 5937); and NHPA (16 USC 470w-3) before making a decision. Under some conditions, the Service may be required by law to disclose confidential information acquired during consultations, public meetings, and other research, planning, and stewardship activities, or in association with the acquisition of resources, including museum collections. Before these

activities occur, NPS staff and authorized researchers will make every effort to inform affected parties that, while the information they provide will not be shared voluntarily, confidentiality cannot be guaranteed.

To the extent permitted by law, the Service will withhold from public disclosure (1) information provided by individuals who wish the information to remain confidential, and (2) the identities of individuals who wish to remain anonymous and who are protected from release by exemption under FOIA. In each instance, the Service will document its decision to disseminate or withhold sensitive or confidential information from public disclosure.

More detailed guidance on sensitive and confidential information can be found in Director's Order #66: The Freedom of Information Act and Protected Information; and the *Museum Handbook*, Part III.

(See Managing Information 1.7. Also see 43 CFR Part 2; 43 CFR 7.18; Privacy Act)

5.3 Stewardship

5.3.1 Protection and Preservation of Cultural Resources

The National Park Service will employ the most effective concepts, techniques, and equipment to protect cultural resources against theft, fire, vandalism, overuse, deterioration, environmental impacts, and other threats, without compromising the integrity of the resources.

5.3.1.1 Emergency Management:

Measures to protect or rescue cultural resources in the event of an emergency, disaster, or fire will be developed as part of a park's emergency operations and fire management planning processes. Designated personnel will be trained to respond to all emergencies in a manner that maximizes visitor and employee safety and the protection of resources and property.

(See Emergency Preparedness and Emergency Operations 8.2.5.2. Also see 36 CFR Part 78)

5.3.1.2 Fire Detection, Suppression, and Post-fire Rehabilitation and Protection

The NPS will take action to prevent or minimize the impact of wildland, prescribed, and structural fires on cultural resources, including the impact of suppression and rehabilitation activities.

In the preservation of historic structures and museum and library collections, every attempt will be made to comply with national building and fire codes. When these cannot be met without significantly impairing a structure's integrity and character, the management and use of the structure will be modified to minimize potential hazards, rather than modifying the structure itself.

Subject to the previous paragraph, when warranted by the significance of a historic structure or a museum or library collection, adequate fire detection, warning, and suppression systems will be installed. "Pre-fire plans" will be developed for historic structures and buildings housing museum or library collections, designed to identify the floor plan, utilities, hazards, and areas and objects requiring special protection. This information will be kept current and made available to local and park fire personnel.

Park and local fire personnel will be advised of the locations and characteristics of cultural resources threatened by fire, and of any priorities for protecting them during any planned or unplanned fire incident. At parks with cultural resources, park fire personnel will receive cultural resource protection training. At parks that have wildland or structural fire programs, cultural resource management specialists will receive fire prevention and suppression training and, when appropriate, will be certified for incident management positions commensurate with their individual qualifications.

Smoking will not be permitted in spaces housing museum or library collections, or in historic structures (except those used as residences in which smoking is permitted by the park superintendent).

(See Fire Management 4.5; Fire Management 6.3.9; Structural Fire Protection and Suppression 9.1.8. Also see Director's Order #18: Wildland Fire Management; Director's Order #58, and Reference Manual 58: Structural Fires)

5.3.1.3 Compensation for Damages

The National Park System Resource Protection Act authorizes the Park Service to take all necessary and appropriate steps to recover costs and damages from any person who destroys, causes the loss of, or injures any resource of the national park system. When such incidents involve cultural resources, the Service will:

- Prevent or minimize the destruction or loss of, or injury to, the cultural resource, or abate or minimize the imminent risk of such destruction, loss, or injury;
- Assess and monitor damage to the cultural resource;
- Recover any and all costs associated with the restoration or replacement of the cultural resource, or with the acquisition of an equivalent resource;
- Recover the value of any significant loss of use of the cultural resource pending its
 restoration or replacement or the acquisition of an equivalent, or the value of the cultural
 resource in the event it cannot be restored or replaced; and
- Recover any and all costs incurred in responding to, assessing, and/ or monitoring damage to the cultural resource.

(See Compensation for Injuries to Natural Resources 4.1.6)

5.3.1.4 Environmental Monitoring and Control

When necessary to preserve a historic structure or a museum collection, appropriate measures will be taken to control relative humidity, temperature, light, and air quality. When museum collections are housed in a historic structure, the needs of both the collection and the structure will be identified and evaluated, weighing relative rarity and significance, before environmental control measures are introduced. The environmental conditions of all areas housing museum collections will be regularly monitored, according to a schedule specific to each condition, to determine whether appropriate levels of relative humidity, temperature, and light are being maintained.

(See Air Quality 4.7.1. Also see Director's Order #24: Museum Management)

5.3.1.5 Pest Management

The Park Service will follow an integrated pest management approach in addressing pest problems (including invasive vegetation) related to cultural resources. Pest occurrences will be dealt with on a case-by-case basis. Available pest management methods, as described in Director's Order #77-7, will be reviewed to determine the most effective and lowest risk management strategy.

(See Pest Management 4.4.5)

5.3.1.6 Carrying Capacity

Park superintendents will set, enforce, and monitor carrying capacities to limit public visitation to, or use of, cultural resources that would be subject to adverse effects from unrestricted levels of visitation or use. This will include (1) reviewing the park's purpose; (2) analyzing existing visitor use of, and related impacts to, the park's cultural resources and traditional resource users; (3) prescribing indicators and specific standards for acceptable and sustainable visitor use; and (4) identifying ways to address and monitor unacceptable impacts resulting from overuse. Studies to gather basic data and make recommendations on setting, enforcing, and monitoring carrying capacities for cultural resources will be conducted in collaboration with cultural resource specialists representing the appropriate disciplines.

(See Visitor Carrying Capacity 8.2.1)

5.3.2 Physical Access for Persons with Disabilities

The National Park Service will provide persons with disabilities the highest feasible level of physical access to historic properties that is reasonable, consistent with the preservation of each property's significant historical features. Access modifications for persons with disabilities will be designed and installed to least affect the features of a property that contribute to its significance. Modifications to some features may be acceptable in providing access, once a review of options for the highest level of access has been completed. However, if it is determined that modification of particular features would impair a property's integrity and character in terms of the Advisory Council's regulations at 36 CFR 800.9, such modifications will not be made. To the extent possible, modifications for access will benefit the greatest number of visitors, staff, and the public, and be integrated with, or in proximity to, the primary path of travel for entrances and from parking areas. In situations where access modifications cannot be made, alternative methods of achieving program access will be adopted.

(See Access to Interpretive and Educational Opportunities 7.5.1; Accessibility for Persons with Disabilities 8.2.4; Accessibility for Persons with Disabilities 9.1.2; Accessibility of Commercial Services 10.2.6.2. Also see Director's Order #42: Accessibility for Visitors with Disabilities)

5.3.3 Historic Property Leases and Cooperative Agreements

The National Park Service may lease or permit the use of a historic property through a cooperative agreement, if such lease or cooperative agreement will ensure the property's preservation. Proposed uses must not unduly limit public appreciation of the property; interfere with visitor use and enjoyment of the park; or preclude use of the property for park administration, employee residences, or other management purposes judged more appropriate or cost effective.

Each lease will be competitively offered. The government will receive at least fair market rental value, adjusted for investments required of the lessee. The term of the lease will be the shortest time needed for the proposed use, taking into account required lessee investments, the common practice for the type of lease, possible future alternatives for the property, and other relevant factors. No lease will exceed 50 years. As authorized by the National Parks Omnibus Management Act (16 USC 1a-2(k)), a lessee may use a property to provide a commercial service if the service will be patronized by park visitors only to a minor extent.

Cooperative agreements to maintain, repair, rehabilitate, restore, or build upon a historic property can be entered into with state, local, and tribal governments; other public entities; educational institutions; and private non-profit organizations.

If a lease or cooperative agreement requires or allows the lessee or cooperator to maintain, repair, rehabilitate, restore, or build upon the property, it will require the work be done in accordance with applicable Secretary of the Interior's standards and guidelines and other NPS policies, guidelines, and standards.

(Also see NHPA [16 USC 470h-3]; 16 USC 460l-22(a); Omnibus Consolidated Appropriations Act, 1997 [16 USC 1g]; 36 CFR Part 18)

5.3.4 Stewardship of Human Remains and Burials

Marked and unmarked prehistoric and historic burial areas and graves will be identified, evaluated, and protected. Every effort will be made to avoid impacting burial areas and graves when planning park development and managing park operations. Such burial areas and graves will not knowingly be disturbed or archeologically investigated unless threatened with destruction.

The Service will consult with American Indian tribes, other Native American groups, and other individuals and groups linked by demonstrable ties of kinship or culture to potentially identifiable human remains when such remains may be disturbed or are inadvertently encountered on park lands. Re-interment at the same park may be permitted, and may include remains that may have been removed from lands now within the park.

Native American human remains and photographs of such remains will not be exhibited. Drawings, renderings, or casts of such remains may be exhibited with the consent of culturally affiliated Indian tribes and native Hawaiian organizations. The exhibit of non-Native American human remains, or photographs, drawings, renderings, or casts of such remains, is allowed in consultation with traditionally associated peoples. The Service may allow access to, and study, publication, and destructive analysis of, human remains, but must consult with traditionally associated peoples and consider their opinions and concerns before making decisions on appropriate actions. In addition, such use of human remains will occur only with an approved research proposal that describes why the information cannot be obtained through other sources or analysis, and why the research is important to the field of study and the general public.

(See Cultural Resources 6.3.8; Consultation 7.5.5; Cemeteries and Burials 8.6.10. Also see ARPA; NAGPRA; 36 CFR Part 79; 43 CFR Part 10)

5.3.5 Treatment of Cultural Resources

The Park Service will provide for the long-term preservation of, public access to, and appreciation of, the features, materials, and qualities contributing to the significance of cultural resources. With some differences by type, cultural resources are subject to several basic treatments, including (1) preservation in their existing states; (2) rehabilitation to serve contemporary uses, consistent with their integrity and character; and (3) restoration to earlier appearances by the removal of later additions and replacement of missing elements. Decisions regarding which treatments will best ensure the preservation and public enjoyment of particular cultural resources will be reached through the planning and compliance process, taking into account:

- The nature and significance of a resource, and its condition and interpretive value;
- The research potential of the resource;
- The level of intervention required by treatment alternatives;
- The availability of data, and the terms of any binding restrictions; and
- The concerns of traditionally associated peoples and other stakeholders.

Except for emergencies that threaten irreparable loss without immediate action, no treatment project will be undertaken unless supported by an approved planning document appropriate to the proposed action.

The preservation of cultural resources in their existing states will always receive first consideration. Treatments entailing greater intervention will not proceed without the consideration of interpretive alternatives. The appearance and condition of resources before treatment, and changes made during treatment, will be documented. Such documentation will be shared with any appropriate state or tribal historic preservation office or certified local government, and added to the park museum cataloging system. Pending treatment decisions reached through the planning process, all resources will be protected and preserved in their existing states.

As a basic principle, anything of historical appearance that the National Park Service presents to the public in a park will be either an authentic survival from the past, or an accurate representation of that once existing there. Reconstructions and reproductions will be clearly identified as such.

The Service will holistically approach the treatment of related cultural resources in a park. All cultural resource and natural resource values will be considered in defining specific treatment and management goals. Research will be coordinated and sequenced so that decisions are not made in isolation. Each proposed action will be evaluated to ensure consistency or compatibility in the overall treatment of park resources. The relative importance and relationship of all values will be weighed to identify potential conflicts between and among resource preservation goals, park management and operation goals, and park user goals. Conflicts will be considered and resolved through the planning process, which will include any consultation required by 16 USC 470f.

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 located within park boundaries unless legally obligated to do so. Parks may provide recreational diving access to submerged cultural resources that are not susceptible to damage or the removal of artifacts. The Service will ensure that the activities of others in park waters do not adversely affect submerged cultural resources or the surrounding natural environment. The Service will consult with the owners of non-abandoned historic shipwrecks, and enter into written agreements with them to clarify how the shipwrecks will be managed by the NPS. Shipwrecks owned by a

state government pursuant to the Abandoned Shipwreck Act of 1987 will be managed in accordance with the Abandoned Shipwreck Act Guidelines (55 FR 50116- 145, 55 FR 51528, and 56 FR 7875).

(See Recreational Activities 8.2.2. Also see 36 CFR Part 2; 485 DM 27; Director's Order #4: Diving Management)

5.3.5.2 Cultural Landscapes

The treatment of a cultural landscape will preserve significant physical attributes, biotic systems, and uses when those uses contribute to historical significance. Treatment decisions will be based on a cultural landscape's historical significance over time, existing conditions, and use. Treatment decisions will consider both the natural and built characteristics and features of a landscape, the dynamics inherent in natural processes and continued use, and the concerns of traditionally associated peoples.

The treatment implemented will be based on sound preservation practices to enable long-term preservation of a resource's historic features, qualities, and materials. There are three types of treatment for extant cultural landscapes: preservation, rehabilitation, and restoration.

(See Decision-making to Avoid Impairments 1.4.7. Also see Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes)

5.3.5.2.1 Preservation

A cultural landscape will be preserved in its present condition if:

- That condition allows for satisfactory protection, maintenance, use, and interpretation; or
- Another treatment is warranted but cannot be accomplished until some future time.

5.3.5.2.2 Rehabilitation

A cultural landscape may be rehabilitated for contemporary use if:

- It cannot adequately serve an appropriate use in its present condition; and
- Rehabilitation will retain its essential features, and will not alter its integrity and character or conflict with approved park management objectives.

5.3.5.2.3 Restoration

A cultural landscape may be restored to an earlier appearance if:

- All changes after the proposed restoration period have been professionally evaluated, and the significance of those changes has been fully considered;
- Restoration is essential to public understanding of the park's cultural associations;
- Sufficient data about that landscape's earlier appearance exist to enable its accurate restoration; and
- The disturbance or loss of significant archeological resources is minimized and mitigated by data recovery.

5.3.5.2.4 Reconstruction of Obliterated Landscapes

No matter how well conceived or executed, reconstructions are contemporary interpretations of the past, rather than authentic survivals from it. The National Park Service will not reconstruct an obliterated cultural landscape unless:

- There is no alternative that would accomplish the park's interpretive mission;
- Sufficient data exist to enable its accurate reconstruction, based on the duplication of historic features substantiated by documentary or physical evidence, rather than on conjectural designs or features from other landscapes;
- Reconstruction will occur in the original location;
- The disturbance or loss of significant archeological resources is minimized and mitigated by data recovery; and
- Reconstruction is approved by the Director.

A landscape will not be reconstructed to appear damaged or ruined. General representations of typical landscapes will not be attempted.

5.3.5.2.5 Biotic Cultural Resources.

Biotic cultural resources, which include plant and animal communities associated with the significance of a cultural landscape, will be duly considered in treatment and management. The cultural resource and natural resource components of the park's resource management plan will jointly identify acceptable plans for the management and treatment of biotic cultural resources. The treatment and management of biotic cultural resources will anticipate and plan for the natural and human-induced processes of change. The degree to which change contributes to or compromises the historic character of a cultural landscape, and the way in which natural cycles influence the ecological processes within a landscape, will both be understood before any major treatment is undertaken. Treatment and management of a cultural landscape will establish acceptable parameters for change, and manage the biotic resources within those parameters.

(See Maintenance of Altered Plant Communities 4.4.2.5)

5.3.5.2.6 Land Use and Ethnographic Value

Many cultural landscapes are significant because of their historic land use and practices. When land use is a primary reason for the significance of a landscape, the objective of treatment will be to balance the perpetuation of use with the retention of the tangible evidence that represents its history. The variety and arrangement of cultural and natural features in a landscape often have sacred or other continuing importance in the ethnic histories and cultural vigor of associated peoples. These features and their past and present-day uses will be identified, and the beliefs, attitudes, practices, traditions, and values of traditionally associated peoples will be considered in any treatment decisions.

Contemporary use of a cultural landscape is appropriate if it:

- Does not adversely affect significant landscape characteristics and features; and
- Either follows the historic use or does not impede public appreciation of it.

All uses of cultural landscapes are subject to legal requirements, policy, guidelines, and standards for natural and cultural resource preservation, public safety, and special park uses.

5.3.5.2.7 New Construction

Contemporary alterations and additions to a cultural landscape must not radically change, obscure, or destroy its significant spatial organization, materials, and features. New buildings, structures, landscape features, and utilities may be constructed in a cultural landscape if:

- Existing structures and improvements do not meet essential management needs;
- New construction is designed and sited to preserve the landscape's integrity and historic character; and
- Unless associated with an approved restoration or reconstruction, the alterations, additions, or related new construction is differentiated from, yet compatible with, the landscape's historic character.

New additions will meet the Secretary of the Interior's Standards for Rehabilitation.

5.3.5.3 Ethnographic Resources

Park ethnographic resources are the cultural and natural features of a park that are of traditional significance to traditionally associated peoples. These peoples are the contemporary park neighbors and ethnic or occupational communities that have been associated with a park for two or more generations (40 years), and whose interests in the park's resources began prior to the park's establishment. Living peoples of many cultural backgrounds—American Indians, Inuit (Eskimos), Native Hawaiians, African Americans, Hispanics, Chinese Americans, Euro-Americans, and farmers, ranchers, and fishermen—may have a traditional association with a particular park.

Traditionally associated peoples generally differ as a group from other park visitors in that they typically assign significance to ethnographic resources—places closely linked with their own sense of purpose, existence as a community, and development as ethnically distinctive peoples. These places may be in urban or rural parks, and may support ceremonial activities or represent birthplaces of significant individuals, group origin sites, migration routes, or harvesting or collecting places. While these places have historic attributes that are of great importance to the group, they may not necessarily have a direct association with the reason the park was established, or be appropriate as a topic of general public interest. Some ethnographic resources might also be traditional cultural properties. A traditional cultural property is one that is eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are (1) rooted in that community's history, and (2) important in maintaining the continuing cultural identity of the community.

The Service's primary interest in these places stems from its responsibilities under

- The NPS Organic Act—to conserve the natural and historic objects within parks unimpaired for the enjoyment of future generations;
- NHPA—to preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions that underlie and are a living expression of our American heritage;
- AIRFA—to protect and preserve for American Indians access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites;
- ARPA—to secure, for the present and future benefit of the American people, the protection of archeological resources and sites which are on public lands; and

- NEPA—to preserve important historic, cultural, and natural aspects of our national heritage;
 and
- Executive Order 13007—to (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites.

The Service must therefore be respectful of these ethnographic resources, and carefully consider the effects that NPS actions may have on them. When religious issues are evident, the Service must also consider constraints imposed on federal agency actions by the first and fourteenth amendments to the U. S. Constitution.

The National Park Service will adopt a comprehensive approach that considers parks and traditionally associated and other peoples as interrelated members of an ecosystem. As an aid to appreciating the diverse human heritage and associated resources that characterize the national park system, the Service will identify the present-day peoples whose cultural practices and identities were, and often still are, closely associated with each park's cultural and natural resources.

ANILCA recognizes the importance of maintaining the Alaska Native culture, and contains several provisions that authorize activities by the NPS that would assist in the cultural preservation of Alaska Native communities. For many rural Alaskans, the land and the way of life are inseparable. The Service will explore opportunities in Alaska to forge a mutually beneficial relationship between Alaska Natives and the NPS. In Alaska and elsewhere, the Service will try to strengthen the ability of traditional and indigenous peoples to perpetuate their culture and to enrich the parks with traditional knowledge and a deeper sense of place.

Ethnographic information will be collected through collaborative research that recognizes the sensitive nature of such information. Cultural anthropologists/ ethnographers will document the meanings that traditionally associated groups assign to traditional natural and cultural resources and the landscapes they form. The park's ethnography file will include this information, as well as data on the traditional management practices and knowledge systems that affect resource uses, and the short- and long-term effects of use on the resources.

(See Confidentiality 5.2.3. Also see Director's Order #29: Ethnography Program)

5.3.5.3.1 Resource Access and Use

Consistent with the requirements of the Organic Act, NHPA, AIRFA, ARPA, NEPA, and Executive Order 13007 cited in section 5.3.5.3 above, the Service will strive to allow American Indians and other traditionally associated peoples access to, and use of, ethnographic resources. Continued access to and use of ethnographic resources is often essential to the survival of family, community, or regional cultural systems, including patterns of belief and sociocultural and religious life. However, the Service may not allow access and use if it would violate the criteria listed in section 8.2.

The Service generally supports traditional access and use, and is considering policy and regulatory revisions that will clarify when reasonable accommodations can be made under NPS authorities to allow greater access and use. Park superintendents may reasonably control the times when, and the places where, specific groups may have exclusive access to particular areas of a park.

With regard to consumptive use of park resources, current NPS policy is reflected in regulations published at 36 CFR 2.1. These regulations allow superintendents to designate certain fruits, berries, nuts, or unoccupied seashells which may be gathered by hand for personal use or consumption if it will not adversely affect park wildlife or the reproductive potential of a plant species, or otherwise adversely affect park resources. The regulations do not authorize the taking, use, or possession of fish, wildlife, or plants for ceremonial or religious purposes, except where specifically authorized by Federal statute or treaty rights, or where hunting, trapping, or fishing are otherwise allowed. These regulations are currently under review, and NPS policy is evolving in this area.

Regulations addressing traditional subsistence uses that are authorized in Alaska by ANILCA are published at 36 CFR Part 13. Some park-specific enabling acts (e.g., Big Cypress National Preserve and Kaloka-Honokohau National Historical Park) allow subsistence or other traditional uses of park resources.

(See Native American Use 8.5; Special Park Uses 8.6; Collecting Natural Products 8.8; Consumptive Uses 8.9)

5.3.5.3.2 Sacred Sites

The National Park Service acknowledges that American Indian tribes, including native Alaskans, treat specific places containing certain natural and cultural resources as sacred places having established religious meaning, and as locales of private ceremonial activities. Consistent with Executive Order 13007, the Service will, to the extent practicable, accommodate access to and ceremonial use of Indian sacred sites by religious practitioners from recognized American Indian and Alaska native tribes, and avoid adversely affecting the physical integrity of such sacred sites.

In consultation with the appropriate groups, the Service will develop a record about such places, and identify any treatments preferred by the groups. This information will alert superintendents and planners to the potential presence of sensitive areas, and will be kept confidential to the extent permitted by law. The Service will collaborate with affected groups to prepare mutually agreeable strategies for providing access to ordinarily gated or otherwise- inaccessible locales, and for enhancing the likelihood of privacy during religious ceremonies. Any strategies that are developed must comply with constitutional and other legal requirements. To the extent feasible and allowable by law, accommodations will also be made for access to, and the use of, sacred places when interest is expressed by other traditionally associated peoples, especially native Hawaiians and other Pacific islanders, and by American Indian peoples and others who often have a long-standing connection and identity with a particular park or resource.

Various ethnic groups, local groups with recently developed ties to resources in neighboring parks, and visitors to family and national cemeteries and national memorials also might use park resources for traditional or individual religious ceremonies. Mutually acceptable agreements may be negotiated with known groups to provide access to, and the use of, such places, consistent with constitutional and other legal constraints.

(See Confidentiality 5.2.3; Resource Access and Use 5.3.5.3.1; Native American Use 8.5; First Amendment Activities 8.6.3. Also see Director's Orders #66: The Freedom of Information Act and Protected Resource Information, and #71B: Sacred Sites; NHPA [16 USC 470w-3]; Executive Order 13007; 512 DM 3)

5.3.5.3.3 Research

The Park Service will maintain a program of professional cultural anthropological/ethnographic research, designed to provide NPS managers with information about relationships between park resources and associated peoples. Research will be undertaken in cooperation with associated peoples in an interdisciplinary manner whenever reasonable, especially in studies of natural resource use and ethnographic landscapes. Research findings will be used to inform planning, cultural and natural resource management decision-making, and interpretation, as well as to help managers meet responsibilities to associated peoples and other stakeholders in the outcomes of NPS decisions. Information required for an ethnographic resource inventory will be drawn from ethnographic research reports to the fullest extent possible.

Collaborative research dealing with recent or contemporary cultural systems and the resources of park-associated peoples will involve the groups in the design and implementation of the research and the review of research findings to the fullest possible extent. The Service will provide individuals or groups involved with, or directly affected by, the research with copies or summaries of the reports, as appropriate.

(See Park Planning Processes 2.3; Studies and Collections 4.2; Consultation 7.5.5; Native American Use 8.5. Also see Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes)

5.3.5.4 Historic and Prehistoric Structures

The treatment of historic and prehistoric structures will be based on sound preservation practice to enable the long-term preservation of a structure's historic features, materials, and qualities. There are three types of treatment for extant structures: preservation, rehabilitation, and restoration.

(Also see Secretary of the Interior's Standards for the Treatment of Historic Properties)

5.3.5.4.1 Preservation

A structure will be preserved in its present condition if:

- That condition allows for satisfactory protection, maintenance, use, and interpretation; or
- Another treatment is warranted but cannot be accomplished until some future time.

5.3.5.4.2 Rehabilitation

A historic structure may be rehabilitated (rehabilitation does not apply to prehistoric structures) for contemporary use if:

- It cannot adequately serve an appropriate use in its present condition; and
- Rehabilitation will retain its essential features and will not alter its integrity and character or conflict with approved park management objectives.

5.3.5.4.3 Restoration

A structure may be restored to an earlier appearance if:

- All changes after the proposed restoration period have been professionally evaluated, and the significance of those changes has been fully considered;
- Restoration is essential to public understanding of the park's cultural associations;

- Sufficient data about that structure's earlier appearance exist to enable its accurate restoration; and
- The disturbance or loss of significant archeological resources is minimized and mitigated by data recovery.

5.3.5.4.4 Reconstruction of Missing Structures

No matter how well conceived or executed, reconstructions are contemporary interpretations of the past rather than authentic survivals from it. The National Park Service will not reconstruct a missing structure unless:

- There is no alternative that would accomplish the park's interpretive mission;
- Sufficient data exist to enable its accurate reconstruction based on the duplication of historic features substantiated by documentary or physical evidence, rather than on conjectural designs or features from other structures;
- Reconstruction will occur in the original location The disturbance or loss of significant archeological resources is minimized and mitigated by data recovery; and
- Reconstruction is approved by the Director.

A structure will not be reconstructed to appear damaged or ruined. Generalized representations of typical structures will not be attempted.

(See Environmental Monitoring and Control 5.3.1.4; Physical Access for Persons with Disabilities 5.3.2; Historic and Prehistoric Ruins 5.3.5.4.10)

5.3.5.4.5 Movement of Historic Structure

Proposals for moving historic structures will consider the effects of movement on the structures, their present environments, their proposed environments, and the archeological research value of the structures and their sites. No historic structure will be moved if its preservation would be adversely affected, or until the appropriate recovery of significant archeological data has occurred. Prehistoric structures will not be moved.

A nationally significant historic structure may be moved only if:

- It cannot practically be preserved on its present site; or
- The move constitutes a return to a previous historic location, and the previous move and present location are not important to the structure's significance.

A historic structure of less-than-national significance may be moved if:

- It cannot practically be preserved on its present site; or
- Its present location is not important to its significance, and its relocation is essential to public understanding of the park's cultural associations.

In moving a historic structure, every effort will be made to reestablish its historic orientation, immediate setting, and general relationship to its environment.

The Park Service will not acquire historic structures for relocation to parks.

5.3.5.4.6 New Construction

In preference to new construction, every reasonable consideration will be given to using historic structures for park purposes compatible with their preservation and public appreciation. Additions may be made to historic structures when essential to their continued use, and when new construction will not destroy historic materials, features, and spatial relationships that characterize the structure. Structural additions will harmonize in size, scale, proportion, and materials with, but be readily distinguishable from, the older work, and will not intrude upon the historic scene. New additions will meet the *Secretary of the Interior's Standards for Rehabilitation*.

In those areas of parks managed for the preservation, protection, and interpretation of cultural resources and their settings, new structures, landscape features, and utilities will be constructed only if:

- Existing structures and improvements do not meet essential park management needs; and
- New construction is designed and sited to preserve the integrity and character of the area.

Unless associated with an approved restoration or reconstruction, all alterations, additions, or related new construction will be differentiated from, yet compatible with, the historic character of the structure.

(See Rehabilitation 5.3.5.4.2; Use of Historic Structures 5.3.5.4.7; Adaptive Use 9.1.1.4. Also see Executive Order 13006; NHPA)

5.3.5.4.7 Use of Historic Structures

NHPA (16 USC 470h-2(a)(1)) and Executive Order 13006 require each federal agency—prior to acquiring, constructing, or leasing buildings—to use, to the maximum extent feasible, historic properties available to it, whenever operationally appropriate and economically prudent. NHPA also requires each agency to implement alternatives for the adaptive use of historic properties it owns, if that will help ensure the properties' preservation. Therefore, compatible uses for structures will be found whenever possible. This policy will help prevent the accelerated deterioration of historic structures due to neglect and vandalism. Unused significant historic structures should be stabilized and protected through appropriate measures, such as "mothballing," until long-term decisions are made through the planning process.

All uses of historic structures are subject to preservation and public safety requirements. No administrative or public use will be permitted that would threaten the stability or character of a structure, the museum objects within it, or the safety of its users, or that would entail alterations significantly compromising its integrity.

(See Fire Detection, Suppression, and Post-fire Rehabilitation and Protection 5.3.1.2; Physical Access for Persons with Disabilities 5.3.2; Adaptive Use 9.1.1.3; Energy Management 9.1.7; Historic Structures 9.4.3.3)

5.3.5.4.8 Park Structures Owned or Managed by Others

Structures and related property owned or managed by others will be managed in accordance with NPS policies, guidelines, and standards to the extent permitted by the Service's interest. This includes structures and property owned but not occupied by the Service, and structures and property owned by others in which the Service has a less-than-fee interest or plays a major

management or preservation role. Interests acquired or retained by the Service will enable the application of this policy.

(See Land Protection Plans 3.3; Historic Property Leases and Cooperative Agreements 5.3.3; Historic Properties 10.2.2.3)

5.3.5.4.9 Damaged or Destroyed Historic Structures

Historic structures damaged or destroyed by fire, storm, earthquake, war, or any other accident may be preserved as ruins; be removed; or be rehabilitated, restored, or reconstructed in accordance with these policies.

5.3.5.4.10 Historic and Prehistoric Ruins

The stabilization of historic and prehistoric ruins will be preceded by studies leading to the recovery of any data that would be affected by stabilization work. Ruins and related features on unexcavated archeological sites will be stabilized only to the extent necessary to preserve research values or to arrest structural deterioration, recognizing that it is preferable to preserve archeological sites in situ than to excavate them. Archeological ruins to be exhibited will not be excavated until consultation has occurred with traditionally associated peoples, and adequate provisions are made for data recovery and stabilization. Structures will not be deliberately reduced to ruins, and missing structures will not be reconstructed to appear damaged or ruined.

5.3.5.5 Museum Collections

The Service will collect, protect, preserve, provide access to, and use objects, specimens, and archival and manuscript collections (henceforth referred to collectively as "collections," or individually as "items") in the disciplines of archeology, ethnography, history, biology, geology, and paleontology, to aid understanding among park visitors, and to advance knowledge in the humanities and sciences. As appropriate, the Service will consult with culturally affiliated or traditionally associated peoples before treating or reproducing items in NPS collections that are subject to NAGPRA.

(Also see Museum Handbook)

5.3.5.5.1 Preservation

An item in a museum collection will be preserved in its present condition through ongoing preventive care if:

- That condition is satisfactory for exhibit or research; or
- Another treatment is warranted, but it cannot be accomplished until some future time.

An item will be stabilized if:

- Preventive measures are insufficient to reduce deterioration to a tolerable level; or
- The item is so fragile that it will be endangered under any circumstances.

Active conservation treatment (intervention) will be minimized to reduce the possibility of compromising the item's integrity. All active treatment will be documented.

5.3.5.5.2 Restoration

An item in a museum collection may be restored to an earlier appearance if:

Restoration is required for exhibit or research purposes;

- Sufficient data about that item's earlier appearance exist to enable its accurate restoration;
 and
- Restoration will not modify that item's known original character.

Restoration will be accomplished using the techniques and materials that least modify the item and in such a manner that the materials can be removed at a later time with minimal adverse effect. Restored areas will be distinguishable from original material, and be documented. Restoration will take into account the possible importance of preserving signs of wear, damage, former maintenance, and other historical and scientific evidence.

5.3.5.5.3 Reproduction

Items needed for interpretive and educational presentations will be reproduced for such use when the originals are (1) unavailable; or (2) would be subject to undue deterioration or loss; or (3) are otherwise inappropriate for exhibit. If an object is inappropriate for exhibit because of its religious or spiritual significance to a traditionally associated people, it will be reproduced only after consultation with such people.

5.3.5.5.4 Acquisition, Management, and Disposition

Collections and related documentation essential to achieving the purposes and objectives of parks will be acquired and maintained in accordance with approved scope of collection statements for each park. When museum objects, specimens, or archival documents become available and fall within a park's approved scope of collection statement, every reasonable effort will be made to acquire them, if they can be managed and made accessible according to Service standards.

Archeological objects systematically collected within a park, and natural history specimens systematically collected within a park for exhibit or permanent retention, will be managed as part of the park's museum collection. The management and care of museum collections will be addressed at all appropriate levels of planning. Requisite levels of care will be established through the interdisciplinary efforts of qualified professionals.

Museum collections will be acquired and disposed of in conformance with legal authorizations and current NPS procedures. The National Park Service will acquire only collections having legal and ethical pedigrees. Each park will maintain complete and current accession records to establish the basis for legal custody of the collections in its possession, including intellectual property rights when acquired. Each park will prepare museum catalog records to record basic property management data and other documentary information about the park's museum collection. Collections will be inventoried in accordance with current procedures. Archeological, cultural landscape, ethnographic, historic and prehistoric structure, historic furnishings, natural resource, and other projects that generate collections for parks will provide for cataloging and initial preservation of those collections in the project budget.

The Service may cooperate with qualified entities in the management, use, and exhibition of museum collections, and may loan items to, or borrow items from, such entities for approved purposes. The Service may de-accession items using means authorized in the Museum Act and NAGPRA.

Interested persons will be permitted to inspect and study NPS museum collections and records in accordance with standards for the preservation and use of collections, and subject to laws and

policies regarding the confidentiality of resource data. At cost, copies of documents may be provided.

(See Natural Resource Collections 4.2.3; Confidentiality 5.2.3; Fire Detection, Suppression, and Post-fire Rehabilitation and Protection 5.3.1.2; Environmental Monitoring and Control 5.3.1.4; Consultation 7.5.5; Special Park Uses 8.6; Museum Collections Management Facilities 9.4.2. Also see 16 USC 18f; 43 USC 1460; 36 CFR Part 79; 43 CFR Part 10; and Museum Handbook)

5.3.5.5.5 Historic Furnishings

When historic furnishings are present in their original arrangement in a historic structure, every effort will be made to preserve them as an entity. Such historic furnishings will not be moved or replaced unless required for their protection or repair, or unless the structure is designated for another use in an approved planning document. The original arrangement of historic furnishings will be properly documented. A structure may be refurnished in whole or in part if:

- All changes after the proposed refurnishing period have been professionally evaluated, and their significance has been fully considered;
- A planning process has demonstrated that refurnishing is essential to public understanding of the park's cultural associations; and
- Sufficient evidence of the design and placement of the structure's furnishings exists to enable its accurate refurnishing without reliance on evidence from comparable structures.

Generalized representations of typical interiors will not be attempted except in exhibit contexts that make their representative nature obvious. Reproductions may be used in place of historic furnishings, but only when photographic evidence or prototypes exist to ensure the accurate recreation of historic pieces.

(See Park Planning Processes 2.3; Nonpersonal Services 7.3.2)

5.3.5.5.6 Archives and Manuscripts

Archival and manuscript collections are museum collections, and will be preserved, arranged, cataloged, and described in finding aids. They will be maintained and used in ways that preserve the collections and their context (provenance and original order) intact while providing controlled access. With few legal exemptions, the Park Service will make archives and manuscripts available to researchers. Electronic documents that are to be preserved in archival and manuscript collections will be migrated so that their information remains accessible.

All documentation associated with natural and cultural resource studies and other resource management actions will be retained in the park's museum collection for use in managing park resources over time. Parks will retain notes or copies of records significant to their administrative histories when they periodically transfer their official records to federal record centers.

(See Confidentiality 5.2.3)

6 Wilderness Preservation and Management

The National Park Service will evaluate all lands it administers for their suitability for inclusion within the national wilderness preservation system. For those lands that possess wilderness characteristics, no action that would diminish their wilderness suitability will be taken until after Congress and the President have taken final action. The superintendent of each park containing wilderness will develop and maintain a wilderness management plan to guide the preservation, management, and use of the park's wilderness area, and ensure that wilderness is unimpaired for future use and enjoyment as wilderness.

6.1 General Statement

The National Park Service will manage wilderness areas for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. Management will include the protection of these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness. The public purpose of wilderness in the national parks includes the preservation of wilderness character and wilderness resources in an unimpaired condition, as well as for the purposes of recreational, scenic, scientific, education, conservation, and historical use.

The policies contained in this chapter are supplemented by Director's Order #41: Wilderness Preservation and Management; and by Reference Manual 41, which accompanies the Director's Order. Those documents should be referred to for more detailed information on the topics covered in this chapter.

6.2 Identification and Designation of the Wilderness Resource

The National Park Service will use the following wilderness study process to consider National Park Service areas for inclusion within the congressionally designated national wilderness preservation system.

6.2.1 Assessment of Wilderness Suitability or Non-suitability

All lands administered by the National Park Service, including new units or additions to existing units since 1964, will be evaluated for their suitability for inclusion within the national wilderness preservation system. Additionally, lands that were originally assessed as non-suitable for wilderness because of a non-conforming or incompatible uses must be re-evaluated if the non-conforming uses have been terminated or removed. A wilderness suitability assessment will consist of a brief memorandum, from the regional director to the Director, that makes a managerial determination as to the suitability of the park lands for wilderness designation. The assessment must be completed no later than one year after the establishment of the park or the acquisition of new lands.

For existing parks in which wilderness suitability determinations have never been undertaken, the superintendent must complete the suitability assessment within one year of the effective date of this edition of NPS Management Policies. Also, for parks with land originally determined to be unsuitable, but where a non-conforming use has been terminated or removed, a reevaluation must be conducted within one year of the time in which the non-conforming use is terminated or removed.

6.2.1.1 Primary Suitability Criteria

National Park Service lands will be considered suitable for wilderness if they are at least 5000 acres or of sufficient size to make practicable their preservation and use in an unimpaired condition, and if they possess the following characteristics (as identified in the Wilderness Act):

- The earth and its community of life are untrammeled by humans, where humans are visitors and do not remain;
- The area is undeveloped and retains its primeval character and influence, without permanent improvements or human habitation;

- The area generally appears to have been affected primarily by the forces of nature, with the imprint of humans' work substantially unnoticeable;
- The area is protected and managed so as to preserve its natural conditions; and
- The area offers outstanding opportunities for solitude or a primitive and unconfined type of recreation.

6.2.1.2 Additional Considerations in Determining Suitability

In addition to the primary suitability criteria, there are other considerations that should be taken into account in determining suitability:

- A wilderness area may contain significant ecological, geological, or other features of scientific, educational, scenic, or historical value, although it does not need these things to be considered suitable for wilderness designation.
- Lands that have been logged, farmed, grazed, mined, or otherwise utilized in ways not involving extensive development or alteration of the landscape may also be considered suitable for wilderness designation if, at the time of assessment, the effects of these activities are substantially unnoticeable or their wilderness character could be maintained or restored through appropriate management actions.
- An area will not be excluded from a determination of wilderness suitability solely because established or proposed management practices require the use of tools, equipment, or structures, if those practices are necessary to meet minimum requirements for the administration of the area as wilderness.
- In the process of determining wilderness suitability, lands will not be excluded solely because of existing rights or privileges (e. g., mineral exploration and development, commercial operations, agricultural development, grazing, or stock driveways). If the National Park Service determines that these lands possess wilderness character, they may be included in the suitability determination so that they can be considered for designation as wilderness or potential wilderness.
- Lands containing aboveground utility lines will normally not be considered as suitable for wilderness designation, but they can be considered as suitable for "potential" wilderness designation if there is a long-term intent to remove the lines. Although relocation outside wilderness is preferable, areas containing underground utility lines may be included if the area otherwise qualifies as wilderness and the maintenance of the utility line, including use of mechanized and motorized equipment, is administered under minimum requirement procedures identified in the park's wilderness management plan. No new utility lines may be installed in wilderness, and existing utility lines may not be extended or enlarged except as may be allowed pursuant to section 1106 of ANILCA (16 USC 1133(c)).
- 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 nonsuitable 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 nonconforming 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, nonconforming 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 intraagency 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.)

6.3.10 Management Facilities

Part of the definition of wilderness as provided by the Wilderness Act is "undeveloped federal land retaining its primeval character and influence, without permanent improvements." Accordingly, authorizations of NPS administrative facilities located in wilderness will be limited to the types and minimum number essential to meet the minimum requirements for the administration of the wilderness area. A decision to construct, maintain, or remove an administrative facility will be based primarily on whether or not such a facility is required to preserve wilderness character or values, not on considerations of administrative convenience, economic effect, or convenience to the public or park staff. Maintenance or the removal of historic structures will also comply with cultural resource protection and preservation policies and directives, and with the concept of minimal requirement management techniques for wilderness.

6.3.10.1 Administrative Facilities

Administrative facilities (e.g., ranger stations and/ or patrol cabins, fire lookouts, radio and/ or cellular telephone antennas, radio repeater sites, associated storage or support structures, drift fences, facilities supporting trail stock operations) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other appropriate planning documents. New roads will not be built in wilderness. Temporary vehicular access may be permitted only to meet the minimum requirements of emergency situations, and will be restored, according to an approved restoration plan, as rapidly as possible. Where abandoned roads have been included within wilderness, they may be used as trails, restored to natural conditions, or managed as a cultural resource.

No permanent heliports, helipads, or airstrips will be allowed in wilderness unless specifically authorized by statute or legislation. Temporary landing facilities may be used to meet the minimum requirements of emergency situations. Site improvements determined to be essential for safety reasons during individual emergency situations may be authorized, but no site markings or improvements of any kind may be installed to support non-emergency use. In Alaska, any prohibitions or restrictions on the use of fixed-wing aircraft should follow the procedures in 43 CFR 36. 11(f).

(See Overflights and Aviation Uses 8.4)

6.3.10.2 Trails in Wilderness

Trails will be permitted within wilderness when they are determined to be necessary for resource protection and/ or for providing for visitor use for the purposes of wilderness. The identification and inventory of the wilderness trail system will be included as an integral part of the wilderness management plan or other appropriate planning document. Trails will be maintained at levels and conditions identified within the approved wilderness management plan or other planning document. Trail maintenance structures (e. g., water bars, gabions) may be provided, under minimum requirement protocols, where they are essential for resource preservation, or where significant safety hazards exist during normal use periods. Historic and/ or prehistoric trails will

be administered in keeping with approved cultural resource and wilderness management plan requirements.

Borrow pits are not permitted in wilderness areas, with the exception of small-quantity use of borrow material for trails, which must be in accordance with an approved wilderness management plan.

6.3.10.3 Shelters and Campsites

The construction of new shelters for public use will generally not be allowed, in keeping with the values and character of wilderness. An existing shelter may be maintained or reconstructed only if the facility is necessary to achieve specific wilderness management objectives as identified in the park's wilderness and cultural resources management plans. The construction, use, and occupancy of cabins and other structures in wilderness areas in Alaska are governed by applicable provisions of ANILCA and by National Park Service regulations in 36 CFR Part 13, and may be permitted only under conditions prescribed in the park's wilderness management plan.

Although the development of facilities to serve visitors will generally be avoided, campsites may be designated when essential for resource protection and preservation or to meet other specific wilderness management objectives. In keeping with the terms of the park's wilderness management plan, campsite facilities may include a site marker, fire rings, tent sites, foodstorage devices, and toilets if these are determined by the superintendent to be the minimum facilities necessary for the health and safety of wilderness users, or for the preservation of wilderness resources and values. Toilets will be placed only in locations where their presence and use will resolve health and sanitation problems or prevent serious resource impacts, especially where reducing or dispersing visitor use is impractical or has failed to alleviate the problems. Picnic tables will not be allowed in wilderness.

6.3.10.4 Signs

Signs detract from the wilderness character of an area and make the imprint of man and management more noticeable. Only those signs necessary for visitor safety or to protect wilderness resources, such as those identifying routes and distances, will be permitted. Where signs are used, they should be compatible with their surroundings and the minimum size possible.

6.3.11 Wilderness Boundaries

Policies related to wilderness boundaries include the following:

6.3.11.1 Legal Descriptions and Boundary Maps

Every park with designated wilderness will possess a written legal description of the wilderness area and a map (or maps) that illustrates the legal description of the wilderness. Each park will ensure that the legal description and map(s) are filed in the appropriate locations. Wilderness boundaries have the force of federal law, and may only be modified through the legislative process, unless minor adjustments and corrections are specifically authorized within the wilderness designation enabling legislation.

6.3.11.2 Caves

All cave passages located totally within the surface wilderness boundary will be managed as wilderness. Caves that have entrances within wilderness but contain passages that may extend

outside the surface wilderness boundary will be managed as wilderness. Caves that may have multiple entrances located both within and exterior to the surface wilderness boundary will be managed consistent with the surface boundary; those portions of the cave within the wilderness boundary will be managed as wilderness.

(See Caves 4.8.2.2)

6.3.11.3 Waters in Wilderness

The NPS will manage as wilderness all waters included within wilderness boundaries, and the lands beneath these waters (if owned by the United States), in keeping with established jurisdictions and authorities.

(See Water Resource Management 4.6)

6.4 Wilderness Use Management

The National Park Service will encourage and facilitate those uses of wilderness that are in keeping with the definitions and purposes of wilderness and do not degrade wilderness resources and character. Appropriate restrictions may be imposed on any authorized activity in the interest of preserving wilderness character and resources or to ensure public safety.

When resource impacts or demands for use exceed established thresholds or capacities, superintendents may limit or redirect use. Physical alterations, public education, general regulations, special regulations, and permit systems, as well as local restrictions, public use limits, closures, and designations implemented under the discretionary authority of the superintendent (36 CFR 1. 5 and Part 13; 43 CFR Part 36 for Alaska units), may all be used in managing use and protecting wilderness, if these actions are determined to be the minimally required level of management.

6.4.1 General Policy

Park visitors need to accept wilderness on its own unique terms. Accordingly, the National Park Service will promote education programs that encourage wilderness users to understand and be aware of certain risks, including possible dangers arising from wildlife, weather conditions, physical features, and other natural phenomena that are inherent in the various conditions that comprise a wilderness experience and primitive methods of travel. The National Park Service will not modify the wilderness area to eliminate risks that are normally associated with wilderness, but it will strive to provide users with general information concerning possible risks, any recommended precautions, related user responsibilities, and applicable restrictions and regulations, including those associated with ethno-graphic and cultural resources.

6.4.2 Wilderness Interpretation and Education

In the context of interpretive and educational planning, national park units with wilderness resources will: (1) operate public education programs designed to promote and perpetuate public awareness of, and appreciation for, wilderness character, resources, and ethics, while providing for acceptable use limits; (2) focus on fostering an understanding of the concept of wilderness that includes respect for the resource, willingness to exercise self-restraint in demanding access to it, and an ability to adhere to appropriate, minimum-impact techniques; and (3) encourage the public to use and accept wilderness on its own terms; i.e., the acceptance of an undeveloped, primitive environment and the assumption of the potential risks and responsibilities involved in

using and enjoying wilderness areas. National Park Service interpretive plans and programs for wilderness parks will address the primary interpretive themes for wilderness. Education is among the most effective tools for dealing with wilderness-use management problems and should generally be applied before more restrictive management tools.

(See Visitor Safety 8.2.5.1)

6.4.3 Recreational Use Management in Wilderness

Recreational uses of National Park Service wilderness are generally those traditionally associated with wilderness and identified by Congress in the legislative record for the development of the Wilderness Act and in keeping with the language provided by sections 2(a) and 2(c) of the Act itself (16 USC 1131(a) and (c)). These recreational uses of wilderness will be of a type and nature that ensure that its use and enjoyment will leave it unimpaired for future use and enjoyment as wilderness, provide for the protection of the area as wilderness, and provide for the preservation of wilderness character. Recreational uses in National Park Service wilderness areas will be of a nature that enable the areas to retain their primeval character and influence; protect and preserve natural conditions; leave the imprint of man's work substantially unnoticeable; provide outstanding opportunities for solitude or primitive and unconfined types of recreation; and preserve wilderness in an unimpaired condition.

(See Management of Recreational Use 8.2.2.1)

6.4.3.1 Recreation Use Evaluation

Recreational uses—particularly new and emerging activities, that compromise the stated purposes and definitions of wilderness or unduly impact the wilderness resource or the visitor experience within wilderness—will be evaluated to determine if these uses are appropriate, or should be limited or disallowed through use of the superintendent's compendium in 36 CFR 1.5. Evaluation or re-evaluation should be accomplished within wilderness management plans or similar implementation plans. Recreational uses that do not meet the purposes and definitions of wilderness should be prohibited in NPS wilderness.

Significant changes in patterns or increased levels of use will not be authorized by special permit, administrative discretion, or authorities under the superintendents' compendia, except in cases where sufficient information exists to adequately determine there is no significant impact on wilderness resources and values, including visitor experiences. These increased levels of use and changes in patterns of existing use will normally not qualify for a categorical exclusion under NEPA. Decisions regarding significant changes in patterns and new levels of use will require environmental analysis and review, including opportunity for public comment, in accordance with the requirements of NEPA.

(See Visitor Carrying Capacity 8.2.1)

6.4.3.2 Leave-no-trace

"Leave-no-trace" principles and practices will be applied to all forms of recreation management within wilderness, including commercial operations. Wilderness users will generally be required to carry out all refuse. Refuse is defined in 36 CFR 1.4.

6.4.3.3 Use of Motorized Equipment

Public use of motorized equipment or any form of mechanical transport will be prohibited in wilderness except as provided for in specific legislation. Operating a motor vehicle or possessing a bicycle in designated wilderness outside Alaska is prohibited (see NPS regulations in 36 CFR 4. 30(d)(1)).

However, section 4(d)(1) of the Wilderness Act (16 USC 1133(d)(1)) authorizes the Secretary, where legislation designating the wilderness specifically makes this provision applicable, to allow the continuation of motorboat and aircraft use under certain circumstances in which those activities were established prior to wilderness designation. Section 4(d)(1) gives the Secretary the discretion to manage and regulate the activity in accordance with the Wilderness Act, the NPS Organic Act, and individual park enabling legislation. As authorized, the National Park Service will administer this use to be compatible with the purpose, character, and resource values of the particular wilderness area involved. The use of motorized equipment by the public in wilderness areas in Alaska is governed by applicable provisions of ANILCA, NPS regulations in 36 CFR part 13, and Department of the Interior regulations in 43 CFR part 36. The specific conditions under which motorized equipment may be used by the public will be outlined in each park's wilderness management plan.

(See Soundscape Management 4.9; Use of Motorized Equipment 8.2.3)

6.4.4 Commercial Services

Wilderness-oriented commercial services that contribute to public education and visitor enjoyment of wilderness values or provide opportunities for primitive and unconfined types of recreation may be authorized if they meet the "necessary and appropriate" tests of the National Park Service Concessions Management Improvement Act of 1998 and section 4(d)(6) of the Wilderness Act (16 USC 1133(d)(5)), and if they are consistent with the wilderness management objectives contained in the park's wilderness management plan, including the application of the minimum requirement concept. Activities such as guide services for outfitted horseback, hiking, mountain-climbing, or river trips and similar activities may be appropriate and may be authorized if conducted under terms and conditions outlined in the park's wilderness management plan and/ or in legislation authorizing these types of commercial use.

The only structures or facilities used by commercial services that will be allowed in wilderness will be temporary shelters, such as tents, or other specifically approved facilities that may be required within the wilderness management plan for resource protection and the preservation of wilderness values. Temporary facilities will generally be removed from the wilderness after each trip, unless such removal will cause additional degradation of the wilderness resources. In Alaska, additional guidance for the management of temporary facilities for hunting and fishing guides is found in ANILCA section 1316 (16 USC 3204). The use of permanent equipment and supply caches by commercial operators is prohibited within wilderness.

Managers will ensure that commercial operators are in compliance with established "Leave-no-trace" protocols.

(See Visitor Use 8.2; Commercial Use Authorization 10.3)

6.4.5 Special Events

The National Park Service will not sponsor or issue permits for special events to be conducted in wilderness if those events are inconsistent with wilderness resources and character, or if they do not require a wilderness setting to occur. Permits will not be issued for special events in NPS wilderness areas that are commercial enterprises, or for competitive events; activities involving animal, foot, or watercraft races; the physical endurance of a person or animal; organized survival exercises; war games; or similar exercises.

(See Special Events 8.6.2. Also see 36 CFR 2.50)

6.4.6 Existing Private Rights

Wilderness designation does not extinguish valid existing private rights (e.g., fee-simple interest, less-than-fee-simple interest, valid mineral operations, rights-of way, grazing permits). The validity of private rights within wilderness must be determined on a case-by-case basis. Valid private rights in wilderness must be administered in keeping with the specific conditions and requirements of the valid right.

6.4.7 Grazing and Livestock Driveways

Commercial grazing or driving of livestock in park wilderness will be allowed only as specifically authorized by Congress. Where these activities are authorized, they will be managed under conditions and requirements identified within the approved wilderness management plan and corresponding allotment management plans. The use of motorized vehicles, motorized equipment, or mechanical transport by grazing permittees will not be allowed except as provided for by a specific authority; i.e., a valid existing right, the enabling legislation, or a determination of minimum requirement by the NPS. The construction of livestock management facilities other than those specifically authorized by legislation is prohibited.

Non- commercial grazing of trail stock used as part of an approved livestock management program within wilderness may be authorized in accordance with National Park Service regulations and conditions outlined in the wilderness management plan or stock use management plan. All approved livestock use must ensure the preservation of wilderness resources and character. Superintendents will be responsible for monitoring livestock use in wilderness to the same degree as human use, and may use the same management tools and techniques, including the application of the minimum requirement concept to manage livestock use that are available for managing other wilderness uses.

(See 8.6.8 Grazing by Domestic and Feral Livestock)

6.4.8 Rights-of-Way

Existing rights-of-way that have been included in wilderness should be terminated or phased out where practicable. Rights-of-way subject to National Park Service administrative control should be administered under conditions outlined in the park's wilderness management plan that protect wilderness character and resources and limit the use of motorized or mechanical equipment. The Service will not issue any new rights-of-way or widen or extend any existing rights-of-way in wilderness. Rights-of-way and access procedures affecting wilderness areas in Alaska are governed by applicable provisions of ANILCA and regulations in 43 CFR part 36, and 36 CFR part 13.

(See Existing Private Rights 6.4.6)

6.4.9 Mineral Development

The National Park Service will seek to remove or extinguish valid mining claims and non-federal mineral interests in wilderness through authorized processes, including purchasing valid rights. In parks where Congress has authorized the leasing of federal minerals, the NPS will take appropriate actions to preclude the leasing of lands or minerals within wilderness whenever, and wherever, it is authorized to do so. Lands included within wilderness will be listed as "excepted areas" under applicable regulations in 43 CFR parts 3100 and 3500 (see section 3500.8).

Unless and until mineral interests and mining claims within Park Service wilderness are eliminated, they must be managed pursuant to existing National Park Service regulations, policies, and procedures. (See 36 CFR part 9, Subpart A, for mineral development on mining claims; 36 CFR part 9, subpart B, for non-federal oil and gas development; and 43 CFR parts 3100 and 3500, for federal mineral leasing.). A validity examination of unpatented claims in wilderness affected by a proposed plan of operations must be conducted by a certified mineral examiner prior to plan approval. Motorized use in wilderness is allowed only with an approved plan of operations on valid mineral claims and where there is no reasonable alternative. Motorized use for access can occur only on existing or approved roads. There will be no new roads or improvement of existing roads unless documented as being necessary for resource protection. Any plan of operations that is approved will include stipulations on operations and reclamation that will ensure that long-term effects on the wilderness area are substantially unnoticeable. For access to mining claims in NPS wilderness in Alaska, see 43 CFR 36.10.

6.4.10 Accessibility for Persons with Disabilities

The National Park Service has legal obligations to make available equal opportunities for people with disabilities in all programs and activities. This requirement includes the opportunity to participate in wilderness experiences. Management decisions responding to requests for special consideration to provide wilderness use by persons with disabilities must be in accord with the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973 (as amended in 1978), and section 507(c) of the Americans with Disabilities Act of 1990 (ADA) (42 USC 12207(c)). Such decisions should balance the intent of access and wilderness laws, and find a way of providing the highest level of protection to the wilderness resource.

Section 17.550 of the Secretary of the Interior's regulations regarding the enforcement of non-discrimination on the basis of disability in Department of Interior programs (43 CFR part 17, subpart E) states that agencies are not required to take any actions or provide access that would result in a fundamental alteration in the nature of a program or activity. However, the agency has the burden of proving that compliance would result in a fundamental alteration. This concept is also found in section 507 of ADA.

(See Accessibility for Persons with Disabilities 8.2.4, and 9.1.2. Also see Director's Order #42: Accessibility for Visitors with Disabilities)

7 Interpretation and Education

Through interpretive and educational programs, the National Park Service will instill in park visitors an understanding, appreciation, and enjoyment of the significance of parks and their resources. Interpretive and educational programs will encourage the development of a personal stewardship ethic, and broaden public support for preserving park resources.

The purpose of National Park Service interpretive and educational programs is to provide memorable educational and recreational experiences, and to foster the development of a personal stewardship ethic. The Service's programs will do this by forging a connection between park resources, visitors, the community, and park management. Programs will be successful when they use the right combination of original objects and places, firsthand experience, and effective media. For the purposes of this chapter, the terms "visitor" and "park visitor" are defined as anyone who uses a park's interpretive and educational services, regardless of where such use occurs.

The Service will maintain the organizational capability to deliver high-quality interpretive services. High-quality interpretation will be the shared responsibility of all levels of NPS staff, from the Washington and regional directorates, through park superintendents and chief interpreters, to field interpreters and non-interpretive staff. It will be achieved through interpretive and educational services, media, ongoing research, planning, technical excellence in implementation, a well-trained staff, broad public input, and continual reevaluation.

Enjoyment of the parks and their resources is a fundamental part of the visitor experience. That experience is heightened when it progresses from enjoyment to an understanding of the reasons for a park's existence and the significance of its resources. In order to quantify the visitor experience, and in compliance with GPRA, the levels of visitor satisfaction, safety, understanding, and appreciation will be measured.

A fully developed park interpretive and educational program will offer visitors a variety of opportunities to gain understanding and appreciation of park sites and the values they represent. Such opportunities will provide knowledge of park resources and the care needed to protect them, and allow visitors to participate in a recreational activity or a dialogue about park resources. Director's Order #6 and Reference Manual 6 provide additional guidance for the development of interpretive and educational programs.

7.1 Interpretive and Educational Programs

Each park's interpretive and educational program will be grounded in (1) park resources, (2) themes related to the park's legislative history and significance, and (3) park and Service-wide mission goals. The intent will be to provide each visitor with an interpretive experience that is enjoyable and inspirational, within the context of the park's tangible resources and the values they represent. In addition, visitors should be made aware of the purposes and scope of the national park system. Interpretation will encourage dialogue, and accept that visitors have their own individual points of view. Factual information presented will be current, accurate, based on current scholarship and science, and delivered so as to convey park meanings, with the understanding that audience members will draw their own conclusions. Interpretation will also reach out to park neighbors and community decision-makers, to stimulate discussions about the park and its values in local, regional, and national contexts. In addition, interpretive services will help park employees better understand the park's history, resources, processes, and visitors.

An effective park interpretive and educational program will include:

• *Informational and orientation programs* that provide visitors with easy access to the information they need to have a safe and enjoyable park experience.

- Interpretive programs that provide both on-and off-site presentations, and are designed to encourage visitors to form their own intellectual or emotional connections with the resource. All successful interpretive programs achieve significance by linking specific tangible artifacts, buildings, and places with ideas, events, and concepts. Interpretive programs facilitate a connection between the interests of visitors and the meanings of the park.
- Curriculum-based educational programs that link park themes to national standards and state curricula, and involve educators in planning and development. These programs usually include pre-visit and post-visit materials, address different learning styles, include an evaluation mechanism, and provide learning experiences linked directly to clear objectives. Programs develop a thorough understanding of a park's resources in individual, regional, national, and global contexts, and of the park's place within the national park system.
- *Interpretive media* that provide visitors with relevant park information, and facilitate more in-depth understanding of—and personal connection with—park themes and resources.

(See Air Quality 4.7.; Geologic Resource Management 4.8; Wilderness Interpretation and Education 6.4.2; Energy Management 9.1.7; Visitor Facilities 9.3)

7.2 Interpretive Planning

7.2.1. General

Interpretive services and facilities will be developed and operated in accordance with the NPS Organic Act and Strategic Plan, and each park's enabling legislation, general management plan, strategic plan, resource management plan, and comprehensive interpretive plan (CIP). A park's CIP will be closely related to its general management plan. Standards for ensuring high-quality interpretive and educational programs are prescribed in Director's Order #6 and Reference Manual 6.

The management plans, CIP, and other interpretive documents for each park will establish a balance of in-park and outreach interpretive services, based upon criteria such as park significance statements and themes, levels and types of visitor use, the nature of park resources, and park management goals. A variety of tools, such as personal services, publications, exhibits, and audiovisual presentations, will be used to enhance a park's interpretive and educational programs, provide visitors with relevant information, and ensure a high quality park experience. Recognition that concessioners, cooperating associations, friends groups, and other partners may have an important role in providing interpretive and educational services is most important in planning for the overall visitor services program, and such entities should be included where appropriate in the planning process.

7.2.2 Comprehensive Interpretive Plan

All parks will have a current CIP as defined in Director's Order #6 and Reference Manual 6. The CIP, initiated by the superintendent, and prepared by field staff with support from a regional office or the Harpers Ferry Center (HFC), will form the overall long-term vision and basis for decisions about interpretive and educational programs in the park. It will provide both long- and short-range views, and deal with all media and personal services. The CIP will include the long-range interpretive plan, the annual interpretive plan, and the interpretive database.

7.3.1 Personal Services

Personal interpretive services are those in which staff interact with visitors. Examples of personal service programs include the staffing of visitor centers and contact stations, talks, illustrated programs, conducted activities, demonstrations, performing arts, junior ranger programs, special events, and educational programs. Each park will offer a wide variety of personal service programs that take into consideration audience characteristics and available time.

7.3.2 Non-personal Services

Non-personal interpretive services are those that do not require the presence of staff. Media such as park folders and other publications, museum and visitor center exhibits, wayside exhibits, web pages, audiovisual presentations, and radio information systems are all examples. Non-personal services, which can reach large audiences, will maintain a consistent quality of presentation over time. In conjunction with personal services, they will provide opportunities for visitor information, orientation, and understanding of park resources. A Service-wide standard for all NPS informational media will be established.

HFC will be responsible for interpretive media planning, design and production for museum and visitor center exhibits, wayside exhibits, audiovisual productions, publications, and directional signage. Plans or proposals to be accomplished by parks and regions, including privately funded projects, may be reviewed by HFC for appropriateness and quality of design and execution. Proposals from concessioners, cooperating associations, and others may also be reviewed. Projects excluded from the review process include site bulletins, bulletin boards, and other parkinitiated or park-approved small projects of a non-permanent nature.

Parks will be responsible for the conservation of historic furnishings and artifacts on exhibit in parks. They may obtain conservation services from HFC or from outside contractors.

(See Acquisition, Management, and Disposition 5.3.5.5.4; Historic Furnishings 5.3.5.5.5; Ethnographic Resources 5.3.5.3; Viewing Devices 9.3.1.6; Interpretation by Concessioners 10.2.4.3. Also see Director's Orders #52C: Park Signage and #70: Internet and Intranet Publications)

7.3.3 Electronic Interpretation

Parks should use electronic communications, such as the Internet and long-distance learning, to enhance their informational, orientation, interpretive, and educational programs. The National Park Service will maintain a site on the World Wide Web to provide an opportunity for all parks and programs to reach beyond their borders to a world-wide audience. Each park will maintain a home page for the purpose of reaching this audience. Park home pages will comply with Director's Order #70: Internet and Intranet Publications. The world of electronic communications is rapidly and constantly changing, and the NPS will take advantage of developing new technologies that have the potential for even greater service to the visiting public.

7.4 Interpretive Competencies and Skills

A high-quality interpretive and educational program requires a well-trained staff. Park managers will require NPS interpretive personnel, and any non-NPS groups or individuals that provide

interpretive and educational services to the public on behalf of the NPS, to develop the knowledge, skills, and abilities necessary for effective interpretation. All NPS interpreters will meet the certification standards for their essential competencies identified in the interpretive development program.

(See Interpretive and Educational Partnerships 7.6; Cooperating Associations 7.6.2; Interpretation by Concessioners 10.2.4.3)

7.5 Requirements for All Interpretive and Educational Services

The following must be considered in the development of all personal and non-personal services:

7.5.1 Access to Interpretive and Educational Opportunities

The National Park Service will ensure, to the greatest extent possible, that persons with disabilities receive the same interpretive opportunities as non-disabled persons. Interpretive and educational programs, exhibits, audiovisual programs, publications, and all other interpretive media will comply with Department of the Interior regulations at 43 CFR part 17, subpart E, and with standards required by the Architectural Barriers Act. Accordingly, the Park Service will ensure that persons with disabilities have the opportunity to participate in, and benefit from, all programs and activities in the most integrated setting appropriate. Additionally, the Service will take all feasible steps to ensure effective communication with individuals with hearing and visual impairments by providing appropriate auxiliary aids, where necessary, in order to afford the opportunity to participate in, and enjoy the benefits of, NPS programs and activities. These steps should include but not be limited to providing sign-language interpreters for visitors with hearing impairments, and providing audio, Braille, and large-print versions of printed materials for those with visual or cognitive disabilities.

Efforts will also be made to ensure that interpretive and educational programs meet the special needs of children, senior citizens, non-English-speaking visitors, and the economically disadvantaged. Foreign-language translations of park publications will be provided in those parks visited by substantial numbers of non-English-speaking visitors.

(See Physical Access for Persons with Disabilities 5.3.2; Accessibility for Persons with Disabilities 8.2.4; Accessibility for Persons with Disabilities 9.1.2; Accessibility of Commercial Services 10.2.6.2. Also see Director's Order #42; Reference Manual 41; 43 CFR 17.550)

7.5.2 Interpretive and Educational Services Beyond Park Boundaries

Outreach services are an active part of a balanced visitor services program. A planned outreach program is essential to each unit of the national park system, and firmly establishes parks as parts of the local, national, and global communities. Outreach should be used to disseminate park information, and interpretive and educational programs, beyond park boundaries. All parks have a responsibility to offer interpretive and educational opportunities to members of the public who are unable to make on-site visits.

7.5.3 Resource Issue Interpretation and Education

Park managers are increasingly called upon to make difficult resource decisions, some of which may be highly controversial. Interpretive and educational programs can build public understanding of, and support for, such decisions and initiatives, and for the NPS mission in general. Therefore, parks should, in balanced and appropriate ways, thoroughly integrate

resource issues and initiatives of local and Service-wide importance into their interpretive and educational programs. Whenever possible, the appropriate interpretive managers at the national, regional, or park level should be involved in the process. In instances in which programming affects resources managed by other agencies, such agencies should be consulted during program planning. For resource issue interpretation to be effective, frontline interpretive staff must be informed about the reasoning that guided the decision-making process, and interpreters must present balanced views. Resource issue interpretation should be integrated into both on-and offsite programs, as well as into printed and electronic media whenever appropriate. The education of residents and officials of gateway and neighboring communities, the region, and the state(s) surrounding a park about resource issues and broad initiatives is often the most effective means of eliminating resource threats and gaining support for the Service's policy choices.

7.5.4 Research

Interpretive and educational programs will be based on current scholarship and research about the history, science, and condition of park resources, and on research about the needs, expectations, and behavior of visitors. To accomplish this, a dialogue must be established and maintained among interpreters, education specialists, resource managers, scientists, archeologists, sociologists, ethnographers, historians, and other experts, for the purpose of offering the most current and accurate programs to the public.

(See Park Planning Processes 2.3)

7.5.5 Consultation

The National Park Service will present factual and balanced presentations of the many American cultures, heritages, and histories. Consultation with diverse constituencies is essential to the development of effective and meaningful interpretive and educational programs, because it (1) ensures appropriate content and accuracy, and (2) identifies multiple points of view and potentially sensitive issues. When appropriate, state and local agencies involved in heritage tourism and history (such as state historic preservation officers) should be included in consultations to foster coordination and partnerships. Acknowledging multiple points of view does not require interpretive and educational programs to provide equal time, or to disregard the weight of scientific or historical evidence.

The Service will actively consult traditionally associated peoples and other cultural and community groups in the planning, development, presentation, and operation of park interpretive programs and media relating to their cultures and histories. Cooperative programs will be developed with tribal governments and cultural groups to help the NPS present accurate perspectives on their cultures. Ethnographic or cultural anthropological data and concepts will also be used in interpretive programs, as appropriate. The Service will not display Native American human remains or photographs of those remains. Drawings, renderings, or casts of such remains will not be displayed without the consent of culturally affiliated Indian tribes and native Hawaiian organizations. The Service may exhibit non-Native American remains, photographs, drawings, renderings, or casts thereof, in consultation with traditionally associated peoples. The Service will consult with culturally affiliated or traditionally associated peoples to determine the religious status of any object whose sacred nature is suspected but not confirmed. These consultations will occur before such an object is exhibited or any action is taken that may have an adverse effect on its religious qualities.

(See Evaluation and Categorization 5.1.3.2; Stewardship of Human Remains and Burials 5.3.4; Ethnographic Resources 5.3.5.3; Museum Collections 5.3.5.5)

7.5.6 Cultural Demonstrators

Cultural demonstrators can provide unique insights into their cultures. In order to facilitate their successful interaction with the public, parks may provide cultural demonstrators with training and direction. Cultural demonstrators (in parks outside the National Capital Region) who are not NPS employees may be permitted to sell self-made handcraft items to park visitors, keeping the proceeds for themselves, where such handcrafts are related to the park's interpretive themes. This is allowed under 16 USC 1a-2(g), which authorizes the sale of products produced in the conduct of living exhibits, interpretive demonstrations, or park programs. When this practice is permitted, all materials used in creating such items must be the private property of the demonstrator, collected from outside the park. The superintendent may permit this practice through a cooperative agreement, special use permit, concession contract, or other legal contract.

Titles 8 and 13 of ANILCA regulate the taking of fish, wildlife, and other natural resources for subsistence and other purposes in the Alaska parks.

(See Special Events 8.6.2; Collecting Natural Products 8.8; Merchandise 10.2.4.4. Also see 36 CFR 5.3; 60 FR 17639)

7.5.7 Historic Weapons

All uses of historic weapons in parks will strictly comply with the Historic Weapons Demonstrations Safety Standards contained in Reference Manual 6, and will follow the procedures specified therein for the particular weapon(s) being used.

Weapons firing demonstrations conducted in areas administered by the NPS are restricted to reproduction black- powder weapons only. Original NPS museum weapons will not be used; no exemptions will be granted. Requests by outside groups or individuals to use non-NPS original weapons will follow the exemption request procedure prescribed in Reference Manual 6, and will be granted or denied in writing by the superintendent.

7.5.8 Reenactments

Battle re-enactments and demonstrations of battle tactics that involve exchanges of fire between opposing lines, the taking of casualties, hand-to-hand combat, or any other form of simulated warfare, are prohibited in all parks. Battle re-enactments create an atmosphere inconsistent with the memorial qualities of the battlefields and other military sites placed in the Service's trust.

7.6 Interpretive and Educational Partnerships

In planning and implementing interpretive and educational programs, superintendents should consider the use of volunteers, concessioners, cooperating associations, field schools and institutes, friends groups, and private individuals to supplement park staff and funds. Such services will not be used as a replacement or substitute for a park's basic interpretive operation. To ensure quality control and appropriateness, NPS interpretive staff will be involved with the planning, approval, training, monitoring, and evaluation of all interpretive services provided by others. Non-NPS personnel providing interpretive services should be offered an opportunity to complete the appropriate interpretive development program training module(s), and/ or seek certification in the appropriate competency(ies).

(See Interpretive Competencies and Skills 7.4; Cooperating Associations 7.6.2; Interpretation by Concessioners 10.2.4.3)

7.6.1 Volunteers in the Parks

Volunteers may be used in various aspects of park operations under the authority of the Volunteers in the Parks Act of 1969. Pursuant to this legislation, volunteers may be recruited without regard to civil service regulations; are covered for tort liability and work-injury compensation; and may be reimbursed for out-of-pocket expenses while participating in the program. Volunteers will be accepted without regard to race, creed, religion, age, sex, color, national origin, disability, or sexual orientation. Volunteers will not displace NPS employees. NPS housing may be used for volunteers only if available and not needed for NPS employees. Director's Order #7 and Reference Manual 7 provide additional guidance for the volunteer program.

(See Protection 5.3.5.1.4; Housing Management Plans 9.4.3.4. Also see Handbook 36 on Housing)

7.6.2 Cooperating Associations

When appropriate, cooperating associations will join the National Park Service in presenting interpretive and educational programs, and in supporting research efforts as authorized in 16 USC 1-3, 6, and 17j-(2) e. Enabled by a standard, non-negotiable cooperating association agreement, cooperating associations may, consistent with a park's scope-of-sales statement, purchase for re-sale, or produce for sale, interpretive and educational items that are directly related to the understanding and interpretation of the park or the national park system. Associations may offer appropriate and approved interpretive services that support but do not supplant interpretive and educational services offered by the NPS. Associations may accept donations on behalf of the Service when appropriate, and when conducted through approved fundraising efforts. Service housing may be used for cooperating association employees only if available and not needed for NPS employees. Guidance for managing NPS partnerships with cooperating associations is included in Director's Order #32 and Reference Manual 32.

(See Housing Management Plans 9.4.3.4. Also see Director's Order #21: Donations and Fundraising; Handbook 36 on Housing)

8 Use of the Parks

National parks belong to all Americans, and all Americans should feel welcome to experience the parks. The National Park Service will promote and regulate appropriate use of the parks, and will provide the services necessary to meet the basic needs of park visitors and to achieve each park's mission goals.

Many different types of uses take place in the hundreds of parks that comprise the national park system. Some of those uses are carried out by the National Park Service, but many more are carried out by park visitors, permittees, lessees, and licensees. The 1916 Organic Act, which created the National Park Service, directs the Service to conserve park resources "unimpaired" for the enjoyment of future generations. The 1970 National Park System General Authorities Act, as amended in 1978, prohibits the Service from allowing any activities that would cause derogation of the values and purposes for which the parks have been established (except as directly and specifically provided by Congress). Taken together, these two laws impose on NPS managers a strict mandate to protect park resources and values, and a responsibility to actively manage all park uses and, when necessary, to regulate their amount, kind, time, and place. (Throughout *Management Policies*, the term "impairment" is construed to also encompass "derogation.")

Providing opportunities for appropriate public enjoyment is an important part of the Service's mission. Other park uses—unrelated to public enjoyment—may sometimes be allowed as a right or a privilege if they are not otherwise prohibited by law or regulation. In exercising its discretionary authority, the Service will allow only uses that are (1) appropriate to the purpose for which the park was established, and (2) can be sustained without causing unacceptable impacts to park resources or values. Recreational activities and other uses that would impair a park's resources, values, or purposes cannot be allowed. The only exception is when an activity that would cause impairment is directly and specifically mandated by Congress.

The fact that a park use may have an impact does not necessarily mean it will impair park resources or values for the enjoyment of future generations. Impacts may affect park resources or values and still be within the limits of the discretionary authority conferred by the Organic Act. However, negative or adverse environmental impacts are never welcome in national parks, even when they fall far short of causing impairment. For this reason, the Service will not knowingly authorize a park use that would cause negative or adverse impacts unless it has been fully evaluated, appropriate public involvement has been obtained, and a compelling management need is present. In those situations, the Service will ensure that any negative or adverse impacts are the minimum necessary, unavoidable, cannot be further mitigated, and do not constitute impairment of park resources and values.

When a use is mandated by law, but causes adverse impacts to park resources or values, the Service will take appropriate management actions to avoid or mitigate the adverse effects. When a use is authorized by law, but not mandated, and may cause adverse impacts to park resources or values, the Service will avoid or mitigate the impacts to the point where there will be no unacceptable impacts; or, if necessary, the Service will deny a proposed activity or eliminate an existing activity.

All proposals for park uses will be evaluated for their:

- consistency with applicable laws, Executive orders, regulations, and policies;
- consistency with existing plans for public use and resource management;
- actual and potential effects on park resources and values;
- total costs to the Service, and whether the public interest will be served.

Park superintendents must continually examine all park uses to ensure that unanticipated and unacceptable impacts do not occur. Unless mandated by statute, only uses that meet the criteria listed in section 8.2 may be allowed.

Specific park uses will be guided by the following subsections of this chapter, and must comply also with the other chapters of these *Management Policies*. The Service will coordinate with appropriate state authorities regarding activities that are subject to state regulation, or to joint state/federal regulation. The regulatory framework for implementing NPS policies governing use of the parks, and for determining when and where activities may be allowed, is found in 36 CFR Parts 2, 3, 4, 5, 7, 12, and 13. Procedures for implementing or terminating a restriction, condition, public use limit, or closure within a park area are found in 36 CFR 1.5 (but see also 36 CFR 13.30 and 43 CFR 36.11(h) for procedures specific to park areas in Alaska). Some activities may be allowed in parks only after park-specific regulations have been published.

(See Park Management 1.4; Consumptive Uses 8.9. Also see Director's Order #12; 36 CFR 2.1)

8.2 Visitor Use

Enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks. The Service is committed to providing appropriate, high quality opportunities for visitors to enjoy the parks, and will maintain within the parks an atmosphere that is open, inviting, and accessible to every segment of American society. However, many forms of recreation enjoyed by the public do not require a national park setting, and are more appropriate to other venues. The Service will therefore:

- Provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in the parks.
- Defer to local, state, and other federal agencies; private industry; and non-governmental organizations to meet the broader spectrum of recreational needs and demands.

To provide for enjoyment of the parks, the National Park Service will encourage visitor activities that:

- Are appropriate to the purpose for which the park was established; and
- Are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and
- Will foster an understanding of, and appreciation for, park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and
- Can be sustained without causing unacceptable impacts to park resources or values.

The primary means by which the Service will actively foster and provide activities that meet these criteria will be through its interpretive and educational programs, which are described in detail in chapter 7. The Service will also welcome the efforts of private-sector organizations to provide structured activities that meet these criteria. In addition to structured activities, the Service will, to the extent practicable, afford visitors ample opportunity for inspiration, appreciation, and enjoyment through their own personalized experiences, without the formality of program or structure.

The Service will allow other visitor uses that do not meet all the above criteria if they are appropriate to the purpose for which the park was established and they can be sustained without causing unacceptable impacts to park resources or values.

Unless mandated by statute, the Service will not allow visitors to conduct activities that:

- Would impair park resources or values;
- Create an unsafe or unhealthful environment for other visitors or employees;
- Are contrary to the purposes for which the park was established; or
- Unreasonably interfere with:
 - The atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park;
 - NPS interpretive, visitor service, administrative, or other activities;
 - NPS concessioner or contractor operations or services; or
 - Other existing, appropriate park uses.

Management controls must be imposed on all park uses to ensure that park resources and values are preserved and protected for the future. If and when a superintendent has a reasonable basis for believing that an ongoing or proposed public use would cause unacceptable impacts to park resources or values, the superintendent must make adjustments to the way the activity is conducted, so as to eliminate the unacceptable impacts. If necessary, the superintendent may (1) temporarily or permanently close a specific area; (2) prohibit a particular use; or (3) otherwise place limitations on the use to ensure that impairment does not occur.

Any closures or restrictions—other than those imposed by law—must be consistent with applicable laws, regulations, and policies, and (except in emergency situations) require a written determination by the superintendent that such measures are needed to:

- protect public health and safety;
- prevent unacceptable impacts to park resources or values;
- carry out scientific research; minimize visitor use conflicts; or
- otherwise implement management responsibilities.

When practicable, restrictions will be based on the results of study or research, including (when appropriate) research in the social sciences. Any restrictions imposed will be fully explained to visitors and the public. Visitors will be given appropriate information on how to keep adverse impacts to a minimum, and how to enjoy the safe and lawful use of the parks.

(See Park Management 1.4; Management of Recreational Use 8.2.2.1. Also see 36 CFR 1.5: "Closures and Public Use Limits"; Director's Order #12: Tourism)

8.2.1 Visitor Carrying Capacity

Visitor carrying capacity is the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in the park. By identifying and staying within carrying capacities, superintendents can prevent park uses that may unacceptably impact the resources and values for which the parks were established. For all zones, districts, or other logical management divisions within a park, superintendents will identify visitor carrying capacities for managing public use. Superintendents will also identify ways to monitor for, and address, unacceptable impacts to park resources and visitor experiences.

When making decisions about carrying capacity, superintendents must utilize the best available natural and social science and other information, and maintain a comprehensive administrative record relating to their decisions. The decision-making process should be based on desired resource conditions and visitor experiences for the area; quality indicators and standards that define the desired resource conditions and visitor experiences; and other factors that will lead to logical conclusions and the protection of park resources and values. The level of analysis necessary to make decisions about carrying capacities is commensurate with the potential impacts or consequences of the decisions. The greater the potential for significant impacts or consequences to park resources and values (or the opportunities to enjoy them), the greater the level of study and analysis needed to support the decisions.

The general management planning process will determine the desired resource and visitor experience conditions that are the foundation for carrying capacity analysis and decision-making. If a general management plan is not current or complete, or if more detailed decision-making is required, a carrying capacity planning process, such as the Visitor Experience and Resource Protection (VERP) framework, should be applied in an implementation plan or an amendment to an existing plan. If the time frame for making decisions is insufficient to allow the application of a carrying capacity planning process, then superintendents must make decisions based on the best available scientific and other information. In either case, such planning must be accompanied by appropriate environmental impact analysis, in accordance with Director's Order #12.

As use changes over time, superintendents must continue to decide if management actions are needed to keep use at acceptable and sustainable levels. If indicators and standards have been prescribed for an impact, the acceptable level is the prescribed standard. If indicators and standards do not exist, the superintendent must determine how much impact can be tolerated before management intervention is required.

If and when park uses reach a level at which they must be limited or curtailed, the preferred choice will be to continue uses that best meet the criteria listed in section 8.2 for preferred uses, and to limit or curtail those that least meet those criteria.

(See Decision- making Requirements to Avoid Impairments 1.4.7; General Management Planning 2.3.1; Carrying Capacity 5.3.1.6; Management of Recreational Use 8.2.2.1. Also see Director's Order #2: Park Planning)

8.2.2 Recreational Activities

The National Park Service will encourage, allow, or not allow recreational activities according to the criteria listed in section 8.2. Examples of recreational activities that may be encouraged or allowed include, but are not limited to, boating, camping, bicycling, fishing, hiking, horseback riding and packing, outdoor sports, picnicking, scuba diving, cross-country skiing, caving, mountain and rock climbing, and swimming. However, not all of these activities will be appropriate or allowable in all parks; that determination must be made on the basis of park-specific planning. Service-wide regulations addressing aircraft use, off-road bicycling, hang gliding, off-road vehicle use, personal watercraft, and snowmobiling require that special, park-specific regulations be developed before these uses may be allowed in parks. (Somewhat different statutory and regulatory provisions apply to snowmobile, motorboat, and aircraft use in units of the national park system in Alaska.)

The Service will monitor new or changing patterns of use or trends in recreational activities, and assess their potential impacts on park resources. A new form of recreational activity will not be allowed within a park until after an environmental analysis has determined that it will not result in unacceptable impacts on park resources. Restrictions placed on recreational uses that have been found to be appropriate will be limited to the minimum necessary to protect park resources and values, and promote visitor safety and enjoyment.

8.2.2.1 Management of Recreational Use

Superintendents will develop and implement visitor use management plans and take management actions, as appropriate, to ensure that recreational uses and activities within the park are consistent with its authorizing legislation or proclamation and do not cause unacceptable impacts to park resources or values. Depending on local park needs and circumstances, these plans may be prepared as coordinated activity-specific documents (such as river use plan, backcountry use plan, wilderness management plan, off-road vehicle use plan, winter use plan); as action plan components of a resource management plan or general management plan; or as a single integrated plan that addresses a broad spectrum of recreational activities. Regardless of their format or complexity, visitor use management plans will (1) contain specific, measurable management objectives related to the activity or activities being addressed; (2) be periodically reviewed and updated; and (3) be consistent with the carrying capacity decisions made in the general management plan.

The Service will seek consistency in recreation management policies and procedures on both a Service-wide and interagency basis to the extent practicable. However, because of differences in the enabling legislation and resources of individual parks, and differences in the missions of the Service and other federal agencies, an activity that is entirely appropriate when conducted in one location may be inappropriate when conducted in another. The Service will consider a park's purposes and the effects on park resources and visitors when determining the appropriateness of a specific recreational activity.

Superintendents will consider a wide range of techniques in managing recreational use to avoid adverse impacts on park resources and values, or desired visitor experiences. Examples of appropriate techniques include visitor information and education programs; separation of conflicting uses by time or location; "hardening" sites; modifying maintenance practices; and permit and reservation systems. Superintendents may also use their discretionary authority to impose local restrictions, public use limits, and closures, and designate areas for a specific use or activity (see 36 CFR 1.5). Any restriction of appropriate recreational uses will be limited to what is necessary to protect park resources and values, to promote visitor safety and enjoyment, or to meet park management needs. To the extent practicable, public use limits established by the Service will be based on the results of scientific research and other available support data. However, an activity will be restricted or prohibited when, in the judgment of the superintendent, its occurrence, continuation, or expansion would (1) violate the criteria listed in section 8.2, or (2) conflict with the findings of a carrying capacity analysis, and there is no reasonable alternative that would avoid or satisfactorily mitigate the violation or conflict.

Recreational activities that are proposed as organized events or that involve commercialization, advertising, or publicity on the part of participants or organizers are defined as "special events," and are managed in accordance with the policies in section 8.6.2; regulations in 36 CFR 2. 50; and criteria and procedures in Director's Order #53: Special Park Uses.

(See Park Planning Processes 2.3; Wilderness Management Planning 6.3.4.2; General Policy 6.4.1; Carrying Capacity 8.2.1; Commercial Visitor Services 8.2.2.2; River Use 8.2.2.3, Backcountry Use 8.2.2.4; fishing 8.2.2.5; Hunting and Trapping 8.2.2.6; Off-road Vehicle Use 8.2.3.1; Snowmobiles 8.2.3.2; Visitor Safety 8.2.5.1; Native American Use 8.5; Special Park Uses 8.6; Collecting Natural Products 8.8. Also see Director's Order #2: Park Planning, and #12: Conservation Planning and Environmental Impact Analysis)

8.2.2.2 Commercial Visitor Services

The Park Service may permit commercial visitor services that are necessary and appropriate for public use and enjoyment of the park, and that are consistent to the highest practicable degree with the preservation and conservation of the park's resources and values. Commercial visitor services:

- Will be operated only under concession contracts or commercial use permits;
- Should not be provided within a park if the identified needs for visitor services can be adequately met outside park boundaries; and
- Must comply with chapter 10; Director's Orders #48A: Concession Management, and 48B: Commercial Use Authorizations; and the regulations found in 36 CFR Part 51.

(See Commercial Services 6.4.4; Planning Criteria for Park Concessions 10.2.2.1; Commercial Use Authorizations 8.3)

8.2.2.3 River Use

A river use management plan will be developed for each park having significant levels of river use, or the potential for such use, unless the planning is accomplished through some other document. Appropriate types and levels of public uses will be identified and managed to prevent adverse impacts on aquatic resources, the riparian environment, and visitor enjoyment. Each river management plan will include specific procedures for disposing of refuse and human waste. Plans should be coordinated with interested state and/ or local governments.

(See Implementation Planning 2.3.3; National Wild and Scenic Rivers System 4.3.4; Water Resource Management 4.6; Flood plains 4.6.4; Wetlands 4.6.5; Grazing by Domestic and Feral Livestock 8.6.8)

8.2.2.4 Backcountry Use

The Park Service uses the term "backcountry" to refer to primitive, undeveloped portions of parks. This is not a specific management zone, but rather refers to a general condition of land that may occur anywhere within a park. Backcountry use will be managed in accordance with a backcountry management plan (or other plan addressing backcountry uses) that is designed to avoid unacceptable impacts on park resources or adverse effects on the visitor enjoyment of appropriate recreational experiences. The Service will seek to identify acceptable limits of impacts, monitor backcountry use levels and resource conditions, and take prompt corrective action when unacceptable impacts occur. Strategies designed to guide the preservation, management, and use of the backcountry and to achieve the park's management objectives will be integrated into the park's backcountry management plan. Backcountry under study, proposed, or recommended for wilderness designation will be managed as wilderness.

The number and types of facilities to support visitor use, including sanitary facilities, will be limited to the minimum necessary to achieve a park's backcountry management objectives and to

provide for the health and safety of park visitors. To avoid the need for sanitary facilities, public use levels will be managed, where practicable, in accordance with the natural system's ability to absorb human waste. The Service will not provide refuse containers in backcountry areas. All refuse must be carried out, except that combustible materials may be burned when authorized by the superintendent.

(See Water Resource Management 4.6, Management Facilities 6.3.10; Wilderness Use Management 6.4; Visitor Carrying Capacity 8.2.1; Waste Management 9.1.6.1; Comfort Stations 9.3.3. Also see Director's Order #83: Public Health).

8.2.2.5 Fishing

Recreational fishing will be allowed in parks when it is authorized, or not specifically prohibited, by federal law, provided that it does not jeopardize natural aquatic ecosystems or riparian zones. When fishing is allowed, it will be conducted in accordance with applicable federal laws and treaty rights, and state laws and regulations. The Service may restrict fishing activities whenever necessary to achieve management objectives outlined in a park's resource management plan or to otherwise protect park resources or public safety, unless such restrictions would violate a federal law or treaty. Before the Service issues regulations or other restrictions, representatives of appropriate tribes and state and federal agencies will be consulted to ensure that all available scientific data is considered in the decision-making process. Any such regulations or other restrictions will be developed with public involvement.

Commercial fishing will be allowed only when specifically authorized by federal law or treaty right.

(See Implementation Planning 2.3.3; Planning for Natural Resource Management 4.1.1; Harvest of Plants and Animals by the Public 4.4.3; Facilities for Water Recreation 9.3.4.2)

8.2.2.6 Hunting and Trapping

Hunting, trapping, or any other method of harvesting wildlife by the public will be allowed where it is specifically mandated by federal law. Where hunting activity is not mandated, but is authorized on a discretionary basis under federal law, it may take place only after the Service has determined that the activity will not compromise public safety and enjoyment, and that the proposed use is consistent with sound resource management principles.

Hunting and trapping, whether it takes place as a mandated or a discretionary activity, will be conducted in accordance with federal law and applicable laws of the state or states in which a park is located. However, except for Alaska park units (which are subject to regulations published at 36 CFR Part 13), the park in which it occurs must also publish special regulations to govern the activity, and those regulations may be more restrictive than applicable state regulations. For example, the superintendent may designate areas where, and establish periods when, no hunting or trapping will be permitted for reasons of public safety, area administration, wildlife management, or public use and enjoyment. Before the Service issues regulations or other restrictions, representatives of appropriate tribes and state and federal agencies will be consulted to ensure that all available scientific data is considered in the decision-making process. Any such regulations or other restrictions will be developed with public involvement.

(See Harvest of Plants and Animals by the Public 4.4.3; Genetic Resource Management Principles 4.4.1.2)

8.2.2.7 BASE Jumping

BASE (Buildings, Antennae, Spans, Earth forms) jumping—also known as fixed object jumping—involves an individual wearing a parachute jumping from buildings, antennae, spans (bridges), and earth forms (cliffs). This is not an appropriate public use activity within national park areas, and is prohibited by 36 CFR 2. 17(3).

8.2.3 Use of Motorized Equipment

The variety of motorized equipment—including visitor vehicles, concessioner equipment, and Park Service administrative or staff vehicles and equipment—that operates in national parks has the potential to adversely impact park resources, including the park's natural soundscape. In addition to their natural values, natural sounds, such as waves breaking on the shore, the roar of a river, and the call of a loon, form a valued part of the visitor experience. Conversely, the sounds of motor vehicle traffic, an electric generator, or loud music can greatly diminish the solemnity of a visit to a national memorial, the effectiveness of a park interpretive program, or the ability of a visitor to hear a bird singing its territorial song. Many parks that appear as they did in historical context no longer sound the way they once did.

The Service will strive to preserve or restore the natural quiet and natural sounds associated with the physical and biological resources of parks. To do this, superintendents will carefully evaluate and manage how, when, and where motorized equipment is used by all those—including park staff—who operate equipment in the parks. Uses and impacts associated with the use of motorized equipment will be addressed in park planning processes. Where such use is necessary and appropriate, the least impacting equipment, vehicles, and transportation systems should be used, consistent with public and employee safety. The natural ambient sound level—that is, the environment of sound that exists in the absence of human-caused noise—is the baseline condition, and the standard against which current conditions in a soundscape will be measured and evaluated.

To meet its responsibilities under Executive Order 13149 (Greening the Government Through Federal fleet and Transportation Efficiency), the Service will develop and implement a strategy to reduce its vehicle fleet's annual petroleum consumption.

(See Soundscape Management 4.9)

8.2.3.1 Off-road Vehicle Use

Off-road motor vehicle use in national park units is governed by Executive Order 11644 (as amended by Executive Order 11989), which defines off-road vehicles as "any motorized vehicle designed for or capable of cross-country travel on or immediately over, land, water, sand, snow, ice, marsh, swampland, or other natural terrain" (except any registered motorboat or any vehicle used for emergency purposes). Unless otherwise provided by statute, any time there is a proposal to allow a motor vehicle meeting this description to be used in a park, the provisions of the Executive order must be applied.

Within the national park system, routes and areas may be designated for off-road motor vehicle use only by special regulation, and only when it would be consistent with the purposes for which the park unit was established. Routes and areas may be designated only in locations in which there will be no adverse impacts on the area's natural, cultural, scenic, and esthetic values, and in consideration of other visitor uses. The criteria listed in section 8.2 must also be applied to determine whether off-road vehicle use may be allowed. As required by the Executive order and

the Organic Act, superintendents must immediately close a designated off-road vehicle route whenever the use is causing, or will cause, unacceptable adverse effects on the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources.

NPS administrative off-road motor vehicle use will be limited to what is necessary to manage the public use of designated off-road vehicle routes and areas; to conduct emergency operations; and to accomplish essential maintenance, construction, and resource protection activities that cannot be accomplished reasonably by other means.

(See Park Management 1.4; Minimum Requirement 6.3.5. Also see 36 CFR 4.10)

8.2.3.2 Snowmobiles

Snowmobile use is a form of off-road vehicle use governed by Executive Order 11644 (as amended by Executive Order 11989) and, in Alaska, by provisions of ANILCA (16 USC 3121 and 3170). Implementing regulations are published at 36 CFR 2. 18, 36 CFR Part 13, and 43 CFR Part 36.

NPS administrative use of snowmobiles will be limited to what is necessary to manage public use of snowmobile routes and areas; to conduct emergency operations; and to accomplish essential maintenance, construction, and resource protection activities that cannot be accomplished reasonably by other means.

(See Minimum Requirement 6.3.5; Management Facilities 6.3.10; General Policy 6.4.1)

8.2.3.3 Personal Watercraft

Motorized personal watercraft (PWC) use is prohibited unless it has been identified as appropriate for a specific park. PWC may be authorized if an evaluation of the park's enabling legislation, resources and values, other visitor uses, and overall management objectives confirms that PWC use is appropriate and consistent with the criteria in section 8.2.

8.2.4 Accessibility for Persons with Disabilities

All reasonable efforts will be made to make NPS facilities, programs, and services accessible to and usable by all people, including those with disabilities. This policy reflects the commitment to provide access to the widest cross section of the public, and to ensure compliance with the intent of the Architectural Barriers Act and the Rehabilitation Act. The Service will also comply with section 507 of the ADA (42 USC 12207), which relates specifically to the operation and management of federal wilderness areas. Specific guidance for implementing these laws is found in the Secretary of the Interior's regulations regarding enforcement of nondiscrimination on the basis of disability in Department of the Interior programs (43 CFR Part 17, Subpart E).

One primary tenet of disability rights requirements is that, to the highest degree reasonable, people with disabilities should be able to participate in the same programs and activities available to everyone else. In choosing among methods for providing accessibility, higher priority will be given to those methods that offer programs and activities in the most integrated setting appropriate. Special, separate, or alternative facilities, programs, or services will be provided only when existing ones cannot reasonably be made accessible. The determination of what is reasonable will be made only after careful consultation with persons with disabilities, or their representatives. Any decision that would result in "less than equal opportunity" is subject to

the filing of an official disability rights complaint under the Departmental regulations cited above.

(See Physical Access for Persons with Disabilities 5.3.2; Accessibility for Persons with Disabilities 6.4.10; Accessibility for Persons with Disabilities 9.1.2. Also see Director's Order #16A: Reasonable Accommodation for Applicants and Employees with Disabilities; Director's Order #42: Accessibility for Visitors with Disabilities)

8.2.5 Visitor Safety and Emergency Response

8.2.5.1 Visitor Safety

The saving of human life will take precedence over all other management actions as the Park Service strives to protect human life and provide for injury-free visits. The Service will do this within the constraints of the 1916 Organic Act. The primary—and very substantial—constraint imposed by the Organic Act is that discretionary management activities may be undertaken only to the extent that they will not impair park resources and values.

While recognizing that there are limitations on its capability to totally eliminate all hazards, the Service and its concessioners, contractors, and cooperators will seek to provide a safe and healthful environment for visitors and employees. The Service will work cooperatively with other federal, tribal, state, and local agencies, organizations, and individuals to carry out this responsibility. The Service will strive to identify recognizable threats to the safety and health of persons and to the protection of property by applying nationally accepted codes, standards, engineering principles, and the guidance contained in Director's Orders #50, #58, and #83 and their associated reference manuals. When practicable, and consistent with congressionally designated purposes and mandates, the Service will reduce or remove known hazards and apply other appropriate measures, including closures, guarding, signing, or other forms of education. In doing so, the Service's preferred actions will be those that have the least impact on park resources and values.

The Service recognizes that the park resources it must protect are not only a visitor attraction, but that they may also be potentially hazardous. In addition, the recreational activities of some visitors may be of an especially high-risk, high-adventure type, which pose a significant personal risk to participants, and which the Service cannot totally control. Park visitors must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments.

These management policies do not impose park-specific visitor safety prescriptions. The means by which public safety concerns are to be addressed is left to the discretion of superintendents and other decision-makers at the park level, who must work within the limits of funding and staffing. Examples include decisions about whether to install warning signs or artificial lighting; distribute weather warnings or advisories; initiate search and rescue operations, or render emergency aid; eliminate potentially dangerous animals; close roads and trails, or install guardrails and fences; and grant or deny backcountry or climbing permits. Some forms of visitor safeguards—such as fences, railings, and paved walking surfaces—typically found in other public venues may not be appropriate or practicable in a national park setting.

(See Air Quality 4.7.1; Lightscape Management 4.10; General Policy 6.4.1; Siting Facilities to Avoid Natural Hazards 9.1.1.6; Waste Management and Contaminant Issues 9.1.6; Risk Management Program 10.2.4.8; Food Service Sanitation Inspections 10.2.4.14)

8.2.5.2 Emergency Preparedness and Emergency Operations

The National Park Service will develop a program of emergency preparedness in accordance with title VI of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 USC 5195—5197g); National Security Decision Directive 259 (February 4, 1987); Department of the Interior policy; and other considerations at the Washington headquarters, regional, and park levels. The purpose of the program will be to maximize visitor and employee safety and the protection of resources and property. This program will include a systematic method for alerting visitors about potential disasters and evacuation procedures.

Superintendents may assist other agencies with emergencies outside of parks, as authorized by 16 USC 1b(1). To the extent practicable, written agreements with other agencies, in accordance with Director's Order #20, must first be in effect. NPS employees who are outside the area of their jurisdiction, and who are directed by their supervisors to provide emergency assistance to other agencies, will be considered to be acting within the scope of their employment.

Park Service emergency operations will be conducted utilizing the Incident Command System (IS) of the National Interagency Incident Management System. The Unified Command System (within IS) will be utilized when other agencies are involved. Each park superintendent will develop and maintain an emergency operations plan to ensure an effective response to all types of emergencies that can be reasonably anticipated.

As one element of the emergency operations plan, or as a separate document, each park must have an oil and chemical spill response management plan for spills that result from NPS activities or from activities that are beyond the NPS's control (such as commercial through-traffic on roads that pass through a park). The plans will place first priority on responder and public safety. Employees will not be permitted to respond to hazardous material spills unless they are properly qualified and certified in accordance with Director's Order #30C: Hazardous Spill Response. The Service will seek to recover all allowable direct and indirect costs for responding to oil or hazardous materials spills.

Parks that have their own aircraft, or incidents of aircraft contracting, must have an aircraft crash rescue response plan in place.

(See Emergency Management 5.3.1.1. Also see Director's Order 60A: Aviation Management)

8.2.5.3 Search and Rescue

To provide for the protection and safety of park visitors, the Service will make reasonable efforts to search for lost persons, and to rescue sick, injured, or stranded persons. This responsibility may be fulfilled by Service staff or by qualified search-and-rescue organizations or agencies that are capable of responding to life-threatening emergencies pursuant to the terms of a formal agreement. Deceased persons will be evacuated unless the level of risk to the rescue party is found to be unacceptably high. Search managers and superintendents will jointly determine when to terminate a search. The NPS will not charge visitors for search-and-rescue operations. Search-and-rescue operations will be conducted utilizing the ICS.

(See Management Facilities 6.3.10; General Policy 6.4.1)

8.2.5.4 Emergency Medical Services

The Service will make reasonable efforts to provide appropriate emergency medical services for persons who become ill or injured. An emergency medical services program will be maintained to provide transportation of the sick and injured, and emergency pre-hospital care, which may range from minor first aid to advanced life support in various environmental settings. Transportation may include everything from patrol cars and ambulances, to fixed-wing planes and helicopter air ambulances.

Qualified emergency medical services in local communities may be used if such services can respond rapidly enough in life-threatening emergencies. When such services are not available, the NPS will make a reasonable effort to provide a level of emergency medical service commensurate with park needs, and in response to an emergency medical needs assessment. Each superintendent will develop and implement a program to meet those needs, in accordance with Director's Order #51: Emergency Medical Services. Extended emergency medical services operations will be conducted utilizing the IS.

8.2.6 Recreation Fees and Reservations

The National Park Service may charge a recreation admission or use fee at parks when authorized by law. Although these fees may provide for the support of the overall management and operation of parks, they are not intended to totally offset the operational costs associated with a park. Such services include protection; resource management; information and orientation; maintenance of park facilities; and interpretation to foster an understanding and appreciation of each park's resources, management procedures, regulations, and programs. Fees may be instituted for secondary or special services that the NPS cannot, or elects not to, offer because of economic constraints or the need for special skills or equipment, or because they are purely supplemental programs. The Service may also contract for the collection of recreational fees if there is a demonstrated benefit to the collecting park unit. In all cases, fee programs will support park purposes and comply with appropriate Service policies and standards.

(See Commercial Use Authorizations 10.3. Also see Director's Order #22: Fee Collection)

8.2.6.1 Recreation Fees

Visitors who use federal facilities and services for recreation may be required to pay a greater share of the cost of providing those opportunities than the population as a whole. Under the guidelines and criteria established by law and regulation, the Service will collect recreation fees of the appropriate type for its parks, facilities, and programs. No fees will be collected in circumstances in which the costs of collection would exceed revenue, or where prohibited by law or regulation. Fees charged for recreational activities will be collected only in accordance with the applicable authority, and recreation fee revenues will be managed according to law and policy. Fee rates will be reasonable and equitable, and consistent with criteria and procedures contained in law and NPS guidance documents. Those who lawfully enter or use a park for activities not related to recreation will not be charged an entrance fee, recreation use fee, or special recreation permit fee. Examples of non-recreation exemptions include persons entering parks for

First Amendment activities, which are exempt from all fees;

- Special park uses such as agricultural, grazing, and commercial filming activities (all of which are subject to special park use fees);
- NPS-authorized research activities:
- Federal, state, tribal, and local government business; and
- Outings conducted for educational purposes by schools and other bonafide educational institutions.

(See Fees 8.6.1.2; first Amendment Activities 8.6.3. Also see 36 CFR 71.13)

8.2.6.2 National Park Reservation Service

To better serve park visitors, to ensure the protection of park resources, or to improve operational efficiency, the NPS will operate a national reservation service of its own, or participate in an inter-agency system. A reservation service may involve campgrounds, other facilities, tours, or other services operated or provided by the NPS for visitors. Existing reservation services may be expanded or new services developed, based on NPS needs.

Superintendents are encouraged to have their parks participate in the Service-wide reservation system whenever it will improve visitor services, better market less-used parks, or improve the efficiency of park administration. In order to avoid duplicative costs and confusion, a park must first determine that a Service-wide system already in operation will not accommodate the park's reservation needs, before participating in some other type of reservation system.

(See Chapter 7: Interpretation and Education)

8.3 Law Enforcement Program

8.3.1 General

The law enforcement program is an important tool in carrying out the National Park Service mission. The objectives of the NPS law enforcement program are (1) the prevention of criminal activities through resource education, public safety efforts, and deterrence; and (2) the detection and investigation of criminal activity and the apprehension and successful prosecution of criminal violators. In carrying out the law enforcement program, the Service will make reasonable efforts to provide for the protection, safety, and security of park visitors, employees, concessioners, and public and private property, and to protect the natural and cultural resources entrusted to its care.

Law enforcement is characterized by high risks and inherent dangers to enforcement officers, and by high public expectations that law enforcement activities will be performed in a professional manner. It is therefore essential that the Service issue clear policies and procedures to guide the law enforcement program, and that commissioned employees receive the training and equipment necessary to perform their jobs successfully. The NPS law enforcement program will be managed and supervised in accordance with all applicable laws and regulations; Part 446 of the *Department of the Interior Manual*; these *Management Policies*; and Director's Order #9: Law Enforcement Program (or U.S. Park Police General Orders, as appropriate). To help sustain the high level of public trust necessary for an effective law enforcement program, commissioned employees will adhere to the Department of the Interior's law enforcement code of conduct, and the standards of ethical conduct found in Reference Manual 9.

The authority and responsibility to manage the law enforcement program will flow from the Director to the regional directors, and from regional directors to park superintendents. To aid in meeting their responsibilities, each park superintendent will prepare a Law Enforcement Needs Assessment and update it at least every three years, guided by the Visitor Management-Resource Protection Assessment Program.

8.3.2 The Context for Law Enforcement

Park law enforcement activities will be managed by superintendents as part of a comprehensive, interdisciplinary effort to protect resources, manage public use, and promote public safety and appropriate enjoyment. This is in keeping with guidance provided by Congress in 1976 when it amended the General Authorities Act (16 USC 1a-3):

The Committee intends that the clear and specific enforcement authority contained in this subsection, while necessary for the protection of the Federal employees so involved, will be implemented by the Secretary to ensure that law enforcement activities in our National Park System will continue to be viewed as one function of a broad program of visitor and resource protection. (House Report No. 94-1569, September 16, 1976)

8.3.3 Shared Responsibilities

Congress has authorized the designation of certain employees as law enforcement officers, with the responsibility to "... maintain law and order and protect persons and property within areas of the National Park System" (16 U.S.C. 1a6(b)). Only employees who meet the standards prescribed by, and who are designated by, the Secretary of the Interior may perform law enforcement duties. The duties of these commissioned employees will not be limited to just law enforcement; they will also continue to incorporate a diversity of other protection concerns, as stipulated in House Report No. 94-1569.

The Service recognizes that effective enforcement requires a cooperative community effort. Therefore, employees without law enforcement commissions will continue to share responsibility for the protection of park resources and visitors, and they will be expected to report any apparent violations or suspicious activities. All park employees will be trained to recognize, observe, and record criminal acts and illegal activities. The Service will also encourage and assist park neighbors in the development of cooperative crime prevention and detection programs.

Extended law enforcement operations will be conducted using the NIIMS Incident Command System.

8.3.4 Enforcement Authority

Within park boundaries, the Service will fulfill its law enforcement responsibilities using NPS employees. However, the NPS is authorized by 16 USC 1a-6(c) to appoint (deputize) another agency's qualified personnel as special police when it will benefit the administration of a park area. Deputations may be issued only for the purpose of obtaining supplemental law enforcement assistance during emergencies or special events, and not to delegate NPS law enforcement responsibilities to state or local governments. All such appointments must be approved by the park superintendent and supported by a written agreement with the other agency at the park or national level, except when there is insufficient time because of an emergency law enforcement situation.

The Service is also authorized to use appropriated funds for "Rendering of emergency rescue, fire fighting, and [other] cooperative assistance to nearby law enforcement and fire prevention agencies and for related purposes outside of the National Park System" (16 U.S.C. 1b(1)). This authority will be used only after first determining that such actions will facilitate the administration of the park, or be an effective management tool for obtaining mutual assistance from other agencies. Furthermore, the authority will generally be used only in response to an unexpected occurrence that requires immediate action, which may include one or more of the following:

- Emergency responses such as life or death incidents, serious injury/fatality accident/incident scenes, crime scenes involving the protection of human life, officer in trouble, threat(s) to health or safety of the public.
- Emergency or law enforcement incidents directly affecting visitor safety or resource protection.
- Probable-cause felonies and felonies committed in the presence of and observed by National Park Service rangers.
- Misdemeanors committed in the presence of National Park Service rangers that present an immediate threat to the health and safety of the public.

Cooperative assistance rendered to nearby law enforcement agencies outside of park boundaries should be limited to only those actions or efforts that support or assist those agencies. Further, insofar as 16 USC 1b(1) does not confer arrest authority to NPS personnel who act outside park areas, state arrest authority is first needed before NPS personnel may enforce state law or engage in law enforcement activity. The Service may not assume law enforcement responsibility outside of park boundaries in lieu of the legitimate responsibilities of nearby agencies.

8.3.5 Jurisdiction

The term "jurisdiction" defines the sphere of authority and outlines the boundaries or territorial limits within which any particular authority may be exercised. Jurisdiction may be either "exclusive," "partial," "concurrent," or "proprietary." Insofar as is practicable, the Service will seek to acquire concurrent legislative jurisdiction for all units of the national park system, as required by the 1976 amendment to the General Authorities Act. Concurrent jurisdiction allows the NPS to enforce federal criminal statutes and also to assimilate state law under 18 USC 13, when no applicable federal law or regulation exists. Concurrent jurisdiction will allow for the more efficient conduct of both state and federal law enforcement functions within the parks.

8.3.6 Use of Force

Commissioned employees may use a wide variety of defensive equipment and force options in response to various threats and other enforcement situations. The primary consideration is the timely and effective application of the appropriate level of force required to establish and maintain lawful control. The only justifications for the use of force are:

- To defend self:
- To defend others:
- To effect an arrest:
- To restrain or control violent, threatening, or resistive behavior, or to disperse an unlawful group.

Commissioned employees may use deadly force only when necessary; that is, when the ranger has an objectively reasonable belief, in light of the facts and circumstances confronting the ranger, that the subject of such force poses an imminent danger of death or serious physical injury to the ranger or to another person. "Deadly force" is the use of any force that is likely to cause death or serious physical injury. Deadly force does not include force that is not likely to cause death or serious physical injury, but unexpectedly results in such death or injury.

If force other than deadly force reasonably appears to be sufficient to accomplish an arrest or otherwise accomplish the law enforcement purpose, that is the preferred level of force. In no instance may deadly force be utilized unless such use is objectively reasonable under the circumstances.

Animals may be destroyed when necessary in self-defense or in the defense of others. Pets or feral animals that are running at large and observed in the act of killing, injuring, or molesting humans, livestock, or wildlife may be destroyed, as provided by regulations at 36 CFR 2. 15(c).

8.3.7 Public Information and Media Relations

The National Park Service will provide information to the public and the news media in accordance with applicable laws, Departmental policy, and Director's Order #75: Media Relations. Superintendents should identify appropriate opportunities to (1) enhance deterrence by publicizing arrests, weapons seizures, and successful prosecutions; (2) highlight cooperation and assistance activities such as Park Watch; and (3) educate the public about the full range of threats to, and the difficulty in protecting, park resources.

The right of the public to obtain information about government operations and activities is subject to the requirements of FOIA and the Privacy Act.

8.4 Overflights and Aviation Uses

A variety of aircraft, including military, commercial, general aviation, and aircraft used for National Park Service administrative purposes, fly in the airspace over national parks. While there are many legitimate aviation uses, overflights can adversely affect park resources and values and interfere with visitor enjoyment. The Service will take all necessary steps to avoid or to mitigate adverse effects from aircraft overflights.

Because the nation's airspace is managed by the Federal Aviation Administration (FAA), the Service will work constructively and cooperatively with the FAA, as well as with national defense and other agencies, to ensure that authorized aviation activities affecting units of the national park system occur in a safe and appropriate manner, with minimal impact on park resources and values and visitor experiences. The Service will build and maintain a cooperative and problem-solving relationship with national defense agencies to address the congressionally mandated mission of each agency, and which will prevent or mitigate any adverse effects of military training or operational flights on park resources or visitors. Cooperation is essential because the other agencies involved have statutory authorities and responsibilities that must be recognized by the Service.

(See Soundscape Management 4.9. Also see Director's Orders #47: Soundscape Preservation and Noise Management; #60: Aviation Management)

8.4.1 Alaska and Remote Areas

Aviation can provide an important, and in some cases the preferred, means of access to remote areas in certain parks, especially in Alaska. In such cases, access by aircraft may make an important contribution to the protection and enjoyment of those areas. Dependence on aviation will be fully considered and addressed in the planning process for those parks. Alaska parks have specific regulations concerning fixed-wing aircraft, published at 36 CFR Part 13, and 43 CFR 36. 11(f).

8.4.2 Education

The Service will develop educational materials for the general public and for aviation interests, describing the importance of the natural soundscape and tranquility to park visitors, as well as the need for cooperation from the aviation community.

(See Chapter 7: Interpretation and Education; Soundscape Management 4.9)

8.4.3 General Aviation

The Service will work closely with the FAA and with general aviation organizations to ensure that general aviation operations over units of the national park system are conducted in accordance with applicable FAA advisories and "fly-friendly" techniques and procedures designed to help pilots minimize impacts on national parks. The Service will seek the assistance of these organizations in problem resolution if general aviation concerns arise over national parks.

8.4.4 Administrative Use

Aviation is a necessary and acceptable management tool in some parks when used in a manner consistent with the NPS mission. Aviation activities will comply with all applicable policies and regulations issued by the Department of the Interior, the FAA, and the NPS. In its administrative use of aircraft, the Service will:

- Use, to the maximum extent practicable, the quietest air craft available for its aviation operations.
- Limit official use of flights over parks to those needed to support or carry out emergency operations or essential management activities in cases where there are no practical alternatives or when alternative methods would be unreasonable. Full consideration will be given to safety; wilderness management implications; impacts on resources, values, or visitors; impacts on other administrative activities and overall cost-effectiveness.
- Plan, schedule, and consolidate flights so as to avoid or minimize adverse impacts on park resources and values and visitor enjoyment.
- Require other agencies that request to use aircraft within park boundaries to comply with the standards and policies applicable to NPS aircraft.

(Also see Director's Order #60: Aviation Management)

8.4.5 Military Aviation

The Service will work cooperatively with agencies of the Department of Defense in order to address the congressionally mandated missions of all agencies. In addition, the Service will prevent or strive to mitigate any adverse effects of overflights related to military training or operational low-level overflights on park resources, values, or visitor experiences in national park units. Superintendents are responsible for opening lines of communication with base

commanders controlling Military Training Routes or Military Operations Areas that may affect their parks, and for developing formal agreements that mitigate identified impacts.

8.4.6 Commercial Air Tour Management

The National Parks Air Tour Management Act of 2000, and implementing FAA regulations, provide for a joint FAA/NPS planning process that will lead to the management of commercial air tours over national parks by the FAA (with the exception of parks in Alaska, which are specifically excluded from the process). The NPS, as a cooperating agency, will assist the FAA in developing an air tour management plan (ATMP) for each park with existing or proposed air tours. Superintendents will work cooperatively with the FAA, air tour operators, and other stakeholders in the development of ATMPs, and will determine the nature and extent of impacts on natural and cultural resources and visitor experience opportunities inside park boundaries. The FAA, with responsibility for ensuring the safe and efficient use of the nation's airspace and for protecting the public health and welfare from aircraft noise, will implement the ATMP and regulate commercial air tours in accordance with it.

8.4.7 Permitted Overflights

When issuing permits for activities such as filming or research, in which the use of aircraft is proposed, the superintendent will impose conditions to protect park resources and values from adverse impacts. Permit requests will be denied if the activity will have unacceptable impacts on a park's resources, values, or desired visitor experiences.

8.4.8 Airports and Landing Sites

Private or commercial aircraft may be operated in parks only on lands or water surfaces designated by the Park Service as landing sites through special regulation. (See section 8.4.1 regarding Alaska and some remote areas.) The Service will evaluate and manage aircraft landing sites under its jurisdiction to ensure that the use of the sites will have no unacceptable impacts on park resources and values, public safety, or visitor enjoyment. Existing sites that meet these criteria and that have been designated as a result of previously established use may be retained as long as the administrative need for them continues. New sites will be designated only where essential to provide administrative access to remote areas (other than wilderness), and only where the site can be established, used, and maintained without the need for new construction or major site improvements.

The National Park Service will also work with entities having jurisdiction over landing sites and airports adjacent to parks for the purpose of preventing, reducing, or otherwise mitigating the effects of aircraft operations. Whether landing sites or airports are situated within or adjacent to parks, the objective will be to minimize noise and other impacts, and confine them to the smallest and most appropriate portion of the park as possible, consistent with safe aircraft operations.

(Also see 36 CFR 2.17; 43 CFR 36.11(f); Reference Manual 47)

8.5 Native American Use

The National Park Service will develop and implement its programs in a manner that reflects knowledge of and respect for the cultures of Native American tribes or groups with demonstrated ancestral ties to particular resources in parks. Evidence of such ties will be established through systematic archeological or ethnographic studies, including ethnographic oral history and

ethnohistory studies, or a combination of these sources. For purposes of these policies, the term "Native American" includes American Indians, Alaskan natives, native peoples of the Caribbean, native Hawaiians, and other native Pacific islanders. The term will be applicable to federally and state-recognized tribes and to those Native Americans who are defined by themselves and known to others as members of a named cultural unit that has historically shared a set of linguistic, kinship, political, or other distinguishing cultural features.

The Service will regularly and actively consult with traditionally associated Native American individuals or groups regarding planning, management, and operational decisions that affect subsistence activities, sacred materials or places, or other ethnographic resources with which they are historically associated. Information about the outcome of these consultations will be made available to those consulted.

In developing its plans and carrying out its programs, the Service will ensure the following:

- Park Service general regulations governing access to and use of natural and cultural resources in parks will be applied in an informed and balanced manner that is consistent with park purposes, does not unreasonably interfere with Native American use of traditional areas or sacred resources, and does not violate the criteria listed in section 8.2 for use of the parks.
- Superintendents will establish and maintain consulting relationships with potentially affected Native American tribes or groups.
- Management decisions will reflect knowledge about and understanding of potentially affected Native American cultures and people, gained through research and consultations with the potentially affected groups.

AIRFA (42 USC 1996) states that "henceforth it shall be the policy of the United States to protect and preserve for American Indians their inherent right to freedom to believe, express, and exercise the traditional religions of the American Indians, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites." The National Park Service recognizes that site-specific worship is vital to Native American religious practices. As a matter of policy, and in keeping with the spirit of the law, the Service will be as unrestrictive as possible in permitting Native American tribes access to park areas to perform traditional religious, ceremonial, or other customary activities at places that have been used historically for such purposes, provided the criteria listed in section 8.2 for use of the parks are not violated. In allowing religious access by other entities, including nonrecognized Indian groups, the NPS will consider requests individually, being mindful to not take actions which will either advance or inhibit religion. The Service will not direct visitor attention to the performance of religious observances unless the Native American group so wishes.

With regard to consumptive use of park resources, current NPS policy is reflected in regulations published at 36 CFR 2.1.

These regulations allow superintendents to designate certain fruits, berries, nuts, or unoccupied seashells which may be gathered by hand for personal use or consumption if it will not adversely affect park wildlife or the reproductive potential of a plant species, or otherwise adversely affect park resources. The regulations do not authorize the taking, use, or possession of fish, wildlife, or plants for ceremonial or religious purposes, except where specifically authorized by Federal

statute or treaty rights, or where hunting, trapping, or fishing are otherwise allowed. These regulations are under review, and NPS policy is evolving in this area.

The Service will protect sacred resources to the extent practicable and in a manner consistent with the goals of the traditionally associated Native American tribe or group, when authorized under NHPA. The location and character of sacred sites will be withheld from public disclosure, if disclosure will cause significant invasion of privacy, risk harm to the historic resource, or impede the use of a traditional religious site by practitioners.

As with other non-recreational users, members of Native American tribes or groups may enter parks for traditional non-recreational activities without paying an entrance fee.

The ceremonial use of peyote will be limited to members of the Native American Church during religious ceremonies, in accordance with regulations of the Department of Justice, Drug Enforcement Administration ("Special Exempt Persons, Native American Church," 21 CFR 1307.31).

(See Consultation 5.2.1; Ethnographic Resources 5.3.5.3; first Amendment Activities 8.6.3; Consumptive Uses 8.9. Also see Executive Order 13007; Director's Orders #71A: Relationships with Indian Tribes, and #71B: Indian Sacred Sites)

8.6 Special Park Uses

8.6.1 General

A special park use is defined as a short-term activity that takes place in a park area, and that:

- Provides a benefit to an individual, group, or organization rather than the public at large;
- Requires written authorization and some degree of management control from the Service in order to protect park resources and the public interest;
- Is not prohibited by law or regulation;
- Is not initiated, sponsored, or conducted by the Service; and
- Is not managed under a concession contract (see chapter 10), a recreation activity for which the NPS charges a fee, or a lease (see chapter 5).

8.6.1.1 Requests for Permits

Each request to permit a special park use or to renew authorization of an existing use will be reviewed and evaluated by the superintendent according to the terms of applicable legislation, regulations, and management planning documents, using criteria and procedures outlined in Director's Order #53: Special Park Uses. When considering permit requests, superintendents will take into account the Service-wide implications of their decisions. A superintendent must deny initial requests, or requests for renewal, upon finding that the proposed activity would not be allowed under the criteria listed in section 8.2.

The superintendent likewise must terminate previously authorized special park uses based on such a finding.

8.6.1.2 Fees

Appropriate fees for cost recovery, as well as performance bond and liability insurance requirements, will be imposed, consistent with applicable statutory authorities and regulations. All costs incurred by the Service in writing the permit, monitoring, providing protection services,

restoring park areas, or otherwise supporting a special park use will be reimbursed by the permittee. When appropriate, the Service will also include a fair charge for the use of the land or facility.

(See Park Management 1.4; Recreation Fees and Reservations 8.3; Special Events 8.6.2)

8.6.2 Special Events

8.6.2.1 General

Special events—such as sports, pageants, regattas, public spectator attractions, entertainment, ceremonies, and encampments—may be permitted by the superintendent when (1) there is a meaningful association between the park area and the event, and (2) the event will contribute to visitor understanding of the significance of the park area. However, a permit must be denied if the event would be disallowed under the criteria listed in section 8.2. The superintendent must ensure that appropriate permit conditions are imposed for special events.

The Park Service will not permit the public staging of special events that are conducted primarily for the material or financial benefit of organizers or participants; or are commercial in nature; or that demand in-park advertising or publicity; or for which a separate public admission fee is to be charged. However, park buildings or specially designated locations that are suitable and appropriate may be made available for private, "by-invitation-only" events. Admission fees for, or any other monies associated with the "by-invitation-only" event, may not be collected by the permittee on park premises.

Large scale events will be managed utilizing the NIBS Incident Command System.

(See Special Events 6.4.5; Personal Services 7.3.1; Cultural Demonstrators 7.5.6; Facilities for Arts and Culture 9.3.1.7. Also see 36 CFR 2.50 and 36 CFR 7.96)

8.6.2.2 Helium-Filled Balloons

Helium-filled balloons pose a danger to the health and safety of marine wildlife (such as sea turtles and sperm whales) and create a litter problem. Therefore, no releases of helium-filled balloons into the atmosphere within a park will be authorized, except for research or planning purposes. Releasing balloons indoors where they can be retrieved may be authorized under permit.

8.6.2.3 Fireworks Displays

Fireworks displays will not be permitted if they pose an unacceptable risk to park resources or values. In all instances, the decision to approve or deny a request will be made by the superintendent, following consultation with the regional safety officer. Fireworks displays will be conducted in compliance with the National Fire Protection Association Code for the Display of Fireworks (NFPA 1123).

8.6.2.4 Sale of Food or Merchandise

The sale of food in the parks is allowed when managed under a permit which does not conflict with a concession contract, and complies with applicable public health codes and Director's Order #83: Public Health. The sale of printed material as defined in 36 CFR 2.52, 36 CFR 7.96(k), and Reference Manual 53, is allowed; but the sale of all other merchandise, including, but not limited to, T-shirts, clothing, and arts and crafts, is prohibited. These restrictions do not apply to sales operations managed under concession contracts or under agreements with

cooperating associations operating within their designated sales areas. (For the sale of products produced in the conduct of living exhibits, interpretive demonstrations, or park programs, see section 7.5.6 of chapter 7.)

(Also see 60 FR 17639, April 7, 1995)

8.6.3 First Amendment Activities

The National Park Service will authorize the use of park land for public assemblies, meetings, demonstrations, religious activities, and other public expressions of views protected under the First Amendment of the U. S. Constitution, in accordance with NPS regulations. To ensure public safety and the protection of park resources and values, and to avoid assigning the same location and time to two or more activities, the Service may manage these activities by issuing a permit to regulate the time, location, number of participants, use of the facilities, and number and type of equipment used, but not the content of the message presented.

For all parks except those within the National Capital Region, locations that are available for public assemblies and other First Amendment activities, including the sale and distribution of printed matter, will be so designated by the superintendent on a map in accordance with procedures and criteria found in NPS regulations (36 CFR 1.5, 1.7, 2.51, and 2.52), unless the sites are otherwise protected from public disclosure, such as sites sacred to Native Americans or sites with vulnerable natural and cultural resources. National Capital Region parks are subject to special demonstration regulations found at 36 CFR 7.96(g)(4)(iii), and do not have such areas designated by the superintendent.

When the Service allows one group to use an area or facility for expressing views, it must provide other groups with a similar opportunity, if requested. No group wishing to assemble lawfully may be discriminated against or denied the right of assembly, provided that all permit conditions are met. Whenever religious activities are conducted in parks, any Park Service actions pertaining to them must reflect a clearly secular purpose, must have a primary effect that neither advances nor inhibits religion, and must avoid "excessive governmental entanglement with religion."

NPS staff on duty in an area in which a First Amendment activity is being conducted will be neutral toward the activity, but will remain responsible for the protection of participants, spectators, private property, public property, and park resources. On-duty staff may not participate in a First Amendment activity. NPS employees exercising their First Amendment rights when off-duty must not, in any way, imply any official Park Service endorsement of the activity.

When a permit is requested for the exercise of first Amendment rights, including freedom of assembly, speech, religion, and the press, the superintendent will issue the permit without any requirement for fees, cost recovery, bonding, or insurance. The superintendent will issue or deny a first Amendment permit request under 36 CFR 2.51 within 2 business days after receiving a proper application. National Capital Parks subject to special demonstration regulations found at 36 CFR 7.96(g)(3) are deemed granted within 24 hours of receipt.

(See Confidentiality 5.2.3. Also see Reference Manual 53)

8.6.4 Rights-of-Way for Utilities and Roads

8.6.4.1 General

A right-of-way is a special park use allowing a utility to pass over, under, or through NPS property. It may be issued only pursuant to specific statutory authority, and generally only if there is no practicable alternative to such use of Park Service lands. The criteria listed in section 8.2 must also be met.

When an application for a right-of-way is submitted, the superintendent will establish conditions, and develop documentation of compliance with NEPA, NHPA, and other statutory compliance requirements as appropriate. Due to the potentially high costs and values associated with rights-of-way, special attention will be paid to fees and the recovery of a fair market value for use of the land. New rights-of-way will be executed by the regional director; conversions from other authorizing documents, amendments, and renewals of existing rights-of-way may be signed by the superintendent. A right-of-way issued by the Park Service is considered a temporary document, and does not convey an interest in land.

National Park Service regulations pertaining to the issuance of rights-of-way are in 36 CFR Part 14; Department of the Interior regulations pertaining to rights-of-way in Alaska are found in 43 CFR Part 36. Additional guidance can be found in Director's Order #53, and Reference Manual 53: Special Park Uses. A utility or road right-of-way proposed for a park in Alaska is subject to the authorities and procedural requirements of title XI of ANILCA.

(See Park Management 1.4, Rights-of-Way 6.4.8. Also see Director's Order #53)

8.6.4.2 Utilities

Utility rights-of-way over lands administered by the NPS are governed by statutory authorities in 16 USC 5 (electrical power transmission and distribution, radio and TV, and other forms of communication facilities), and 16 USC 79 (electrical power, telephone, and water conduits). Rights-of-way issued under 16 USC 5 or 79 are discretionary, and conditional upon a finding by the Service that the proposed use will not cause unacceptable impacts to park resources, values, or purposes, and is not incompatible with the public interest.

8.6.4.3 Telecommunication Antenna Sites

Requests to site non-NPS telecommunication antennas and related facilities on Park Service lands will be considered in accordance with the Telecommunications Act of 1996 (47 USC 332 note), which authorizes the NPS to issue rights-of-way permits for telecommunications services. Superintendents will accept an application for a telecommunications antenna site only from a Federal Communications Commission licensee authorized to provide these services.

As with other special park uses, telecommunication proposals must meet the criteria listed in section 8.2. In addition:

Superintendents will encourage preliminary meetings with telecommunication antenna applicants who wish to discuss the pending applications and address NPS concerns. Similar meetings should be held during the decision-making process, as necessary, particularly if the superintendent is considering denying the application.

- Superintendents will consider the safety of the visiting public when reviewing telecommunication antenna applications, including the potential benefit of having telephone access to emergency law enforcement and public safety services.
- Reviews under NEPA and NHPA will be conducted expeditiously and consistent with all applicable statutes, and within timetables established under Director's Order #53.

8.6.4.4 Roads and Highways

Right-of-way permits are not issued for roads and highways within the federal aid highway system. These highways require specific statutory authority. A request for lands for highway purposes under 23 USC 107(d) or 317 is subject to compliance with 23 USC 138—commonly referred to as 4(f)). The 4(f) evaluation is to be completed by the Secretary of Transportation and concurred in by the Secretary of the Interior. There are no general NPS statutory authorities for non-NPS roads or for gas pipelines; however, individual park enabling legislation may provide such authorizations. If park-specific enabling legislation is absent, the Service will generally object to proposals for the use of park lands for highway purposes that do not directly benefit a park.

(See Fees 8.6.1.2; Non-NPS Roads 9.2.1.2, Construction and Expansion Proposals 9.2.1.2.2. Also see Director's Order #87D: Non-NPS Federal Aid Roads)

8.6.5 Access to Private Property

The Park Service will not prevent access to the private property of adjacent landowners, as well as the property of landowners within park boundaries, when

- It would contribute in a material way to the park's mission, without causing unacceptable impacts to park resources or values, or the purposes for which the park was established; or
- Access is the landowner's right by law or by deed reservation.

When one of these circumstances exist, commercial vehicles will be allowed access to private property only in accordance with 36 CFR 5.6, "Commercial Vehicles."

8.6.6 Filming and Photography

8.6.6.1 General

The National Park Service will encourage filming and photography when it will promote the protection and public enjoyment of park resources, provided that the activity does not violate the criteria listed in section 8.2.

Filming and photography activities that do not necessarily promote the protection and public enjoyment of parks, but which meet the section 8.2 criteria, will also be permitted. For the purposes of this policy, "filming" is defined as any technology that may be used for recording images or the sound tracks associated with them, including still, motion, and video filming.

8.6.6.2 Permits and Fees

A permit will be required for any filming or photography that (1) involves the use of a model, set, or prop; (2) requires entry into a closed area; or (3) requires access to the park after normal visiting hours.

A permit will not be required for a visitor using a camera and/ or a recording device for his/ her own personal use within normal visitation areas and hours. Press coverage of breaking news

never requires a permit; however, it is subject to the restrictions and conditions necessary to protect park resources and public health and safety, and to prevent impairment of park resources and values.

Appropriate fees for cost recovery and use of Park Service lands and/or facilities, as well as performance bond and liability insurance requirements, will be imposed. All costs incurred by the Service in writing the permit, monitoring, providing protection services, or otherwise supporting filming or photography activities will be reimbursed by the permittee as a condition of the permit.

8.6.6.3 NPS Participation

The Service's participation is governed by the following:

- The NPS may actively assist filming and photography activities that promote public understanding and appreciation of the national park system, and the Director may authorize use of the arrowhead symbol for such filming projects.
- A superintendent may request a credit line, provided that the content or subject matter of the filming project would not reflect adversely on the National Park Service.
- Park Service employees, while on duty or in uniform, will not be employed by filming permittees.
- Identifiable NPS equipment, uniforms, or insignia must not be portrayed in any way that would imply Service endorsement of a product or service.
- The NPS will not censor the content of any filming project, or require finished film products for review, files, or documentation purposes. However, a superintendent may review a story board or other material offered by the applicant to help determine whether (1) a credit line would be appropriate, or (2) it would be appropriate for the NPS to actively assist a filming activity or authorize use of the arrowhead symbol.

Additional guidance is provided by Director's Order #53: Special Park Uses; and by Reference Manual 53.

(Also see Director's Order #52D: Arrowhead Symbol)

8.6.7 Agricultural Uses

Agricultural uses and activities are authorized in parks in accordance with the direction provided by a park's enabling legislation and general management plan. Agricultural practices and techniques, including the use of pesticides and other biocontrol agents such as genetically modified or engineered organisms, should be specified in an approved resource management plan, and are subject to review and approval by the NPS integrated pest management (IPM) program manager. These practices and techniques are also subject to the provisions of federal and state laws, NPS regulations and policies, and Director's Orders #53 and #77-7. In general, agricultural activities should be conducted in accordance with accepted, best management practices.

Agricultural activities, including demonstration farms, prescribed to meet a park's management objectives, will be allowed if (1) they do not result in unacceptable impacts to park resources, values, or purposes; (2) they conform to activities that occurred during the historic period; and (3) they support the park's interpretive themes. Agricultural uses that do not conform to those in practice during the historic period may be allowed if (1) they are authorized by the park's

enabling legislation; (2) they are retained as a right subsequent to NPS land acquisition; (3) they contribute to the maintenance of a cultural landscape; or (4) they are carried out as part of a living exhibit or interpretive demonstration.

The Service may issue leases or special use permits to individuals or organizations to conduct agricultural activities that are allowed on park lands under the criteria listed in the preceding paragraph. The use of a lease (versus a special use permit) is appropriate only when (1) specifically authorized by the park's enabling legislation; or (2) it is part of an historic preservation program authorized by 16 USC 470h-3; or (3) it is associated with a building that is leased pursuant to 16 USC 1a-2(k). NPS and concession employees living in parks may cultivate gardens for personal use under terms and conditions established by the superintendent. Such use will not be permitted if it would have unacceptable impacts on park resources, values, or purposes, or visitor enjoyment thereof. In urban parks, areas may be designated for community recreational gardening under the same conditions.

(See Park Planning Processes 2.3; Biological Resource Management 4.4; Pest Management 4.4.5; Cultural Landscapes 5.3.5.2; Personal Services 7.3.1. Also see Director's Order #77-7: Integrated Pest Management)

8.6.8 Domestic and Feral Livestock

8.6.8.1 General

The NPS will allow livestock use only when the use is consistent with the criteria listed in section 8.2, and the use is either:

- Specifically authorized by a park's enabling legislation;
- Required under a reserved right of use arising from the acquisition of a tract of land;
- Required in order to maintain a historic scene; or
- Conducted as a necessary and an integral part of a recreational activity appropriate to a park. Where livestock use (including cattle, sheep, goats, horses, mules, burros, reindeer, llamas, and alpacas) occurs in parks, it will be categorized as (1) livestock operations, (2) recreational stock, (3) trespass animals, or (4) feral herds. No livestock use or activity, regardless of how authorized, will be allowed that would cause unacceptable impacts to a park's resources, values, or purposes. In particular, livestock use that depletes or degrades non-renewable resources, or whose effects cannot be satisfactorily mitigated, will not be allowed.

8.6.8.2 Managing the Use

Where domestic or feral livestock use occurs, the National Park Service will foster "best management practices" that protect vegetation, and wildlife and its habitat; safeguard sensitive species; control proliferation of exotic species; conserve soil; protect riparian areas and ground water; avoid toxic contamination; and preserve cultural sites. Integrated pest management methods and pesticide use on and around livestock must comply with NPS pest management policy in section 4.4.11. Livestock may be used as part of an integrated program to control exotic plants.

The National Park Service must manage its resources in a manner that conserves them for future generations. Park uses, including domestic and feral livestock, that may jeopardize the sustainability of a park's natural and cultural resources must be evaluated continuously.

Livestock, including trail stock, will be kept within the carrying capacity of the area to be used. Managers must regulate livestock so that ecosystem dynamics, and the composition, condition, and distribution of native plants and animal communities, are not significantly altered or otherwise threatened, and cultural values are protected. Conflicts with public use and enjoyment must be kept to a minimum.

The use of pack-in feed, preferably pellets, is encouraged for all recreational stock while on the trail, and is required whenever grazing would have unacceptable impacts on a park's resources. When not being actively used for recreation in a park, livestock will either be removed from the park or be confined within an appropriate corral or other structure, and it will be fed pelletized feed or hay that is free of weed seeds. Livestock activities must be discontinued whenever they would be disallowed by the criteria listed in section 8.2.

In parks with legislation that states that livestock use is administered by another agency, the superintendent will work closely with the other agency to manage the amounts and types of use, and to ensure that the best management practices are followed. Administration by another agency does not release the NPS from its responsibility to ensure that the activity is managed in compliance with the NPS mission and all applicable laws and policies.

8.6.8.3 Management Plans

Each park that allows domestic or feral livestock, including parks where the livestock use is administered by another agency, will prepare a livestock management plan designed to sustain and protect park resources and values. Restrictions will be placed on the amount and type of use to protect resources and values, and to minimize conflicts with visitors. Particular attention will be given to protecting wetland and riparian areas, sensitive species and their habitats, water quality, and cultural resources. Natural and cultural resource protection will be given first priority when determining livestock management priorities. A monitoring program must be implemented, and will be used to detect change and adjust management to protect resources.

Plans will include an evaluation of impacts as directed by NEPA and NHPA. Benefits and impacts must be carefully weighed. A rigorous assessment is especially important for areas with unique natural and cultural resources, low precipitation, limited vegetation cover, water quality concerns, highly erodable soils, or sensitive species. Areas that have been continuously grazed for long periods, or that are in poor ecological health, will require special emphasis in the plan. Until a plan is completed for livestock operations or recreational stock, environmental impact analysis will be done when the permitting document is issued or renewed.

8.6.8.4 Permitting Instruments

Livestock activities by parties other than the NPS will be conducted only pursuant to the terms and conditions of a special use permit, lease, concession contract, or commercial use authorization. The use of a lease (versus some other instrument) is appropriate only when (1) specifically authorized by the park's enabling legislation; or (2) it is part of an historic preservation program authorized by 16 USC 470h-3; or (3) the livestock use is associated with a building that is leased pursuant to 16 USC 1a-2(k).

In addition to any other penalty provisions, violation of the terms and conditions of the permitting instrument may result in revocation of the livestock use privilege. In parks where the NPS shares livestock allotment management with another government agency, or where another

government agency, through legislation, administers the use, a general agreement between agencies is necessary to describe the relationship and responsibilities.

8.6.8.5 Structures

No structures except those specifically authorized by law or approved by the National Park Service will be allowed in parks to increase livestock numbers, sustain livestock in areas in which they cannot otherwise be sustained, or introduce livestock into areas that previously have not been open to livestock. The Service will not expend funds to construct or maintain livestock structures unless there is a direct benefit to the protection of park resources. The permittee may be required to remove structures when livestock activities are no longer authorized.

(See Management of Exotic Species 4.4.4; Water Resource Management 4.6; Identification and Designation of the Wilderness Resource 6.2; Grazing and Livestock Driveways 6.4.7; Equestrian Trails 9.2.3.3; Miscellaneous Management Facilities 9.4.5. Also see Director's Order #77-3: Domestic and Feral Livestock, and Reference Manual 77-3; Director's Order #53: Special Park Uses, and Reference Manual 53; Director's Order #77-7: Integrated Pest Management)

8.6.9 Military Operations

In general, military activities are discouraged in parks, except for study of military history at related NPS sites. Periodically, an armed services unit may request the use of park areas for noncombat exercises such as search-and-rescue and outdoor survival. Determining when and where military units may conduct such activities is a discretionary decision of the superintendent. A permitted military activity must conform to the following conditions:

- A permit will be issued that clearly states all necessary conditions or stipulations to protect park resources and visitors;
- All applicable park rules and regulations will be followed;
- No weaponry will be carried, displayed, or used, except for ceremonial purposes or authorized public demonstrations;
- The activity will be conducted away from visitor use locations and out of public view (except where a public demonstration is specifically authorized);
- The military organization will designate a liaison officer who will be available to the superintendent throughout the exercise; and
- Permittees will be educated about how the purpose, mission, and regulations of the park differ from their own missions, especially in regard to resource protection and visitor use and enjoyment.

National security and law enforcement agencies, such as the CIA, FBI, and state police, may wish to conduct similar exercises. These requests should be evaluated in the same way as military special use requests.

8.6.10 Cemeteries and Burials

8.6.10.1 National Cemeteries

All national cemeteries administered by the National Park Service will be managed as historically significant resources, and as integral parts of larger historical parks. Burials in national cemeteries will be permitted, pursuant to applicable regulations, until available space has been filled. The management and preservation of national cemeteries are subject to the

provisions of the National Cemeteries Act of 1973; NPS "National Cemetery Regulations" (36 CFR Part 12); and Director's Order #61: National Cemeteries.

The enlargement of a national cemetery for additional burials constitutes a modern intrusion, compromising the historical character of both the cemetery and the historical park, and will not be permitted.

8.6.10.2 Family Cemeteries

The burial of family members in family cemeteries that have been acquired by the Park Service in the course of establishment of parks will be permitted to the extent practicable, pursuant to applicable regulations, until space allotted to the cemeteries has been filled. Family members (or their designees) will be allowed access for purposes of upkeep and commemoration (such as wreath-laying and religious rituals) that do not jeopardize safety or resource protection. Park superintendents will keep active files on cemeteries for the purpose of responding to requests and inquiries.

(Also see Director's Order #19: Records Management)

8.6.10.3 Other Burials and the Scattering of Ashes

Other burials or re-interments outside established cemeteries in parks will be prohibited except where permitted by cultural resource policies. The scattering of ashes from cremation may be permitted by a superintendent, in accordance with NPS general regulations in 36 CFR 2. 62, and applicable state laws. Authorization to scatter ashes must take into account potential conflicts with the spiritual or cultural practices of the indigenous people associated with the area.

(See Stewardship of Human Remains and Burials 5.3.4; Cultural Resources 6.3.8, Consultation 7.5.5)

8.6.11 Other Special Park Uses

Other special park uses that may be allowed under permit or special regulations include the use of explosives, and the use of portable power equipment. Specific guidance is provided in 36 CFR Part 2; Director's Order #53: Special Park Uses; and Reference Manual 53.

8.7 Mineral Exploration and Development

Mineral exploration and development include exploration, extraction, production, storage, and transportation of minerals. Mineral exploration or development may be allowed in parks only when prospective operators demonstrate that they hold rights to valid mining claims, federal mineral leases, or non-federally-owned minerals. If this right is not clearly demonstrated, the National Park Service will inform the prospective operator that, until proof of a property right is shown, the Service will not further consider the proposed activity. If the Service determines that the proposed mineral development would impair park resources, values, or purposes, or does not meet approval standards under applicable NPS regulations and cannot be sufficiently modified to meet those standards, the Service will seek to extinguish the associated mineral right through acquisition, unless otherwise directed by Congress. In some parks, all or certain types of mineral development are specifically prohibited by law.

All persons who conduct mineral development within parks will do so only in conformance with applicable laws, regulations, and NPS policies. These laws include the Mining in the Parks Act;

the Mineral Leasing Act; the Acquired Lands Mineral Leasing Act; the Surface Mining Control and Reclamation Act of 1977; the National Park System General Authorities Act; ANILCA; and enabling statutes for individual parks. Applicable regulations include 36 CFR Part 9, Subpart A and Subpart B; 43 CFR Parts 3100-3500; and special use regulations. Persons may not use or occupy surface lands in a park for purposes of removing minerals outside the park unless provided for in law. General management plans, land protection plans, and other planning documents for parks with mining claims, federal mineral leases, or non-federally-owned mineral interests will address these non-federal property interests as appropriate. Lands with mineral interests will be zoned according to their anticipated management and use, based on their resource values, park management objectives, and park-specific legislative provisions relating to mineral interests.

(See Park Planning Processes 2.3; Land Protection Plans 3.3; Identification and Designation of the Wilderness Resource 6.2; Mineral Development 6.4.9)

8.7.1 Mining Claims

The location of new mining claims pursuant to the General Mining Act of 1872 is prohibited in all park areas. The National Park Service may permit mineral development only on existing patented and valid unpatented mining claims in conformance with the park's enabling legislation and the regulations for mining claims in 36 CFR Part 9, Subpart A. The Service may initiate a validity examination on unpatented mining claims at any time. The Service will perform a validity examination of all unpatented mining claims before approving any operations on such claims in accordance with 36 CFR Part 9, Subpart A. However, a validity examination is not required prior to the NPS authorization of activities that are conducted only to reclaim a site. All mineral development and use of resources in connection with a claim will be confined to the boundaries of the claim itself, except for the access and transport that are permitted under 36 CFR Part 9, Subpart A; or, for Alaska, 43 CFR Part 36.

8.7.2 Federal Mineral Leases

All parks are closed to new federal mineral leasing except for three national recreation areas (Lake Mead, Whiskeytown, and Glen Canyon), in which Congress has explicitly authorized federal mineral leasing in each area's enabling legislation. Through park planning documents, the National Park Service has closed portions of these areas to federal mineral leasing because of the presence of sensitive resources. No person may explore for federal minerals in any of these areas except under a lease issued pursuant to regulations in 43 CFR Part 3100, or under a prospecting permit pursuant to 43 CFR 3500. Before consenting to a federal mineral lease or subsequent mineral development connected with a lease, the regional director must find, in writing, that leasing and subsequent mineral development will not result in a significant adverse effect on park resources or administration.

Some park areas contain leases that existed at the time the park was created or expanded. These leases are valid existing rights, and will continue to exist until such time as they expire under the regulations that govern federal mineral leasing (43 CFR Parts 3100 and 3500).

8.7.3 Non-federally-owned Minerals

Non-federal mineral interests in park units consist of oil and gas interests, or rights to mineral interests other than oil and gas (such as private outstanding mineral rights, mineral rights through general land grant patents, homestead patents, or other private mineral rights that did not derive

from the General Mining Act. The Park Service governs activities associated with these two categories of non-federal mineral rights under separate regulatory schemes.

The Park Service may approve operations associated with non-federal oil and gas interests under the standards and procedures in 36 CFR Part 9, Subpart B. If an operator's plan fails to meet the approved standards of these regulations, the NPS generally has authority to deny the operation, and may initiate acquisition. Absent a decision to acquire the property, application of the regulations is not intended to result in a taking of the property interest, but rather to impose reasonable regulation of the activity.

The Service may approve operations associated with nonfederal mineral interests, other than oil and gas, under 36 CFR Part 5, "Commercial and Private Operations," and 36 CFR 1.6.

The Service must determine that operations associated with these mineral interests would not adversely impact "public health and safety, environmental, or scenic values, natural or cultural resources, scientific research, implementation or management responsibilities, proper allocation and use of facilities, or the avoidance of conflict among visitor use activities" If the operation cannot be sufficiently mitigated to meet this standard, the NPS may seek to acquire the mineral interest.

8.8 Collecting Natural Products

The collection of natural products for personal use or consumption is governed by NPS general regulations contained in 36 CFR 2.1. A superintendent may designate certain fruits, berries, nuts, or unoccupied seashells that can be gathered by hand for personal use or consumption upon a written determination by the superintendent that such an activity will not adversely affect park wildlife or the reproductive potential of a plant species or otherwise adversely affect park resources. In some cases, peer-reviewed scientific information may be needed to support the determination. The collection of minerals or rocks for personal use will be allowed only when specifically authorized by federal law or treaty rights.

While campfires are a traditional element of camping and the park experience, the gathering of firewood will be prohibited, except where subsistence use is authorized by federal law, or in specific areas designated by a superintendent in which dead and down wood may be collected for campfires or in small quantities for other uses within the park. Natural resource products that accumulate as a result of site clearing for development, hazard tree removal, vista clearing, or other management actions will be recycled through the ecosystem when practicable. When recycling is not practicable, the products may be disposed of by other means. Disposal may be accomplished by contract, if the result of the work done under contract and the value are calculated in the contract cost, or by sale at fair market value in accordance with applicable laws and regulations. Wood that accumulates as a result of the management actions described above may also be used for park purposes, such as heating public buildings or offices, or for interpretive campfire programs.

(See Consumptive Uses 8.9, Natural and Cultural Studies, Research, and Collection Activities 8.10. Also see Director's Order #18: Wildland Fire Management)

8.9 Consumptive Uses

Consumptive uses of park resources may be allowed only when they are:

- Specifically authorized by federal law or treaty rights (such as hunting, trapping, or mining in specifically identified parks);
- Specifically authorized pursuant to other existing rights (such as a right retained by a donor
 of the land on which the use would occur);
- Grazing activities authorized in accordance with section 8.6.8.1; or
- Traditional visitor activities, such as fishing or berry picking, that are authorized in accordance with NPS general regulations.

As a matter of policy, the Service general supports the limited and controlled consumption of natural resources for traditional religious and ceremonial purposes, and is moving toward a goal of greater access and accommodation. As a general matter, a superintendent may not allow consumptive use of park resources by any particular group to the exclusion of others.

Current NPS policy is reflected in regulations published at 36 CFR Part 13. The general regulations at 36 CFR 2.1 allow superintendents to designate certain fruits, berries, nuts, or unoccupied seashells which may be gathered by hand for personal use or consumption if it will not adversely affect park wildlife or the reproductive potential of a plant species, or otherwise adversely affect park resources. The regulations do not authorize the taking , use, or possession of fish, wildlife, or plants for ceremonial or religious purposes, except where specifically authorized by Federal statute or treaty rights, or where hunting, trapping, or fishing are otherwise allowed.

The 36 CFR Part 13 regulations address the consumptive use of park resources for subsistence purposes in Alaska, where it is allowed in the 10 parks and "expanded areas" established by ANILCA. Some park-specific enabling acts (e.g., Big Cypress National Preserve and Kaloka-Honokohau National Historical Park) also allow subsistence or other traditional uses of park resources.

(See Park Management 1.4; Harvest of Plants and Animals by the Public 4.4.3; General 8.1, Native American Use 8.5. Also see 36 CFR Part 13, Subpart B)

8.10 Natural and Cultural Studies Research and Collection Activities

Studies, research, and collection activities by non-NPS personnel involving natural and cultural resources will be encouraged and facilitated when they otherwise comport with NPS policies. Scientific activities that involve field work or specimen collection, or have the potential to disturb resources, the visitor experience, or park operations, require a permit issued by the superintendent that prescribes appropriate conditions for protecting park resources, visitors, and operations.

(See Studies and Collections 4.2; Independent Research 5.1.2; Independent and Commercial Studies 8.11.3)

8.11.1 General

The National Park Service will facilitate social science studies that support the NPS mission by providing an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. This approach will provide a scientific basis for park planning, development, operations, management, education, and interpretive activities. Investigators will be encouraged to use the parks for scientific studies whenever such use is consistent with Service policies that recognize the scientific value of parks as laboratories. Specific guidance is provided in Director's Order #78: Social Science.

Studies include short- or long-term scientific investigations in NPS areas that may involve social science surveys and research. The data and information acquired through scientific activities conducted in the parks will be made broadly available to park managers, the scientific community, and the public, except where legal restrictions apply. Studies may include projects conducted by researchers and scholars with universities, foundations, state and federal agencies, and NPS staff. The NPS will promote cooperative relationships with educational and scientific institutions and qualified individuals when specialized expertise exists that can be of significant assistance to the Service in obtaining information, and when the opportunity for research and study in the parks offers institutions a significant benefit to their programs. NPS facilities and assistance may be made available to qualified researchers conducting NPS-authorized studies. NPS or other federally funded studies that rely on survey instruments are strictly regulated and must be approved by the NPS, the Department of the Interior, and the Office of Management and Budget before they can be used to gather information directly from visitors or the general public.

(See Information Resources Management 1.7; Studies and Collections 4.2; Research 5.1, Planning 5.2; Special Park Uses 8.6; NPS-supported Studies 8.11.2; Independent and Commercial Studies 8.11.3)

8.11.2 NPS-supported Studies

The National Park Service is responsible for the identification and acquisition of needed inventory, monitoring, and research, as well as for the interpretation of the management and operational implications of such studies. The Service will use the best available science to assist park managers in addressing management needs and objectives that have been identified in legislation and planning documents.

The Service will support studies to:

- Reach a level of understanding that will minimize "crisis" management;
- Ensure a systematic and fully adequate park information base;
- Provide a sound basis for policy, planning, and decision-making;
- Develop effective strategies, methods, and technologies to predict, avoid, or minimize adverse impacts on resources, visitors, and related activities;
- Determine causes of resource management problems;
- Further understand park ecosystems and related human social systems, and document their components, condition, and significance;
- Evaluate visitor satisfaction with services, facilities, and recreational opportunities;
- Ensure that the interpretation of park resources and issues reflects current standards of scholarship for the history, science, and condition of the resources; and

• Evaluate performance measures in support of strategic plan goals.

Superintendents may authorize park staff to carry out routine duties without requiring a research/collecting permit. NPS-supported research will rely on high-quality methods, and undergo peer review. NPS-supported scientists will be expected to publish their findings in refereed journals, among other outlets.

8.11.3 Independent and Commercial Studies

Non-NPS social science studies conducted in parks are not required to address specifically identified NPS management issues or information needs. However, these studies (excluding research in museum collections) require an NPS research/collecting permit. The studies must conform to NPS policies and other guidance regarding activities such as the collection and publication of data, conduct of studies, and wilderness restrictions, pursuant to the terms and conditions of the permit. NPS research/collecting permits may include requirements that permittees provide parks, within reasonable time-frames, with the appropriate field notes (subject to ethical guidelines of the appropriate discipline), data, information about the data, catalog data, progress reports, interim and final reports, and publications derived from the permitted activities. Projects will be administered and conducted only by fully qualified personnel, and will conform to current standards of scholarship.

The collection of data from the public and employees to support the research, development, and marketing of commercial products or services may be permitted only in limited circumstances. Such activity will not be permitted when the superintendent determines that it would impose an undue burden on visitors and/or employees, and/ or when it has the potential to adversely impact park resources or detract from visitors' experiences in the park. All necessary data collection permits must be obtained, including the Scientific Research and Collecting Permit, as well as the permission of the park superintendent. Names and addresses and any other unique identifying information collected from park visitors and/or employees cannot be distributed, shared, or sold for commercial purposes.

(Also see Director's Order #84: Library Resources)

8.11.4 Management and Conduct of Studies

All studies in parks will employ non-destructive methods to the maximum extent possible, so as to avoid the irretrievable commitment of park resources. Studies will be preceded by an approved scope of work, proposal, or other detailed written description of the work to be performed.

(See Studies and Collections 4.2. Also see Director's Order #74: Studies and Collecting)

9 Park Facilities

The National Park Service will provide visitor and administrative facilities that are necessary, appropriate, and consistent with the conservation of park resources and values. Facilities will be harmonious with park resources, compatible with natural processes, esthetically pleasing, functional, energy- and water-efficient, cost effective, universally designed, and as welcoming as possible to all segments of the population. Park facilities and operations will demonstrate environmental leadership by incorporating sustainable practices to the maximum extent practicable in planning, design, siting, construction, and maintenance.

The Organic Act, which created the National Park Service in 1916, directs the Service to conserve park resources "unimpaired" for the enjoyment of future generations. The 1970 National Park System General Authorities Act, as amended in 1978, prohibits the Service from allowing any activities that would cause derogation of the values and purposes for which the parks have been established. Taken together, these two laws impose on NPS managers a strict mandate to protect park resources and values. (Throughout *Management Policies*, "impairment" is construed to also encompass "derogation.") In protecting park resources and values, the Service will demonstrate environmental leadership and a commitment to the principles of sustainability in all facility developments and operations. This commitment will be made obvious to the public in the choices and decisions that are made, and through appropriate educational opportunities.

Support facilities necessary to house, transport, inform, and serve visitors and staff require proper planning, design, programming, construction, operation, and maintenance. The Service must avoid the construction of buildings, roads, and other development that will cause unacceptable impacts on park resources values. The Service must also avoid the future operation and maintenance costs of unnecessary or ineffective facilities. Therefore, the Service will not develop or redevelop a facility within a park until a determination has been made that the facility is necessary and appropriate, and that it would not be practicable for the facility to be developed, or the service provided, outside the park. This policy recognizes, for example, that a gas station or a grocery store may be necessary to park use and enjoyment, but that it may not need to be located within the park.

(See Park Management 1.4; Decision-making Requirements to Avoid Impairments 1.4.7; Evaluating Impacts on Natural Resources 4.1.3; Planning 5.2; Commercial Visitor Services Planning 10.2.2)

9.1.1 Facility Planning and Design

The protection of each park's resources and values will be the primary consideration in facility development decisions. Facilities for visitor use and park management will be consistent with each park's authorizing legislation, and with approved general management plans, development concept plans, and associated planning documents. The planning and design of park facilities will be accomplished by interdisciplinary teams constituted to meet the resource stewardship, programmatic, and technical requirements of the project. Public input will be sought at the earliest stage of planning and design, particularly in those cases where controversy is likely.

The Park Service will meet its facility development needs in a cost-effective manner, ensuring that value is returned for every decision made. Only development projects that are shown to be an appropriate use of funds, and economically feasible, will be approved. Value-analysis and value-engineering techniques, such as functional analysis and cost evaluation, will be applied to achieve the lowest life-cycle cost, consistent with required environmental and energy performance, reliability, quality, safety, and resource protection. Construction and operational cost estimates will be continually reviewed throughout the planning and development processes to avoid excessive, unwarranted, or unnecessary costs. Development projects will also be continually reviewed for opportunities to add value and benefits that will help achieve the NPS mission.

Designs for park facilities, regardless of their origin (NPS, contractor, concessioner, or other), will be harmonious with and integrated into the park environment. They will also be subject, throughout all phases of design and construction, to the same code compliance; the same high standards of sustainable design, "universal design," and functionality; and the same review and approval processes. Park Service requirements for sustainable design and functionality include protection of the natural and cultural environments, resource conservation, energy conservation, pollution prevention, defensible space for fire safety, and fostering education about sustainable design and practices.

The Service will issue, and update as necessary, guiding principles for sustainable design to be applied throughout the national park system, consistent with federal regulations such as Executive Order 13123 (Greening the Government Through Efficient Energy Management) and Executive Order 13101 (Greening the Government Through Waste Prevention, Recycling and Federal Acquisition).

(See Park Planning Processes 2.3; General Management Concepts 4.1; Lightscape Management 4.10. Also see Director's Orders #13: Environmental Leadership; and #90: Value Analysis; NPS Guiding Principles of Sustainable Design)

9.1.1.1 Life-cycle Costs

The total cost of a system, facility, or other product will be considered in its planning, design, and construction. Total cost will be computed over a product's or system's useful life, or other specified period of time, using economic analysis. Life-cycle costs include acquisition, shipping, initial construction or installation, operating and maintenance, environmental and energy consumption, water, wastewater, and the costs of eventual disposal or deconstruction of the system, facility, and/or product. To the extent practicable, the waste implications of materials, products, and by-products (including product "life cycle" pollution) should be considered as part of life-cycle costs. When the cost of facility deconstruction is included in the life-cycle cost analysis, deductions may be factored in for the salvage value of the recyclable materials.

(Also see Director's Orders #13: Environmental Leader ship; and #90: Value Analysis)

9.1.1.2 Integration of Facilities into the Park Environment

Facilities will be integrated into the park landscape and environs with sustainable designs and systems to minimize environmental impact. Development will not compete with or dominate park features, or interfere with natural processes, such as the seasonal migration of wildlife or hydrologic activity associated with wetlands.

If a cohesive design theme is desired, recommended, or required, the theme will reflect the purpose and character of the park, or, in a large park, of an individual developed area. Standard designs and components may be used, but they will be adapted as appropriate to the specific site and conditions as part of the design process.

The full integration of facilities into the park environment will involve:

Sensitivity to cultural, regional, esthetic, and environmental factors (e.g., solar orientation, prevailing winds, landscaping, vulnerability to wildfire and other natural hazards) in the selection of site, construction materials, and forms;

- Innovative concepts for grouping facilities and activities, both in the design of new
 development and in the re-design of existing complexes, building on the architectural and
 landscape elements already present;
- Thorough interdisciplinary resource, user, and short- and long-term structure maintenance analysis;
- The long-term need for, and sustainable use of, water, energy, and waste disposal resources;
- Assessment of the transportation and mobility needs of park visitors, as well as concessioner and park employees within the park, and for accessing the park from gateway communities;
- Knowledge about the values and socio-cultural interests of groups, including Native Americans, traditionally associated with the park.

(See Environmental Leadership 1.6; Lightscape Management 4.10; Protection of Cultural Values 9.1.1.5; Visitor Centers 9.3.1.3; Siting Facilities to Avoid Natural Hazards 9.1.1.6)

9.1.1.3 Protection of Cultural Values

When important cultural resources are present, efforts will be made to utilize existing contributing structures. New visitor or administration structures will harmonize with the area and the cultural resources in proportion, color, and texture. No attempt will be made to duplicate or mimic a historic design, nor will any modern construction be portrayed to the public as being historic. However, vernacular styles of architecture are appropriate when they provide visual compatibility with the cultural landscape. Application of the "criteria of effect" promulgated by the Advisory Council on Historic Preservation, and compliance with the Council's regulations on "Protection of Historic Properties" (36 CFR Part 800), will precede any development. These criteria apply to all historic properties.

(See Identification and Evaluation of Resources 5.1.3; Planning 5.2; Treatment of Cultural Resources 5.3.5. Also see Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation)

9.1.1.4 Adaptive Use

The National Historic Preservation Act and Executive Order 13006 require each federal agency—prior to acquiring, constructing, or leasing buildings—to use, to the maximum extent feasible, historic properties available to it, whenever operationally appropriate and economically prudent. (16 USC 470h-2(a)(1)) The Act also requires each agency to implement alternatives for the adaptive use of historic properties it owns, if that will help ensure the properties' preservation. Therefore, the adaptive use of historic and non-historic buildings for operations such as visitor centers, hostels, and administrative offices, will be considered first, before new construction, provided that (1) it can meet park objectives and current code requirements; (2) its use will not be an intrusion on significant natural or cultural resources; and (3) a cost savings will be realized. Even when the cost of adaptive use is greater than new construction, it may still be justified. Use of historic buildings will comply with all laws, regulations, and policies regarding the treatment and use of cultural resources.

(See Physical Access for Persons with Disabilities 5.3.2; Use of Historic Structures 5.3.5.4.7)

9.1.1.5 Facility Siting

Whenever feasible and authorized by Congress, major park facilities—especially those that can be shared with other entities—should be developed outside of park boundaries. The Service will

encourage the private sector to meet facility needs in gateway communities, and thus contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park construction. Where possible, appropriate, and authorized, the Park Service will cooperatively establish and maintain administration/information facilities with other federal, state, or local entities.

If facilities must be located inside of park boundaries, then the preferred locations will be those that minimize impacts to park resources, and are situated to stimulate the use of alternative transportation systems, bicycle routes, and pedestrian walkways. Major facilities within park boundaries will be placed only in locations identified in an approved GMP, or in implementation planning documents, as being suitable and appropriate. Facility siting will take into account the need for protection from fires, and take maximum advantage of factors such as solar energy, wind direction and speed, natural landscaping, and other natural features.

When structures that are not historically significant are no longer functional in their present locations, and are determined to be inappropriately placed in important resource areas, they will be removed or relocated to a more appropriate area.

(See General Management Planning 2.3.1; Historic and Prehistoric Structures 5.3.5.4; Commercial Visitor Services Planning 10.2.2)

9.1.1.6 Siting Facilities to Avoid Natural Hazards

The Service will strive to site facilities where they will not be damaged or destroyed by natural physical processes. Natural hazard areas include sites with unstable soils and geologic conditions, fault zones, thermal areas, floodplains, flash-flood zones, fire-prone vegetation, and coastal high-hazard areas. Park development that is damaged or destroyed by a destructive, hazardous, or catastrophic natural event will be thoroughly evaluated for relocation or replacement by new construction at a different location. If a decision is made to relocate or replace a severely damaged or destroyed facility, it will be placed, if practicable, in an area that is believed to be free from natural hazards. In areas where dynamic natural processes cannot be avoided, such as seashores, developed facilities should be sustainably designed (e.g., removable in advance of hazardous storms or other conditions). When it has been determined that facilities must be located in such areas, their design and siting will be based on:

- A thorough understanding of the nature of the physical processes; and
- Avoiding or mitigating (1) the risks to human life and property, and (2) the effect of the facility on natural physical processes and the ecosystem.

Requirements for development in floodplains and wetlands are contained in Executive Order 11988 (Floodplain Management); Executive Order 11990 (Protection of Wetlands); Director's Orders #77-1 and #77-10; and other NPS guidance documents.

(See Park Planning Processes 2.3; Floodplains 4.6.4; Wetlands 4.6.5; Shorelines and Barrier Islands 4.8.1.1; Geologic Hazards 4.8.1.3; Visitor Safety and Emergency Response 8.2.5; Concession Facilities 10.2.6)

9.1.1.7 Sustainable Energy Design

Any facility development, whether it be a new building, a renovation, or an adaptive re- use of an existing facility, should include improvements in energy efficiency and reduction in "greenhouse

gas" emissions for both the building envelope and the mechanical systems that support the facility. Maximum energy efficiency should be achieved using solar thermal and photovoltaic applications, appropriate insulation and glazing strategies, energy-efficient lighting and appliances, and renewable energy technologies. Energy-efficient construction projects should be used as an educational opportunity for the visiting public.

9.1.2 Accessibility for Persons with Disabilities

The NPS will design, construct, and operate all buildings and facilities so they are accessible to, and usable by, persons with disabilities to the greatest extent reasonable, in compliance with all applicable laws, regulations, and standards. This means that all new and altered buildings and facilities will be in conformance with appropriate design standards. It also means that a sufficient number of existing buildings and facilities will be modified to ensure that programs can be provided in an accessible location.

Accessibility will be provided consistent with preserving park resources, visitor safety, and providing a high-quality visitor experience. In most instances, the degree of accessibility provided will be proportionately related to the degree of human-made modifications in the area surrounding the facility, and the importance of the facility to people visiting or working in the park. Accordingly, most administrative offices, some overnight visitor accommodations, some employee housing, and most interpretive and visitor service facilities will be accessible. Undeveloped areas, such as those outside the immediate influence of buildings and roads, will not normally be modified, nor will special facilities be provided for the sole purpose of providing access to all segments of the population. Accessibility to facilities in threshold areas will be determined on the basis of topography, the significance of the attraction, the number of physical modifications being made to the environment, and the modifications necessary to ensure programmatic accessibility.

Transportation systems in parks, including water transportation, will have a sufficient percentage of fully accessible vehicles or watercraft to provide effective services to persons with disabilities. In the case of existing systems, the necessary vehicles will be provided on a replacement or retrofit basis. Until the transportation system has been made fully accessible, a separate accessible vehicle will be provided, or disabled persons will be allowed to drive their personal vehicles on otherwise-restricted roadways. In meeting the goal of accessibility, emphasis will be placed on ensuring that persons with disabilities are afforded experiences and opportunities along with other visitors, to the greatest extent reasonable. Separate facilities for people with disabilities are not a substitute for full accessibility to other park facilities, but they may be allowed where the need for specialized services is clearly demonstrated.

(See Physical Access for Persons with Disabilities 5.3.2; Accessibility for Persons with Disabilities 8.2.4; Accessibility of Commercial Services 10.2.6.2. Also see Director's Order #42: Accessibility for Visitors with Disabilities)

9.1.3 Construction

The Service will incorporate sustainable principles and practices into design, siting, construction, building materials, utility systems, recycling of all unusable materials, and waste management. Best management practices will be used for all phases of construction activity, including preconstruction, actual construction, and post-construction.

9.1.3.1 Construction Sites

Construction sites will be limited to the smallest feasible area. The selection of construction sites will consider opportunities for taking advantage of natural sources of lighting, heating, and cooling (e.g., near an existing or potential stand of deciduous trees) in order to maximize energy conservation. Ground disturbance and site management will be carefully controlled to prevent undue damage to vegetation, soils, and archeological resources, and to minimize air, water, soil, and noise pollution. Protective fencing and barricades will be provided for safety, and to preserve natural and cultural resources. Effective storm water management measures specific to the site will be implemented, and appropriate erosion and sedimentation control measures will be in place at all times. Solid, volatile, and hazardous wastes will be stockpiled, transported, and disposed of, as appropriate, and in compliance with federal, state, and local laws and regulations. All materials will be recycled whenever possible.

A review and approval of any "hot work" (e.g., welding, use of open flame, grinding) will be done to ensure fire safety at the construction site. Visual intrusions will be kept to a minimum. Construction equipment will be in satisfactory condition; i.e., it will be equipped with required safety components, and not be leaking hazardous liquids or emitting hazardous or undesirable fumes above allowable legal limits. Care will be exercised to ensure that construction equipment and all construction materials imported into the park are free of undesirable species. The cost of restoring areas impacted by construction will be considered part of the cost of construction, and funding for restoration will be included in construction budgets.

(See Air Resource Management 4.7; Water Resource Management 4.6; Soil Resource Management 4.8.2.4. Also see Denver Service Center specifications section 01570)

9.1.3.2 Re-vegetation and Landscaping

The selection of plant materials and cultivation practices will be guided by the policies for management of plant materials in section 4.4, and the need for fire-resistant vegetation for defensible space. To the maximum extent possible, plantings will consist of species that are native to the park or that are historically appropriate for the period or event commemorated. The use of exotic plant species is restricted to situations that conform to the exotic species policy in section 4.4.4. Irrigation to maintain exotic plantings will be avoided, except when it is part of an approved management program essential to achieve park objectives, and when adequate and dependable supplies of water are available. When a decision has been made to irrigate, efficient application must be made of water to protect water resources and ecosystems. Low water use practices that measure soil moisture content, and other technologies such as drip irrigation and appropriate timing of water applications, should be employed.

Prior to using soil fertilizers or other soil amendments in park natural or altered landscapes, parks must develop a prescription designed to ensure that the amendments will not unacceptably alter the physical, chemical, or biological characteristics of the soil, biological community, or surface or ground waters.

Wherever practicable, soils and plants affected by construction will be salvaged for use in site restoration. Any surplus soils and plants may be used, as appropriate, for the restoration of other degraded areas within the park. Surplus soils not used in this way should be stockpiled for future use. If additional soil and plants are needed to restore disturbed sites, they may be obtained from other sites in the park if it is determined that the use of an in-park source will not significantly

affect cultural or natural resources or ecological processes. In any case, imported soils must be compatible with existing soils, free of undesired seeds and organisms, and fulfill the horticultural requirements of plants used for restoration.

(See Management of Native Plants and Animals 4.4.2; Genetic Resource Management Principles 4.4.1.2; Management of Exotic Species 4.4.4; Water Resource Management 4.6; Soil Resource Management 4.8.2.4; Cultural Landscapes 5.3.5.2; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2. Also see Executive Order 13148 (Greening the Government Through Leadership in Environmental Management) section 207, "Environmentally and Economically Beneficial Landscaping")

9.1.3.3 Borrow Pits and Spoil Areas

Materials from borrow pits, quarries, and other clay, stone, gravel, or sand sources on NPS lands, including submerged lands, will be extracted and used only:

- By the NPS or its agents or contractors;
- For in-park administrative uses;
- After compliance with NEPA, including written findings that extraction and use of in-park borrow materials does not, or will not, impair park resources or values, and is the park's most reasonable alternative based on economic, environmental, or ecological considerations; and
- After compliance with other applicable federal, state, and local requirements.

Parks should use existing pits, quarries, or sources, or create new pits, quarries, or sources in the park only after developing and implementing a park-wide borrow management plan that addresses the cumulative effects of borrow site extraction, restoration, and importation. NPS guidance documents, as well as natural and cultural resources and facilities management staff, should be consulted during plan development and the review of specific proposals.

In designated wild and scenic rivers, no new sources may be established, and existing sources should be closed and reclaimed. Borrow material may be extracted in proposed or designated wilderness areas only in small quantities for trail use and in accordance with an approved wilderness management plan.

Spoil may be used for beach nourishment or another resource management activity only if the superintendent first finds that the proposed nourishment or activity will not impair park resources and values, and is consistent with park planning documents.

All existing spoil areas within park units that meet the definition of "solid waste disposal site" (36 CFR Part 6) will be brought into compliance with NPS solid waste regulations in 36 CFR 6.5. The development of new spoil areas or borrow pits, or the expansion of existing ones, will be analyzed through the NEPA and NHPA processes. In addition, superintendents will comply with NPS solid waste regulations and other specific NPS requirements.

Proposed borrow pits and spoil areas outside of parks will also be evaluated to ensure that use by the Service or its contractors does not impair resources or values inside the park, and that extraction operations comply with all applicable statutes and regulations, including NEPA and NHPA.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Geologic Resource Management 4.8; Non-federally Owned Minerals 8.7.3; Revegetation and Landscaping 9.1.3.2)

9.1.4 Maintenance

9.1.4.1 General

There is a maintenance responsibility and cost for every asset that is administered by the National Park Service. A regular, periodic inventory and condition assessment of park assets will be performed to identify deficiencies and to ensure the cost-effective maintenance of all facilities. The costs of operation and the useful life of facilities and equipment are directly related to the type and level of maintenance provided. Therefore, the Service will conduct a program of preventive and rehabilitative maintenance and preservation to (1) provide a safe, sanitary, environmentally protective, and esthetically pleasing environment for park visitors and employees; (2) protect the physical integrity of facilities; and (3) preserve or maintain facilities in their optimum sustainable condition to the greatest extent possible. Preventive and rehabilitative maintenance programs will incorporate sustainable design elements and practices to ensure that water and energy efficiency, pollution prevention, and waste prevention and reduction are standard practice.

(Also see NPS Solid Waste Management Handbook; Executive Order 13101 (Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition); Executive Order 13148 (Greening the Government Through Leadership in Environmental Management); Executive Order 13149 (Greening the Government Through Federal Fleet and Transportation Efficiency))

9.1.4.2 Acquisition of Environmentally Preferable and Energy Efficient-products

In carrying out its maintenance responsibilities, the Park Service will acquire environmentally preferable and energy efficient products, as required by the Solid Waste Disposal Act, federal regulations, and Executive orders, and will strive to meet and exceed any Department of the Interior affirmative acquisition goals that are established. The Service will consider a variety of attributes when purchasing products, including energy efficiency, biodegradability, toxicity, recovered material content, packaging, transport cost, and other lifecycle environmental impacts, such as disposal. The Service will actively pursue opportunities to test and demonstrate environmentally preferable and energy-efficient products, consistent with its goal of demonstrating sustainable practices that avoid or minimize environmental impacts.

(See Environmental Leadership 1.6; Concession Operations 10.2.4. Also see Director's Order #13: Environmental Leadership)

9.1.5 Utilities

Utilities (i.e., energy, water, and wastewater systems) will be sited outside park boundaries whenever possible. In-park utilities will be as unobtrusive as possible, and have the least possible resource impact. The Service will use municipal or other utility systems outside parks whenever economically and environmentally practicable, and it may participate, when authorized, in cost-sharing with municipalities and others in meeting new, expanded, or replacement park utility needs. The Service will use the least polluting power supply options, either through on-site generation or through power purchases, where appropriate, available, and cost-effective, or where such purchase helps meet federal or state emissions goals or alternative energy goals.

(See Utilities and Services 10.2.6.4. Also see Director's Order #35A: Sale or Lease of Park Services, Resources or Water in Support of Activities Outside the Boundaries of National Park Areas; and Director's Order #35B: Sale of Park Services to Support Activities Within the Boundaries of National Park Areas)

9.1.5.1 Water Supply Systems

The National Park Service will use water efficiently and sustainably. Water systems will be designed to maximally conserve water and the energy used in its treatment and distribution. Water supply and delivery systems will be designed and maintained to provide sufficient water to operate fire sprinkler systems and fire hydrants. Water efficient devices will be installed in retrofit of existing structures and in the building of new structures. New water systems, or extensions to existing systems, will be constructed only if reasonable conservation measures will not be sufficient to cover park needs. Where a new system or an expansion is justified, the system must be properly sized, and the available or projected water supply must be sufficient for expected needs. Where feasible and appropriate, and given resource availability, groundwater sources will generally be developed, rather than surface water diversions in parks. Water supply systems, and their operators, must comply with all applicable state and federal health standards. Outdoor use of water will be limited to those applications deemed essential to park operations or to protect park values. Consistent with native plant policies, the Service will use efficient methods for outdoor irrigation. Where appropriate, rainwater should be collected for uses such as maintenance of landscape features and general cleaning.

(See Water Resource Management 4.6; Campgrounds 9.3.2.1; Comfort Stations 9.3.3. Also see Director's Order #83: Public Health)

9.1.5.2 Wastewater Treatment Systems

New wastewater systems, or extensions or expansions of existing systems, will be constructed only if a determination has first been made that reasonable conservation measures will not be sufficient to cover park needs. In the selection of an appropriate method of wastewater treatment, factors such as all-season reliability, regulatory and public health issues, cost-effectiveness, and minimum adverse impact on the environment will all be considered. Where composting toilets are used, there should be interpretation for visitors regarding the value of recycling organic solid waste. Wastewater will be adequately treated so that, on its return to water courses, it meets or exceeds applicable state and federal water quality standards. Water and wastewater systems, and their operators, are subject to state and federal health standards. Superintendents must ensure that operators are certified, and that operations are inspected and conducted in accordance with all laws, regulations, and policies.

(See Water Resource Management 4.6; Campgrounds 9.3.2.1; Comfort Stations 9.3.3. Also see Director's Order #83: Public Health)

9.1.5.3 Utility Lines

Where feasible, NPS utility lines will be placed underground, except where such placement would cause significant damage to natural or cultural resources (such as historic structures or cultural landscapes). When placed aboveground, utility lines and appurtenant structures will be located and designed so as to minimize their impact on park resources and values. Whenever possible and visually acceptable, all utilities will share a common corridor, and will be combined with transportation corridors. Cost effectiveness, reliability of service, and visual impact will be

considered when deciding whether to install utility lines aboveground or underground. To minimize the impact of on-grid utility lines, consideration will be given to long-term, cost-effective, renewable-energy applications, such as the use of photovoltaic, wind, fuel cell, and/or bio-fuel technologies (either as stand-alones or as hybrid systems), particularly in remote areas.

(See Potential Wilderness 6.2.2.1)

9.1.5.4 Historic Utilities

Utilities that were present during the historic period will be managed as cultural resources, and will be governed by the same policies as other cultural resources. Where present needs require upgraded lines and facilities, modern utilities will conform insofar as possible to the appearance and location of the historic utilities.

(See Treatment of Cultural Resources 5.3.5)

9.1.6 Waste Management and Contaminant Issues

The National Park Service recognizes the far-reaching impacts that waste products, contaminants, and wasteful practices have, not only on national park resources, but also on biotic and abiotic resources elsewhere in the nation and around the world. The Service will therefore demonstrate environmental leadership, and serve as a model for others to follow in managing wastes and contaminants.

9.1.6.1 Waste Management

The Service will implement solid and hazardous waste management practices that integrate waste reduction, reuse, and recycling programs to minimize the generation and disposal of solid and hazardous waste at, and from, parks. For purposes of this section, solid and hazardous wastes include any materials that are so defined in the Solid Waste Disposal Act, as amended. The Service will require the use of biodegradable materials, the reuse and recycling of materials, and other appropriate measures to minimize solid waste, and to conserve natural resources to the fullest extent possible. Innovation in the use of recyclable or reusable materials is encouraged. For example, the NPS may encourage the remanufacturing of recyclable materials into acceptable sales items for willing markets, including the NPS.

The disposal in parks of solid wastes generated by non-NPS activities is, in most cases, incompatible with national park values. All disposal of solid waste on lands and waters within the boundaries of a unit of the park system, whether federally or non-federally owned, must comply with NPS regulations in 36 CFR Part 6, which implement Public Law 98-506 (16 USC 4601-22(c)). These regulations are designed to ensure that all activities associated with the operation of solid waste disposal sites within the boundaries of national parks are conducted in a manner that will (1) prevent the deterioration of air and water quality; (2) prevent the degradation of natural and cultural resources; and (3) reduce adverse effects on visitor enjoyment. In accordance with the spirit and intent of these requirements, the NPS will, to the extent practicable, avoid the use of park lands for landfills by such means as (1) implementing waste minimization and substitution practices; (2) diverting material to recycling facilities or other appropriate locations; and (3) using storage or treatment facilities that meet or exceed DOI and all legal and regulatory standards for any generated waste that is not diverted.

The NPS will remove landfill operations and associated impacts from parks where feasible. Cooperative waste management solutions that minimize adverse impacts on park resources are

also encouraged for areas where alternatives to landfilling are scarce for both parks and adjacent communities.

Open burning for solid waste disposal will not be permitted in parks, except in the very limited circumstances described in Director's Order #18: Wildland Fire Management.

Any hazardous waste that the Service generates will be disposed of separately from solid waste, in full accord with all applicable legal requirements.

(See Air Quality 4.7.1; River Use 8.2.2.3; Backcountry Use 8.2.2.4; Miscellaneous Management Facilities 9.4.5. Also see Director's Order #18: Wildland Fire Management; Director's Order #30A: Hazardous and Solid Waste Management)

9.1.6.2 NPS Response to Contaminants

The Service will make every reasonable effort to prevent or minimize the release of contaminants on, or that will affect, NPS lands or resources, and will take all necessary actions to control or minimize such releases when they occur. For purposes of this section, contaminants include any substance that may pose a risk to NPS resources or is regulated or governed by statutes referenced in this subsection. Prevention and minimization will include, but not be limited to, (1) the acquisition, use, and selection of non-toxic or less toxic materials; (2) implementation of safe use, storage, and disposal practices; (3) recycling of spent materials; (4) implementation of effective hazard communication programs for employees, contractors, concessioners, and visitors; (5) development and extension of appropriate emergency response programs; and (6) acting to ensure that parties responsible for contamination or threatened contamination of NPS property bear the responsibility for addressing such contamination.

Activities pertaining to contaminants, including response actions or handling, acquisition, storage, transportation, and disposal of such substances, will comply with federal, state, and local laws and regulations including, but not limited to, (1) the Solid Waste Disposal Act, including the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984, as amended; (2) the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); (3) the Oil Pollution Act of 1990; (4) the Clean Water Act; (4) the Hazardous Materials Transportation Act; and (5) the Toxic Substances Control Act. Such activities will also comply with the NPS integrated pest management program.

The Service will identify, assess, and take response actions as promptly as possible to address releases and threatened releases of contaminants into the environment. Each park will have an oil and chemical spill response management plan for spills that result from NPS activities, or from activities that are beyond NPS control (such as commercial through-traffic on roads that pass through a park). The plans will place first priority on responder and public safety. Employees will not be permitted to respond to hazardous materials spills unless they are properly qualified and certified in accordance with Director's Order #30B: Hazardous Spill Response.

The Service will take affirmative and aggressive action to ensure that all NPS costs and damages associated with the release of contaminants are borne by those responsible for the contamination of NPS property. In addition, when lands are proposed for acquisition by the NPS, the Service will take steps to avoid or minimize its liability for the contamination of NPS property caused by other parties. The Service will include in the pre-acquisition environmental assessment process the identification of recognizable environmental conditions, such as those associated with prior

or existing commercial facilities, mining sites, and landfills. Any recognizable existing or potential environmental contamination of lands proposed for inclusion in a park will be brought to the attention of the regional director as soon as they are identified.

(See Criteria for Inclusion 1.3; Chapter 3: Land Protection; Pest Management 4.4.5; Emergency Preparedness and Emergency Operations 8.2.5.2. Also see Director's Orders #25: Land Protection; #30A: Hazardous and Solid Waste Management; #30B: Hazardous Spill Response; 30C: Damage Assessments)

9.1.7 Energy Management

The National Park Service will conduct its activities in ways that use energy wisely and economically. Park resources and values will not be degraded to provide energy for NPS purposes. The Service will adhere to all federal policies governing energy and water efficiency, renewable resources, use of alternative fuels, and federal fleet goals as established in the Energy Policy Act of 1992. The Service will also comply with applicable Executive orders, including Executive Order 13123 (Greening the Government Through Effective Energy Management), Executive Order 13031 (Federal Alternative Fueled Vehicle Leadership), and Executive Order 13149 (Greening the Government Through Federal Fleet and Transportation Efficiency).

All facilities, vehicles, and equipment will be operated and managed so as to minimize the consumption of energy, water, and non-renewable fuels. Full consideration will be given to the use of alternative fuels. Alternative transportation programs and the use of bio-based fuels will be encouraged, where appropriate. Renewable sources of energy, and new developments in energy-efficiency technology, including products from the recycling of materials and waste, will be used where appropriate and cost effective over the life cycle. However, energy efficiencies will not be pursued if they will cause adverse impacts to park resources and values.

To conserve energy, park personnel and visitors may be provided with opportunities for in-park public transportation, or trails and walks for non-motorized transport. As an environmental leader, the Service will interpret for the public the overall resource protection benefits from the efficient use of energy, and will actively educate and motivate park personnel and visitors to utilize sustainable practices in conserving energy. The Service will also pursue partnership efforts with the Department of Energy and others to further develop and meet NPS energy conservation goals.

(See Air Quality 4.7.1; Lightscape Management 4.10; Resource Issue Interpretation and Education 7.5.3; Maintenance 9.1.4; Transportation Systems 9.2; Trails and Walks 9.2.3; Sustainable Energy Design 9.1.1.7. Also see Director's Order #13: Environmental Leadership)

9.1.8 Structural Fire Protection and Suppression

Superintendents will manage structural fire activities as part of a comprehensive interdisciplinary effort to protect resources and promote the safe and appropriate public enjoyment of those resources. Fire prevention, protection, and suppression will be primary considerations in the design, construction, rehabilitation, maintenance, and operation of all facilities. Structural fires will be suppressed to prevent the loss of human life and minimize damage to property and resources. The Service's Structural Fire Protection and Suppression Program will provide, through Director's Order #58 and Reference Manual 58, additional policy, standards, operational procedures, and accountability to meet the diverse needs and complexities of individual parks.

The goal is to ensure that all national park areas receive an appropriate level of fire protection, provided in a safe and cost-effective manner by qualified personnel.

Each superintendent will complete a structural fire assessment and develop a structural fire plan to meet park needs. Structural fire protection and suppression capabilities will be maintained in accordance with those plans. Prevention priorities will focus on occupied structures and cultural resources, with emphasis placed evenly on code compliance, early warning detection, suppression systems, and employee training and awareness.

Fire prevention through code-compliant new construction, upgrading of existing structures, standardized and regularly scheduled fire inspections, and properly installed and maintained detection and suppression systems will be the primary means of addressing and correcting NPS structural fire deficiencies. Where these measures are not sufficient to meet park needs, aid agreements will be entered into with non-NPS entities capable of providing requisite fire suppression. Support from neighboring fire protection organizations is encouraged, and superintendents should enter into appropriate agreements whenever possible to enhance firefighting capabilities. Development of a park fire brigade will be considered only when all other options have been explored and found unacceptable.

(See Fire Management 4.5; Fire Detection, Suppression, and Post-fire Rehabilitation and Protection 5.3.1.2; Water Supply Systems 9.1.5.1. Also see Director's Order #58: Structural Fire Management)

9.2 Transportation Systems

The location, type, and design of transportation systems and their components (e.g., roads, bridges, trails, and parking areas), and the use of alternative transportation systems, all strongly influence the quality of the visitor experience. These systems also affect, to a great degree, how and where park resources will be impacted. For these reasons, management decisions regarding transportation facilities require a full, interdisciplinary consideration of alternatives, and a full understanding of their consequences. Traditional practices of building wider roads and larger parking areas to accommodate more motor vehicles are not necessarily the answer. The Service must find better transportation solutions, which will preserve the natural and cultural resources in its care while providing a high-quality visitor experience.

Early NPS participation in transportation studies and planning processes is crucial to the long term strategy of working closely with other federal agencies; tribal, state and local governments; regional planning bodies; citizen groups; and others to enhance partnering and funding opportunities. The Service will participate in all transportation planning forums that may result in links to parks or impacts to park resources. Working with federal, tribal, state, and local agencies on transportation issues, the Service will seek reasonable access to parks, and connections to external transportation systems. The Service will also advocate corridor crossings for terrestrial and aquatic wildlife, and other accommodations to promote biodiversity, and to avoid or mitigate (1) harm to individual animals, (2) the fragmentation of plant and animal habitats, and (3) the disruption of natural systems.

Depending on a park's size, location, resources, and level of use, the NPS will, where appropriate, emphasize and encourage alternative transportation systems, which may include a

mix of buses, trains, ferries, trams, and—preferably—nonmotorized modes of access to, and moving within, parks. In general, the preferred modes of transportation will be those that contribute to maximum visitor enjoyment of, and minimum adverse impacts to, park resources and values.

Before a decision is made to design, construct, expand, or upgrade access to or within a park, non-construction alternatives—such as distributing visitors to alternative locations—must be fully explored. If non-construction alternatives will not achieve satisfactory results, then a development solution may be pursued if the project:

- Is appropriate and necessary to meet park management needs or to provide for visitor use and enjoyment;
- Is designed with extreme care and sensitivity to the landscape through which it passes;
- Will not cause unacceptable adverse impacts to natural and cultural resources, and will minimize or mitigate those that cannot be avoided;
- Will not cause use in the areas it serves to exceed the areas' visitor carrying capacity;
- Will incorporate the principles of energy conservation and sustainability;
- Will incorporate universal design principles to provide for accessibility for all people, including those with disabilities;
- Will take maximum advantage of interpretive opportunities and scenic values;
- Will not violate federal, state, or local air pollution control plans or regulations; and
- Is based on a comprehensive and multi-disciplinary approach that is fully consistent with the park's general management plan.

If a decision is made to construct, expand, or reconstruct a park transportation system, the Service will address the need for terrestrial and aquatic wildlife corridor crossings and other accommodations to avoid or mitigate harm to individual animals, the fragmentation of plant and animal habitats, and the disruption of natural systems.

(See General Management Planning 2.3.1; Implementation Planning 2.3.3; Air Quality 4.7.1; General 9.1; Accessibility for Persons with Disabilities 9.1.2; Energy Management 9.1.7. Also see Director's Orders #87A: Park Roads and Parkways; #87B: Alternative Transportation Systems; #87C: Transportation System Funding; #87D: Non-NPS Federal Aid Roads)

9.2.1 Road Systems

9.2.1.1 Park Roads

Park roads will be well constructed, sensitive to natural and cultural resources, reflect the highest principles of park design, and enhance the visitor experience. Park roads are generally not intended to provide fast and convenient transportation; rather, they are intended to enhance the quality of a visit, while providing for safe and efficient travel, with minimal or no impacts on natural and cultural resources. For most parks, a road system is already in place. When plans for meeting the transportation needs of these parks are updated, a determination must be made as to whether the road system should be maintained as is, reduced, expanded, re-oriented, eliminated, or supplemented by other means of travel. When roads are chronically at or near capacity, the use of alternative destination points or transportation systems, or limitations on use, will be considered as alternatives to road expansion.

Park road designs are subject to NPS Park Road Standards, which are adaptable to each park's unique character and resource limitations. Although some existing roads do not meet current engineering standards, they may be important cultural resources whose values must be preserved.

(Also see Director's Order #87A: Park Roads and Park ways)

9.2.1.2 Non-NPS Roads

Many parks contain roads that were not constructed by the NPS and are not under NPS jurisdiction. Most often, these roads existed before the areas became part of the national park system, and the Park Service must rely heavily on tribal, state, or local authorities to maintain the roads consistent with park management goals. These other government authorities sometimes propose to expand an existing road, or to construct a new road within a park, with significant potential for adversely affecting park resources and values. Superintendents must consider road proposals in strict accordance with section 9.2.1.2.2, and Director's Order #87D: Non-NPS Federal Aid Roads. The Service will not permit the public or private construction of new roads for access to inholdings unless specifically authorized by law.

(See General 8.6.4.1)

9.2.1.2.1 Existing Commercial and Other Through-Traffic

The Service will work with appropriate governments and private organizations and individuals to minimize the impacts of traffic on park resources and values. Whenever possible, commercial traffic will be prohibited on roads within parks, except for the purpose of serving park visitors and park operations. However, in accordance with section 8.6.5 and applicable NPS regulations (36 CFR 5.6):

- Superintendents will permit commercial vehicles to use park roads when necessary for access
 to private lands within or adjacent to a park area to which access is otherwise not available;
 and
- Superintendents may issue permits for commercial vehicle traffic to pass through the park in emergencies.

When a determination is made that existing through-traffic routes have adverse impacts on park resources and values, the Service will work with the appropriate government authorities to minimize these impacts, or to have the traffic flow re-routed over an alternative route. Where feasible and practicable, roads that are no longer needed will be closed or removed, and the area restored to a natural condition.

9.2.1.2.2 Construction and Expansion Proposals

Superintendents must take an active role in overall community and transportation planning activities to educate all parties about the NPS mandate to protect park resources. The NPS will work closely with the U.S. Department of Transportation (DOT) and state DOTs when new highways or roads, or expansions of existing road corridors, that may impact park lands are proposed. In accordance with 23 USC 138 and the Organic Act, the NPS will object to any proposal to route a state or local road through national park lands, or to increase the size of a right-of-way for an existing road, unless the NPS first determines (or concurs with a DOT determination) that:

• There is no feasible and prudent alternative;

- All possible planning has taken place to minimize and mitigate harm to the park;
- It will not be contrary to the public interest, or inconsistent with the purposes for which the park was established;
- It will not cause health and safety risks to visitors or park staff; and
- It will conform to NPS standards and practices for road design, engineering, and construction.

In making these determinations, the Service will take into account the factors listed in section 9.2.

Responsibility for future maintenance—meeting NPS standards—must be identified prior to NPS approval of a proposal.

(Also see Director's Order #87D: Non-NPS Federal Aid Roads)

9.2.2 Alternative Transportation Systems

The Service will work cooperatively with other federal agencies; tribal, state and local governments; regional planning bodies; concessioners; citizen groups, and others to design and promote alternative transportation systems for park access and circulation. In-park transportation systems should be linked to public transportation whenever feasible, through cooperation with public transportation agencies and gateway communities.

A decision to provide visitor transportation systems will be based on a finding that the system:

- Is a cost-effective alternative to the construction, operation, and maintenance of additional roads, parking areas, an support facilities;
- Will reduce traffic congestion, noise, air pollution, and adverse effects on park resources and values;
- Will enhance the visitor experience by offering new or improved interpretive or recreational opportunities; by simplifying travel within the park; or by making it easier or safer to see park features; and
- Will conserve energy and utilize alternative fueled vehicles whenever practicable.

All alternative transportation systems may be considered conceptually. However, any alternative transportation system that would require a significant investment in the construction of tracks, suspended cables, or advanced technologies will not go beyond conceptual status without approval from the Director. A compelling advantage must be shown before any mode of transportation other than rubber-tired vehicles operating on existing roads, or standard displacement boats, will be authorized.

(See Accessibility for Persons with Disabilities 9.1.2; Energy Management 9.1.7; Road Systems 9.2.1. Also see Director's Order #87B: Alternative Transportation Systems)

9.2.3 Trails and Walks

Trails and walks provide the only means of access into many areas within parks. These facilities will be planned and developed as integral parts of each park's transportation system, and incorporate principles of universal design. Trails and walks will serve as management tools to help control the distribution and intensity of use. All trails and walks will be carefully situated, designed, and managed to

- Reduce conflicts with automobiles and incompatible uses;
- Allow for a satisfying park experience;
- Allow accessibility by the greatest number of people; and
- Protect park resources.

Heavily used trails and walks in developed areas may be surfaced as necessary for visitor safety, accessibility for persons with impaired mobility, resource protection, or erosion control. Surface materials should be carefully selected, taking into account factors such as the purpose and location of a trail or walk, and the potential for erosion and other environmental impacts.

The visitor use and management aspects of trails and walks are addressed in section 8.2.2, "Recreational Activities."

(See Chapter 7: Interpretation and Education; Accessibility for Persons with Disabilities 9.1.2. Also see Director's Order #42: Accessibility for Visitors with Disabilities)

9.2.3.1 Cooperative Trail Planning

The Park Service will cooperate with other land managers, non-profit organizations, and user groups to facilitate local and regional trail access to parks. When parks abut other public lands, the Service will participate in inter-agency, multi-jurisdictional trail planning. When an effective trail system exists, and when otherwise permitted, hostels or similar low-cost overnight facilities may be provided, if they are consistent with the park's general management plan, and harmonize with the natural and/or cultural resources.

(See Hostels and Shelters 9.3.2.3)

9.2.3.2 Hiking Trails

Trail design will vary to accommodate a wide range of users, and will be appropriate to user patterns and site conditions. Wetlands will generally be avoided and, where possible, they will be spanned by a boardwalk or other means, using sustainable materials that will not disturb hydrologic or ecological processes. Backcountry trails will offer visitors a primitive outdoor experience, and will be unsurfaced and modest in character, except where a more durable surface is needed. The use of non-native materials is generally not permitted on backcountry trails.

(See Wilderness General Policy 6.4.1; Trails in Wilderness 6.3.10.2; Backcountry Use 8.2.2.4)

9.2.3.3 Equestrian Trails

Equestrian trails and related support facilities, such as feed boxes and hitch rails, may be provided when they are consistent with park objectives, and when site conditions are suitable. Horse camps should be designed with user interest in mind, and consistent with NPS policy. Photovoltaic systems should be evaluated to power any necessary water systems, and ramps for mounting the animals must be provided for persons with disabilities.

(See Grazing and Livestock Driveways 6.4.7; Grazing by Domestic and Feral Livestock 8.6.8; Accessibility of Commercial Services 10.2.6.2)

9.2.3.4 Bicycle Trails

Bicycle routes may be considered as an alternative to motor vehicle access. Bicycle travel ways may be integrated with park roads when determined to be safe and feasible. Bicycle trails may be paved or stabilized for the protection of resources, and for the safety and convenience of

travelers. The designation of bicycle routes, other than on park roads and in parking areas, requires a written determination that such use is consistent with the protection of a park's natural, cultural, scenic, and esthetic values, safety considerations, and management objectives, and will not disturb wildlife or other park resources.

(See General Policy 6.4.1; Backcountry Use 8.2.2.4. Also see 36 CFR 4.30)

9.2.3.5 Water Trails

Water access and use may be provided when consistent with resource protection needs. Appropriate locations and levels of use will be determined in the park's general management plan. The NPS will work with other agencies and organizations, as appropriate, to develop and provide education and interpretation for water trails that access parks; to promote understanding and enjoyment; and to protect waterways and adjacent lands.

9.2.3.6 Interpretive Trails

Interpretive trails and walks, both guided and self-guiding, may be used for purposes of visitor appreciation and understanding of park values.

9.2.3.7 National Trails

The Service will cooperate with other land managers, nonprofit organizations, and user groups to facilitate the use of national scenic, historic, and recreation trails, in accordance with the laws and policies applicable to such trails, and to the extent that trail management and use would not detract from the basic mission, and the protected resources and values, of individual parks.

(Also see Director's Order #45-1: National Scenic and Historic Trails; National Trails System Act)

9.2.3.8 Trailheads

Trailheads, and trail access points from which trail use can begin, will be carefully tied into other elements of the park development and circulation system to facilitate safe and enjoyable trail use, and efficient management.

9.2.3.9 Trail Bridges

Trail bridges may be used for crossing swift waters, areas prone to flash-flooding, and other places presenting potential safety hazards. Less obtrusive alternatives to bridges, such as culverts, fords, and trail relocation, will be considered before a decision is made to build a bridge. A bridge may be the preferred alternative when necessary to prevent stream bank erosion, or to protect wetlands or fisheries. If a bridge is determined to be appropriate, it will be kept to the minimum size needed to serve trail users, and be designed to harmonize with the surrounding natural scene and be as unobtrusive as possible.

(See Water Resource Management 4.6)

9.2.4 Traffic Signs and Markings

Signs will be limited to the minimum necessary to meet information, warning, and regulatory needs; and to avoid confusion and visual intrusion. Signs should be planned to provide a pleasing, uniform appearance. Traffic signs and pavement markings on park roads will be consistent with the standards contained in the Manual on Uniform Traffic Control Devices, as supplemented by the National Park Service Sign Manual. All roadside signs and markings will conform to good traffic engineering practices. Park signs—especially those that display the NPS

arrowhead symbol—are an important part of the total identity system for the NPS, and must conform to the standards contained in Director's Order #52C: Park Signage.

(See Navigation Aids 9.2.6; Signs 9.3.1.1)

9.2.5 Parking Areas

Parking areas and overlooks will be located so as not to unacceptably intrude, by sight, sound, or other impact, on park resources or values. When parking areas are deemed necessary, they will be limited to the smallest size appropriate, and be designed to harmoniously accommodate motor vehicles and other appropriate users. When large parking areas are needed, appropriate plantings and other design elements will be used to reduce negative visual and environmental impacts. When overflow parking is provided to meet peak visitation, it should be in areas that have been stabilized, or are otherwise capable of withstanding the temporary impacts of parking without harming park resources. Permanent parking areas will not normally be sized for the peak use day, but rather for the use anticipated on the average weekend day during the peak season of use.

(See Management of Native Plants and Animals 4.4.2; General 9.1; Transportation Systems 9.2)

9.2.6 Navigation Aids

Necessary aircraft and water navigation aids will be planned in collaboration with the Federal Aviation Administration and U.S. Coast Guard, respectively, and will be installed, maintained, and used in conformance with the standards established by these agencies only if there are no appropriate alternatives outside park boundaries. Exceptions to the standards may be authorized when necessary to meet specific park and public safety needs, provided the exceptions are jointly agreed to by the NPS and the agency having primary jurisdiction.

(See Overflights and Aviation Uses 8.4; Traffic Signs and Markings 9.2.4)

9.3 Visitor Facilities

While striving for excellence in visitor services, the NPS will limit visitor facility development to that which is necessary and appropriate. Facilities like gas stations and grocery stores may be necessary to park use and enjoyment, but it does not necessarily follow that these facilities must be located inside a park. The NPS will encourage the development of private sector visitor services in gateway communities to contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park facilities. When visitor facilities are found to be necessary and appropriate within a park, they will be designed, built, and maintained in accordance with accepted NPS standards for quality, and the NPS commitment to visitor satisfaction.

9.3.1 Informational and Interpretive Facilities

Informational and interpretive facilities will be provided to assist park visitors in appreciating and enjoying the park and understanding its significance, provided that the facilities can be developed without impairing the park's natural or cultural resources. The Harpers Ferry Center will be consulted on planning, design, and quality control for major interpretive facilities.

(See Chapter 7: Interpretation and Education; Accessibility for Persons with Disabilities 9.1.2)

9.3.1.1 Signs

Signs will be carefully planned and designed to fulfill their important roles of conveying an appropriate NPS and park image and providing information and orientation to visitors. Each park should have an approved park-wide sign plan based on Service-wide design criteria, and tailored to meet individual park needs. Entrance and other key signs will be distinctively designed to reflect the character of the park, while meeting Service-wide standards for consistency.

Signs will be held to the minimum number, size, and wording required to serve their intended functions, so as to minimally intrude upon the natural and historic settings. They will be placed where they do not interfere with park visitors' enjoyment and appreciation of park resources. Roadside information signs are subject to the standards established in the National Park Service Sign Manual. Interpretive signs will be guided by sign and wayside exhibit plans.

(See Signs 6.3.10.4; Traffic Signs and Markings 9.2.4; Navigation Aids 9.2.6. Also see Director's Order #52C: Park Signage)

9.3.1.2 Entrance Stations

Entrance and fee collection stations will be harmonious with the park environment, and should reflect the architectural character of the park.

9.3.1.3 Visitor Centers

When necessary to provide visitor information and interpretive services, visitor centers may be constructed at locations identified in approved plans. To minimize visual intrusions and impacts to major park features, visitor centers will generally not be located near such features. Where an in-park location would create unacceptable environmental impacts, authorization should be obtained to place a visitor center outside the park.

Visitor centers are not substitutes for personal or self-guiding on-site interpretation. They will be constructed only when it has been determined that indoor media are the most effective means of communicating major elements of the park story, and that a central public-contact point is needed.

As appropriate, a visitor center may include information services, sales of educational materials and theme-related items, audiovisual programs, museums, museum collections storage, exhibits, and other staffed or self-help programs and spaces necessary for a high-quality visitor experience. Additionally, the need for restrooms, drinking fountains, and other basic visitor requirements will be considered during the planning and design stage.

(See Park Management 1.4; Environmental Leadership 1.6; Non-personal Services 7.3.2; Location 9.1.1.2; Accessibility for Persons with Disabilities 9.1.2; Museum Collections Management Facilities 9.4.2)

9.3.1.4 Amphitheaters

Amphitheaters may be provided in campgrounds and in other locations where formal interpretive programs are desirable. Campfire circles may be provided in campgrounds to accommodate evening programs and informal social gatherings. Artificial lighting must be carefully directed and kept to a minimum, with due regard for natural night sky conditions.

(See Lightscape Management 4.10; Campgrounds 9.3.2.1)

9.3.1.5 Wayside Exhibits

Wayside exhibits may be provided along roads and heavily used walks and trails to interpret resources on site.

(See Non-personal Services 7.3.2)

9.3.1.6 Viewing Devices

Viewing devices, such as pedestal binoculars or telescopes, may be provided at appropriate locations when the superintendent determines that such devices are desirable for the meaningful interpretation or understanding of park resources. Such devices may be provided by the Service, or by others under a concession contract or commercial use authorization.

9.3.1.7 Facilities for Arts and Culture

Various cultural events (such as concerts, films, lectures, plays, craft shows, and art exhibits) are permitted when they will support a park's purposes and objectives. However, permanent facilities may be built specifically for cultural activities only when all of the following criteria are met:

- The permanent facility is required for programs of major importance in conveying the park story;
- It would be impossible or impractical to use demountable or temporary facilities;
- It would be impossible to adaptively use other park facilities;
- Neither the facility nor its operation would impair cultural or natural resources, or hinder the use of the park for its intended purposes; and
- It would not be feasible for others outside the park to provide the facility.

(See Use of Historic Structures 5.3.5.4.7; Special Events 8.6.2)

9.3.2 Overnight Accommodations and Food Services

Overnight facilities and food services will be restricted to the kinds and levels necessary and appropriate to achieve each park's purposes. In many cases, overnight accommodations and food services are not needed within a park. In general, they should be provided only when the private sector or other public agencies cannot adequately provide them in the park vicinity. However, inpark facilities or services may be justified when the distance and travel time to accommodations and services outside the park are too great to permit reasonable use, or when leaving the park to obtain incidental services would substantially detract from the quality of the visitor experience. Certain activities, such as backcountry use, may require overnight stays. Types of overnight accommodations may vary from unimproved backcountry campsites to motel or hotel-type lodging, as appropriate. Commercial facilities run by concessioners are addressed in greater detail in chapter 10.

(See Accessibility for Persons with Disabilities 9.1.2; Commercial Visitor Services Planning 10.2.2)

9.3.2.1 Campgrounds

When campgrounds are determined to be necessary, their design will accommodate the differences between recreation-vehicle camping and tent camping, and will consider cultural landscapes, terrain, soils, vegetation, wildlife, climate, special needs of users, visual and auditory privacy, and other relevant factors.

The Park Service generally will not provide a full range of amenities and utility hookups. Portable generators may be allowed, but they may also be limited to designated areas and times. To eliminate the need for generators, electric utilities may be provided on a limited basis. Shower facilities may be provided where feasible. Modest-sized play areas for small children are permissible, as are informal areas for field sports associated with organized group camps. Wood fires in fire rings are generally permissible; however, whenever it is necessary to restrict such fires at individual campsites because of fire danger, air pollution, or other hazards, alternatives may be provided or allowed, such as facilities for the use of charcoal or other fuels, or central cook sheds. When a need exists, sanitary dump stations will be provided in or near campgrounds that accommodate recreation vehicles.

When necessary for basic safety requirements, pathways and the exteriors of buildings and structures may be lighted. Such lighting will be energy efficient and shielded as much as possible to preserve the natural dark.

Campgrounds intended to accommodate large recreation vehicles or buses will be located only where existing roads can safely accommodate such vehicles and the resulting increased traffic load.

Campgrounds will not exceed 250 sites unless a larger number of sites has been approved by the Director.

When desirable for purposes of management, tent camping may be accommodated in separate campgrounds, or in separately designated areas within campgrounds. Provision may also be made for accommodating organized groups in separate campgrounds, or in separately designated areas.

Boaters' campgrounds may be provided in parks with waters used for recreational boating. The need for campgrounds—and their sizes, locations, and numbers—will be determined by (1) the type of water body (e.g., river, lake, reservoir, saltwater); (2) the availability and resiliency of potential campsites; (3) the feasibility of providing and maintaining docking, beaching, mooring, camping, and sanitary facilities; and (4) the potential impacts on park natural and cultural resources.

(See Soundscape Management 4.9; Lightscape Management 4.10; Recreational Fees 8.2.6.1; National Park Reservation Service 8.2.6.2; Collecting Natural Products 8.8; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2; Concession Facilities 10.2.6. Also see Director's Order #47: Soundscape Preservation and Noise Management; Director's Order #83: Public Health)

9.3.2.2 Backcountry Campsites

Backcountry and wilderness campsites may be permitted, but only within the acceptable limits of use determined by the park's wilderness management plan, resource management plan, or other pertinent planning document.

(See Wilderness Use Management 6.4; Backcountry Use 8.2.2.4)

9.3.2.3 Hostels and Shelters

Hostels are low-cost, supervised accommodations that encourage and facilitate the energy-efficient, non-motorized enjoyment of parks and their surrounding regions by individuals and

families. Such facilities, along with hostel-like accommodations such as huts and shelters, will be considered in the planning process if overnight use is determined to be an appropriate use of the park, particularly as a means of encouraging and facilitating the use of trails and backcountry areas. The Service will cooperate with other agencies, non-profit organizations, park concessioners, and others to plan and develop hostels, where appropriate. If a decision is reached to develop a hostel accommodation, it will be managed by others under the provisions of concession policies and procedures.

Hostels will, at a minimum, contain sheltered overnight accommodations and sanitary facilities, and they will usually contain cooking, eating, and recreation spaces. Hostels may be used for other park programs, such as environmental education or interpretation. Although non-motorized access to hostels is emphasized, motorized transportation may also be available.

(See Facility Planning and Design 9.1.1; Chapter 10: Commercial Visitor Services)

9.3.3 Comfort Stations

Comfort facilities will have waste disposal systems that meet Public Health Service standards. Levels of use will determine the size and nature of the utility systems provided. Low-water use or waterless (oil and composting) toilets will be considered in locations where there are water-supply and wastewater-disposal problems. Chemical toilets in portable enclosures may be used for temporary purposes when necessary. Pit privies, vault toilets, composting toilets, or other alternatives that meet public health standards may suffice in little-used areas in which utility services are not readily available.

(See General Policy 6.4.1; Backcountry Use 8.2.2.4; Accessibility for Persons with Disabilities 8.2.4; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2; Campgrounds 9.3.2.1. Also see Director's Order #83: Public Health)

9.3.4 Other Visitor Facilities

Other visitor facilities may be provided when necessary for visitor enjoyment of the area, and when consistent with the protection of park values. Visitor facilities determined to be detrimental to park resources or values will not be permitted.

9.3.4.1 Picnic and Other Day Use Areas

Picnic areas and other day use areas to be used for specific purposes (such as play areas) may be provided on a limited basis as appropriate to meet existing visitor needs.

9.3.4.2 Facilities for Water Recreation

Boating facilities (such as access points, courtesy docks, boat ramps, floating sewage pump-out stations, navigational aids, and marinas), breakwaters, and fish cleaners may be provided as appropriate for the safe enjoyment by visitors of water recreation resources, when (1) they are consistent with the purposes for which the park was established, and (2) there is no possibility that adequate private facilities will be developed. Facilities must be carefully sited and designed to avoid unacceptable adverse effects on aquatic and riparian habitats, and to minimize conflicts between boaters and other visitors who enjoy use of the park. A decision to develop water-based facilities must take into account not only the primary impacts (such as noise, air, and water pollution) of the development, but also the secondary impacts (including cumulative effects over time) that recreational use associated with the development may have on park resources and visitor enjoyment.

(See Park Management 1.4; Soundscape Management 4.9; Visitor Use 8.2; River Use 8.2.2.3; Fishing 8.2.2.5; Campgrounds 9.3.2.1; Water Trails 9.2.3.5. Also see Director's Order #47: Soundscape Preservation and Noise Management)

9.3.4.3 Skiing Facilities

The Park Service will not permit new downhill skiing facilities or associated structures in any unit of the national park system. Downhill skiing is an activity that requires extensive development, with resulting significant environmental impacts, and it should only be provided outside park areas. When such facilities have been provided based on previous policy, their use may continue, unless the development and use have caused, or may cause, impairment of park resources or values. Any proposal to eliminate, or change the capacity of, existing facilities will be accomplished through the Park Service planning process, and will involve public participation and an environmental assessment of impacts.

(See Decision-making Requirements to Avoid Impairments 1.4.7; Recreational Activities 8.2.2)

9.3.5 Advertising

Commercial notices or advertisements will generally not be displayed, posted, or distributed on the federally owned or federally controlled land, water, or airspace of a park. A superintendent may permit advertising only if the notice or advertisement is for goods, services, or facilities available within the park, and if such notices and advertisements are found to be desirable and necessary for the convenience and guidance of the public. Acceptable forms of advertising will be addressed, as necessary, in concession contracts and cooperating association agreements.

Billboard advertising will in no case be permitted within a park and, in general, will be discouraged on approach roads outside of parks when it would adversely affect a park's scenic values.

NPS policy does not prohibit "donor recognition," which occurs when the NPS publicly thanks an individual, corporation, or some other entity for their gift or service to the NPS.

In accordance with Part 470 of the DOI manual, the Service will not use paid advertising in any publication in connection with its programs and activities, except where special legal requirements and authority exist. If a superintendent believes paid advertising is necessary because of the significant benefits it affords in enhancing public participation, prior approval must be obtained from the WASO Office of Public Affairs.

(See Cooperating Associations 7.6.2; Concession Contracting 10.2.3. Also see Director's Order #21: Donations and Fundraising, 36 CFR 5.1)

9.4 Management Facilities

Where authorized by Congress, management facilities will be located outside park boundaries whenever the management functions being served can be adequately supported from such a location. When management facilities must be located inside the park, they will be located away from primary resources and features of the park, and sited so as to not adversely affect park resources or values, or detract from the visitor experience. Historic properties will be used to the maximum extent practicable, provided that the use will not affect their significance.

Modular, pre-cut, or prefabricated structures may be used for management facilities, including administrative offices, employee housing, and maintenance structures, when products meeting design requirements are available. Standard plans will be modified to reflect regional and park design themes, and harmonize with the natural surroundings; preserve the natural and cultural environments; provide for resource conservation; provide for energy efficiency or the use of renewable energy sources; limit chemical emissions; and foster education about sustainable design.

(See Park Management 1.4; Environmental Leadership 1.6; Use of Historic Structures 5.3.5.4.7; Accessibility for Persons with Disabilities 8.2.4; Facility Planning and Design 9.1.1; Accessibility for Persons with Disabilities 9.1.2. Also see Director's Orders #89: Space Management; and #90: Value Analysis)

9.4.1 Administrative Offices

The location of administrative offices will be determined by conditions specific to each park, including impacts on park resources, availability and adequacy of leasable space outside the park, relationship to adjacent communities, convenience to visitors, weather, energy consumption, comparative costs, commuting distance for employees, and management effectiveness.

(See Facility Planning and Design 9.1.1; Energy Management 9.1.7)

9.4.2 Museum Collections Management Facilities

Park curatorial facilities should be adapted to the needs of each park. They may share space in visitor centers or administrative office buildings, or be housed in completely separate buildings. Incorporation with maintenance facilities should be avoided because of the heightened danger of fire, chemical spills, and similar accidents. Curatorial facilities will meet each collection's special requirements for security, fire suppression, and environmental controls.

The operation of environmental control systems to meet the temperature, relative humidity, particulate, and, as necessary, pollutant control specifications for museum collections are typically more energy intensive than those for structures with staff and offices. In order to ensure energy efficiency and the correct performance of the systems to protect the resource, the thermal performance of the building envelope and the efficiency of the systems must be addressed in facility planning and design. Prior to planning a collections management facility, the park, in consultation with subject-matter specialists, must complete a value analysis that evaluates various options for addressing the collections management needs of the park, including on-site and off-site locations.

(See Museum Collections 5.3.5.5; Fire Detection, Suppression, and Post-fire Rehabilitation and Protection 5.3.1.2; Environmental Monitoring and Control 5.3.1.4. Also see Director's Order #24: NPS Museum Collections Management)

9.4.3 Employee Housing

The NPS will rely on the private sector to provide housing for NPS employees. If housing is not available in the private sector, the Service will provide only the number of housing units necessary to support the NPS mission.

Occupancy is permitted or required to provide for timely response to park protection needs, to ensure reasonable deterrence to prevent threats to resources, and to protect the health and safety

of visitors and employees. Such prevention or response services will determine acceptable and appropriate locations for employee housing that is provided for the benefit of the government in meeting the NPS mission.

9.4.3.1 Accountability

A needs assessment will be prepared every two years to determine the necessary number of housing units in a park. Park superintendents are accountable to their regional directors for employee housing in their parks. Regional directors are responsible for ensuring the consistent application of Service-wide housing policy.

9.4.3.2 Eligible Residents

Park housing will be provided for persons who are essential to the management and operation of the park. These may include not only NPS employees, but also concession employees, volunteers in the parks, Student Conservation Association volunteers, researchers, essential cooperators (e.g., schoolteachers, health personnel, contractors, state or county employees), and employees of another federal agency.

9.4.3.3 Historic Structures

The use of historic structures for housing is encouraged when NPS managers determine that this use contributes to the preservation of these structures, and when feasible cost-effective alternatives have been considered.

(See Use of Historic Structures 5.3.5.4.7; Adaptive Use 9.1.1.4)

9.4.3.4 Housing Management Plans

A housing management plan will be prepared for each park, and be updated every two years (or more frequently, if necessary). The plans will include an assessment of housing needs to meet the mission of the park.

9.4.3.5 Design and Construction

Because of location, use, and other unique factors, special design concerns must be considered for housing constructed in parks. Housing must be designed to be as much a part of the natural or cultural setting as possible, yet it must be well-built, functional, energy efficient, and cost effective. The design of park housing will minimize impacts on park resources and values, comply with the standards for quality design, and consider regional design and construction influences. Value analysis principles will be applied in all NPS housing construction projects. Design costs will be kept to a minimum by using designs from the NPS Standard Design Catalog and a cost model.

(See Facility Planning and Design 9.1.1. Also see Director's Orders #36: Housing Management, and #90: Value Analysis)

9.4.4 Maintenance Structures

Maintenance structures will be consistent in design, scale, texture, and details with other park facilities. Optimally, they will be screened or located in areas remote from public use. Wherever feasible, NPS and concessioner maintenance facilities will be adjacent and integrated in design, to facilitate operations and to reduce impacts on park resources.

9.4.5 Miscellaneous Management Facilities

When installations such as landing sites and airstrips, fire towers, weather monitors, research stations, communication towers, and pump houses are necessary, they will be located and designed to minimize their impact on resources and their intrusion on the visitor experience. Whenever possible and practicable, such installations will be located within developed park areas. Totally utilitarian facilities, such as maintenance storage yards, sewage lagoons, and solid waste disposal sites—when they absolutely must be developed inside a park—will be sited so as to avoid adverse impacts to resources and provide visual screening. Alternative energy applications and sustainable wastewater treatment facilities, such as aquaculture ponds, wetlands, and rootzone beds, may be located in more visible areas when they are important to interpretive and educational objectives.

(See Environmental Leadership 1.6; Studies and Collections 4.2; General Policy 6.3.1; Airports and Landing Sites 8.4.8; Facility Planning and Design 9.1.1; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2; Waste Management 9.1.6.1; Maintenance Structures 9.4.4)

9.5 Dams and Reservoirs

Dams and reservoirs will not be constructed in parks. The National Park Service will seek to deactivate existing structures unless they contribute to the cultural, natural, or recreational resource bases of the area, or are a necessary part of a park's water supply system.

All dams will be subject to annual safety inspections. Each park with a dam or reservoir will prepare an emergency action plan. The emergency action plan will also address potential hazards posed by dams outside the park and beyond the Service's control. The National Park Service inventory of dams will be used to record all NPS and non-NPS dams and reservoirs, and any other type of stream flow control structures affecting units of the national park system, including those that are proposed or have been deactivated.

(See Water Quality 4.6.3; Floodplains 4.6.4; Wetlands 4.6.5; Watershed and Stream Processes 4.6.6; Emergency Preparedness and Emergency Operations 8.2.5.2; Water Supply Systems 9.1.5.1; Wastewater Treatment Systems 9.1.5.2. Also see Director's Order #40: Dams and Appurtenant Works)

9.6 Commemorative Works and Plaques

9.6.1 General

For the purpose of this section, the term "commemorative work" means any statue, monument, sculpture, memorial, plaque, or other structure or landscape feature, including a garden or memorial grove, designed to perpetuate in a permanent manner the memory of a person, group, event, or other significant element of history. It also includes the naming of park structures or other features—including features within the interior of buildings. Within the District of Columbia and its environs, the Commemorative Works Act prohibits the establishment of commemorative works unless specifically authorized by Act of Congress. Outside of the District of Columbia and its environs, commemorative works will not be established unless authorized by Congress or approved by the Director (36 CFR 2.62). The consultation process required by section 106 of NHPA must be completed before the Director will make a decision to approve a commemorative work.

To be permanently commemorated in a national park is a high honor, affording a degree of recognition that implies national importance. At the same time, the excessive or inappropriate use of commemorative works—especially commemorative naming—diminishes its value as a tool for recognizing people or events that are truly noteworthy, and has the potential for diverting attention from the important resources and values which park visitors need to learn about. Therefore, the National Park Service will discourage and curtail the use and proliferation of commemorative works except when:

- Congress has specifically authorized their placement; or
- There is compelling justification for the recognition, and the commemorative work is the best way to express the association between the park and the person, group, event, or other subject being commemorated.

In general, compelling justification for a commemorative work will not be considered unless:

- The association between the park and the person, group, or event is of exceptional importance; and
- In cases where a person or event is proposed for commemoration, at least five years have elapsed since the death of the person (or the last member of a group), or at least 25 years have elapsed since the event. (Within the District of Columbia and its environs, refer to the Commemorative Works Act for more specific requirements.)

Simply having worked in a park, or having made a monetary or other type of donation to a park, does not necessarily meet the test of "compelling justification." In these and similar cases, other forms of recognition should be pursued. Donor recognition must be consistent with Director's Order #21: Donations and Fundraising.

With regard to the naming of park structures, names that meet the criteria listed above may be approved by the Director. Names that do not meet those criteria will require legislative action.

9.6.2 Interpretive Works That Commemorate

The primary function of some commemorative works—most often in the form of a plaque presented by an outside organization—is to describe, explain, or otherwise attest to the significance of a park's resources. These devices are not always the most appropriate medium for their intended purpose, and their permanent installation may not be in the best long-term interests of the park. Therefore, permanent installations of this nature will not be allowed unless it can be clearly demonstrated that the work will substantially increase visitors' appreciation of the significance of park resources or values, and do so more effectively than other interpretive media.

With regard to Civil War parks, new commemorative works will not be approved, except where specifically authorized by legislation. However, consideration may be given to proposals that would commemorate groups that were not allowed to be recognized during the commemorative period.

In those parks where there is legislative authorization to erect commemorative works, superintendents will prepare a plan to control their size, location, materials, and other factors necessary to protect the overall integrity of the park. The plan may include a requirement for an endowment to cover the costs of maintaining the commemorative work.

9.6.3 Approval of Commemorative Works

Before being approved, a determination must be made, based on consultation with qualified professionals, that the proposed commemorative work will:

- Be designed and sited to avoid disturbance of natural and cultural resources and values;
- Be located in surroundings relevant to its subject;
- Be constructed of materials suitable to and compatible with the local environment;
- Meet NPS design and maintenance standards;
- Not encroach on any other pre-existing work, or be esthetically intrusive;
- Not interfere significantly with open space and existing public use; Not divert attention from a park's primary interpretive theme; and
- Not be affixed to the historic fabric of a structure.

The Director may order the removal or modification of commemorative works that were installed without proper authorization, or that are inconsistent with the policies in this section. Temporary forms of in-park recognition, and permanent forms that will not be constructed or installed within park boundaries, do not require the Director's approval.

The naming of geographic features is subject to approval by the U.S. Board on Geographic Names. NPS proposals for naming geographic features will follow the procedures described in Director's Order #63: Geographic Names.

(Also see Director's Order #67: Copyright and Trademarks; U. S. Board on Geographic Names "Principles, Policies, and Procedures: Domestic Geographic Names")

9.6.4 Pre-existing Commemorative Works

Many commemorative works have existed in the parks long enough to qualify as historic features. A key aspect of their historical interest is that they reflect the knowledge, attitudes, and tastes of the persons who designed and placed them. These works and their inscriptions will not be altered, relocated, obscured, or removed, even when they are deemed inaccurate or incompatible with prevailing present-day values. Any exceptions require specific approval by the Director.

9.6.5 Donated Commemorative Works

While commemorative works and other forms of in-park permanent recognition will not be used to recognize monetary contributions or other donations to a park or the Service, there may be occasions when an authorized or approved commemorative work will be offered or provided by a private donor. Names of donors will be discouraged from appearing on commemorative works. If they do appear, donor names will be conspicuously subordinate to the subjects commemorated. Donations of commemorative works should include sufficient funds to provide for their installation, and an endowment for their permanent care.

(See Non-personal Services 7.3.2; Cemeteries and Burials 8.6.10. Also see Director's Order #64: Commemorative Works and Plaques)

9.6.6 Commemorative Works in National Cemeteries

Regulations governing commemorative works associated with national cemeteries are found in 36 CFR Part 12; and Director's Order #61: National Cemeteries.

10 Commercial Visitor Services

The National Park Service will provide, through the use of concession contracts, commercial visitor services within parks that are necessary and appropriate for visitor use and enjoyment. Concession operations will be consistent with the protection of park resources and values and demonstrate sound environmental management and stewardship.

Public accommodations, facilities, and services must be consistent to the highest practicable degree with the preservation and conservation of park resources and values.

10.1 General

Commercial visitor services will be authorized through concession contracts or commercial use authorizations, unless otherwise provided by law. Section 10.2 addresses concession authorizations. Section 10.3 addresses commercial use authorizations.

(Also see Director's Orders #48A: Concessions Management, and #48B: Commercial Use Authorizations)

10.2 Concessions

10.2.1 Concession Policies

Concession operations are subject to the provisions of the National Park Service Concessions Management Improvement Act of 1998; National Park Service regulations published at 36 CFR Part 51; this chapter of NPS *Management Policies*; and Director's Order #89A: Concession Management, and other specific guidance that may be issued under the Director's authority.

10.2.2 Commercial Visitor Services Planning

Commercial visitor services planning will identify the appropriate role of commercial operations in helping parks to achieve desired visitor experiences, and will be integrated into other plans and planning processes.

Concession management plans or commercial services plans will support a park's purpose and significance, exceptional resource values, and visitor experience objectives, and will be consistent with enabling legislation. These plans will also determine whether proposed concession facilities and services are necessary and appropriate, and will consider alternatives. Proposed concession operations must be economically feasible and generally supported by a feasibility study prepared by a qualified individual.

Any concession facilities improvement program, or any service authorized in a concession contract, will be in conformance with the appropriate approved plan(s) for the area being considered. A decision to authorize a park concession will be based on a determination that the facility or service:

- Is necessary and appropriate for the public use and enjoyment of the park in which it is located, and identified needs are not, nor can they be, met outside park boundaries;
- Will be provided in a manner that furthers the protection, conservation, and preservation of the environment, and park resources and values;
- Incorporates sustainable principles and practices in planning, design, siting, construction, utility systems, selection and recycling of building materials, and waste management; and
- Will enhance visitor use and enjoyment of the park without causing unacceptable impacts to park resources or values.

The number, location, and sizes of sites assigned for necessary facilities will be the minimum necessary for proper and satisfactory operation of the facilities, emphasizing compatibility of design; preservation of esthetic values, and natural and cultural resources; and integration of sustainable design concepts.

For information about leasing historic structures for concession purposes, see Director's Order #38: Real Property Leasing.

10.2.3 Concession Contracting

Approved standard contract language will be used in all National Park Service concession contracts.

10.2.3.1 Terms and Conditions of Contracts

Concession services will be authorized under concession contracts, unless otherwise authorized by law. The term of a concession contract will generally be 10 years or less. However, the Director may award a contract for a term of up to 20 years if the Director determines that the contract terms and conditions, including the required construction of capital improvements, warrant a longer term. In this regard, the term of concession contracts should be as short as is prudent, taking into account the financial requirements of the concession contract, resource protection, visitor needs, and other factors that the Director may deem appropriate.

10.2.3.2 Modifications

Concession contracts may be modified only by written amendment. Amendments developed after the issuance of a concession contract must be consistent with current National Park Service policies and orders. Unless otherwise authorized by the contract, a concession contract may be amended to provide additional visitor services only if the services are minor and comprise a reasonable extension of the existing services.

10.2.3.3 Extension

Concession contracts may be extended only in accordance with the requirements of 36 CFR Part 51, subpart D. The signature authority for contract extensions or amendments must be consistent with delegations of authority from the Director.

10.2.3.4 Competition

In order to obtain the best service provider and maximize benefits to the government, the National Park Service encourages competition in the awarding of concession contracts. The National Park Service also encourages, through outreach, the participation of American Indian, minority and women-owned businesses when new business activities occur.

10.2.3.5 Third-party Agreements and Sub-concessions

Unless specified in the contract, sub-concession or other third-party agreements, including management agreements, for the provision of visitor services that are required and/or authorized under concession contracts are not permitted. The NPS may also advertise for a new concession contract to provide these additional services.

10.2.3.6 Multi-park Contracts

Concessioners operating in more than one park unit must have separate contracts for each park unit. An exception may be made in the case of those park units having common National Park Service management or where service is provided in contiguous park areas (for example, a pack trip that crosses the boundary of two adjoining parks).

10.2.3.7 Termination

The Service may terminate concession contracts for default and under any other circumstances specified in the concession contract.

10.2.4 Concession Operations

10.2.4.1 Operating Plans

The operating plan is an exhibit to the concession contract, and will describe operative responsibilities authorized in the contract between the concessioner and the NPS. The plan is reviewed and updated annually by the Service, in accordance with the terms of the contract. Operating plans are considered an integral part of a concessioner's contractual performance compliance.

10.2.4.2 Service Type and Quality

It is the objective of the National Park Service that park visitors be provided with high-quality facilities and services. Where appropriate, the concession contract will specify a range of facility, accommodation, and service types that are to be provided at reasonable rates.

10.2.4.3 Evaluation of Concession Operations

Concession operations will be evaluated to ensure that park visitors are provided with high-quality services and facilities are safe and sanitary and meet environmental, health, safety, and operational standards. As outlined in the Concessioner Operational Evaluation Program, the evaluation results will provide a basis for NPS management to determine whether to continue or terminate a concession contract, and whether a concessioner is eligible to exercise a right of preference in the award of a qualified new concession contract.

10.2.4.4 Interpretation by Concessioners

Concessioners will be encouraged to train their employees and, through their facilities and services, to instill in their guests an appreciation of the park, its purpose and significance, its proper and sustainable management, and the stewardship of its resources. When the provision of interpretive services is required by the contract, concessioners will provide formal interpretive training for their employees, or will participate in formal interpretive training that is either offered by the NPS or co-sponsored by the concessioner.

Instilling appreciation of the park in visitors can be accomplished in many ways. For example, it can be accomplished through guided activities; the design, architecture, landscape, and decor of facilities; educational programs; interpretive menu design and menu offerings; and involvement in the park's overall interpretive program. Gift shop merchandise and displays also present opportunities to educate visitors about park history; natural, cultural, and historical resources; and sustainable environmental management.

Concession contracts will require the concessioner to provide all visitor services in a manner that is consistent with, and supportive of, the interpretive themes, goals, and objectives articulated in each park's planning documents, mission statement, and/or interpretive prospectus.

(See Chapter 7: Interpretation and Education)

10.2.4.5 Merchandise

The National Park Service will approve the nature, type, and quality of merchandise to be offered by concessioners. Although there is no Service-wide list of specific preferred merchandise, priority will be given to those sale items that interpret, and foster awareness and understanding of, the park and its resources. Merchandise should have interpretive labeling, or include other information to indicate how the merchandise is relevant to the park's interpretive theme(s).

Each park with concession activities will have a gift shop mission statement, based on the park's concession service plan or GMP. Concessioners will develop and implement a merchandise plan based on the park's gift-shop mission statement. The merchandise plan must be satisfactory to the Director, and should ensure that merchandise sold or provided reflects the significance of the park, and promotes the conservation of the park's geology; wildlife; plant life; archeology; local Native American culture; local ethnic culture; historical significance; and other park resources and values. The plan should also integrate pollution prevention and waste-reduction objectives and strategies for merchandise. Merchandise must be available at a range of prices. Themerelated merchandise manufactured or handcrafted in the United States—particularly in a park's geographic vicinity—will be emphasized. The revenue derived from the sale of United States Indian, Alaska native, native Samoan, and native Hawaiian handcrafts is exempt from any franchise fee payments. Foreign merchandise is not encouraged, but will not be prohibited.

10.2.4.6 Artifacts and Specimens

Concessioners will not be permitted to sell any merchandise in violation of laws, regulations, or National Park Service policies. Some merchandise may be determined by the park superintendent to be locally sensitive or inappropriate for sale, and may, at the discretion of the superintendent, be prohibited for retail sale. The sale of original objects, artifacts, or specimens of a historic, archeological, paleontological, or biological nature is prohibited. Replicated historic, archeological, paleontological, or biological objects, artifacts, or specimens may be sold if they are obvious replicas and clearly labeled.

Any geological merchandise that is approved for sale or exhibit by concessioners must be accompanied by appropriate educational material and a written disclaimer clearly stating that such items were not obtained from inside park boundaries. The proposed sale of any replicas, or of geological merchandise, must be addressed in the gift shop merchandise plan.

10.2.4.7 Rates

The National Park Service must approve all rates charged to visitors by concessioners. The reasonableness of a concessioner's rates and charges to the public will, unless otherwise provided in the contract, be judged primarily on the basis of comparison with current rates and charges for facilities and services of comparable character under similar conditions. Due consideration will be given to length of season, provision for peak loads, average percentage of occupancy, accessibility, availability and costs of labor and materials, type of patronage, and other factors deemed significant by the Director.

10.2.4.8 Risk Management Program

Concession contracts require each concessioner to develop a risk management program, which is approved by the superintendent, and is in accord with the Occupational Safety and Health Act and the National Park Service Concession Risk Management Program.

Concessioners are responsible for managing all of their operations in a manner that minimizes risk and controls loss due to accident, illness, or injury. To ensure compliance, the Service will include a risk management evaluation as part of its standard operational review of concession operations.

10.2.4.9 Natural and Cultural Resource Management Requirements

Concessioners are required to comply with applicable provisions of all laws, regulations, and policies that apply to natural and cultural resource protection. The use, maintenance, repair,

rehabilitation, restoration, or other modification of concession facilities that are listed on or eligible for the National Register of Historic Places are subject to the applicable provisions of all laws, Executive orders, regulations, and policies pertaining to cultural properties.

The National Park Service will assist concessioners in understanding and complying with regulations for the protection of historic properties (36 CFR Part 800) promulgated by the Advisory Council on Historic Preservation. Historic structures and their contents and museum objects that are in the control of concessioners will be treated in accordance with the appropriate standards contained in National Park Service guidance documents.

(See Chapter 4, Natural Resource Management; Use of Historic Structures 5.3.5.4.7. Also see Reference Manual 24: the Museum Handbook, and 28: the Cultural Resource Management Guideline; Director's Order #38: Real Property Leasing, and #48A: Concessions Management)

10.2.4.10 Environmental Program Requirements

In the operation of visitor services, concessioners will be required by contract to meet environmental compliance objectives by:

- Complying with all applicable laws pertaining to the protection of human health and the environment; and
- Incorporating best management practices (BMPs) in all operations, construction, maintenance, acquisition, provision of visitor services, and other activities under the contract.

Concessioners will be required by contract to develop, document, implement, and comply fully with, to the satisfaction of the Director, a comprehensive, written environmental management program (EMP) to achieve environmental management objectives. The EMP must be updated at least annually, and must be approved by the Director.

The EMP must account for all activities with potential environmental impacts conducted by the concessioner, or to which the concessioner contributes. The scope and complexity of the EMP may vary based on the type, size, and number of concessioner activities.

Superintendents are encouraged to require the EMP to be submitted as part of the prospectus package. The National Park Service will review concessioner compliance with the EMP under the contract. The National Park Service will also conduct environmental compliance audits of all commercial visitor services at least every three years in accordance with the concessions environmental audit program. The concessioner will be responsible for corrective actions required by law, and identified during the environmental compliance audits.

The National Park Service will assist concessioners in understanding environmental program requirements, and will also include an environmental management evaluation as part of its annual standard operational reviews of concession operations.

(See Compensation for Injuries to Natural Resources 4.1.6; Compensation for Damages 5.3.1.3; Integrated Pest Management Program 4.4.5.2; Overnight Accommodations and Food Services 9.3.2. Also see Director's Order #83: Public Health)

10.2.4.11 Insurance

Concession contracts will identify the types and minimum amounts of insurance coverage required of concessioners in order to:

- provide reasonable assurance that concessioners have the ability to cover bona fide claims for bodily injury, death, or property damage arising from an action or omission of the operator;
- protect the government against potential liability protect the government against potential liability for claims based on the negligence of the operators; and
- enable rapid repair or replacement of essential visitor facilities located on park lands that are damaged or destroyed by fire or other hazards.

Concessioners will not be permitted to operate without liability insurance. Under limited conditions, concessioners may operate without property insurance, as described in Director's Order #48A: Concession Management.

10.2.4.12 Food Service Sanitation Inspections

Concessioners who prepare food on or off park lands, or serve food on park lands will be subject to inspection for compliance with all applicable health and sanitation requirements of local and state agencies, the U.S. Public Health Service, and the Food and Drug Administration.

(Also see Director's Order #83: Public Health)

10.2.4.13 Smoking

Generally, all NPS concession facilities will be smoke free. The only exceptions will be specifically designated smoking areas and rooms. The sale of tobacco products through vending machines is prohibited.

(See Executive Order 13058 (Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace))

10.2.5 Concessions Financial Management

Concession contracts must provide for payment to the government of a franchise fee, or other monetary consideration as determined by the Secretary, upon consideration of the probable value to the concessioner of the privileges granted by the particular contract involved. Such probable value will be based upon a reasonable opportunity for net profit in relation to capital invested and the obligations of the contract. Consideration of revenue to the United States is subordinate to the objectives of protecting and preserving park areas and of providing necessary and appropriate services for visitors at reasonable rates.

10.2.5.1 Franchise Fees

The amount of the franchise fee or other monetary consideration paid to the United States for the term of the concession contract must be specified in the concession contract and may only be modified to reflect extraordinary unanticipated changes from the conditions anticipated as of the effective date of the contract. Contracts with a term of more than five years will include a provision that allows reconsideration of the franchise fee at the request of the Secretary or the concessioner in the event of such extraordinary unanticipated changes. Such provision will provide for binding arbitration in the event that the Secretary and the concessioner are unable to agree upon an adjustment to the franchise fee in these circumstances.

10.2.5.2 Franchise Fee Special Account

All franchise fees and other monetary considerations will be deposited into a Department of the Treasury special account. In accordance with the NPS Concessions Management Improvement Act of 1998, twenty percent (20%) will be available to support activities throughout the national

park system, and eighty percent (80%) will be available to the park unit in which it was generated, for visitor services and funding high-priority and urgently necessary resource management programs and operations.

10.2.5.3 Record-keeping System

All concessioners will establish and maintain a system of accounts and a record-keeping system that utilize written journals and general ledger accounts to facilitate the preparation of annual concessioner financial reports.

10.2.5.4 Annual Financial Reports

Concessioners will be required to submit an annual financial report that reflects only the operations that they are authorized to pursue.

10.2.5.5 Donations to the NPS

The National Park Service will not solicit or accept donations or gifts from entities that have, or are seeking to obtain or establish a contract, lease, or other business arrangement with the Service. Nor will the NPS require any concessioner to donate or make contributions to the Service under any circumstance, including the incorporation of such a requirement in concession contracts. Further guidance on donations is available in Director's Order #21: Donations and Fundraising.

10.2.6 Concession Facilities

10.2.6.1 Design

Concession facilities will be of a size and at a location that the Service determines to be necessary and appropriate for their intended purposes. All concession facilities must comply with applicable federal, state, and local construction codes, and meet accessibility requirements as set forth in applicable accessibility guidelines. Proposed concession facilities must conform to NPS standards for sustainable design, universal design, and architectural design. Concession development or improvement proposals must undergo review for compliance with NEPA and section 106 of NHPA (16 USC 470f), and be carried out in a manner consistent with applicable provisions of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, and other applicable legal requirements.

In addition to general park design requirements, the NPS will apply value analysis during the design process to analyze the functions of facilities, processes, systems, equipment, services, and supplies. Value analysis must be used to help achieve essential functions at the lowest life-cycle cost, consistent with required performance, reliability, environmental quality, and safety criteria and standards.

(See Facility Planning and Design 9.1.1)

10.2.6.2 Accessibility of Commercial Services

Concessioners share the National Park Service's responsibility to provide employees and visitors with the greatest degree of access to programs, facilities, and services that is reasonable, within the terms of existing contracts and agreements. Applicable laws include, but are not limited to (1) regulations issued under the authority of section 504 of the Rehabilitation Act of 1973, as amended (43 CFR Part 17), which prohibits discrimination on the basis of disability in programs or activities conducted by federal executive agencies; and (2) the Architectural Barriers Act of 1968, which requires physical access to buildings and facilities. Where there is no specific

language identifying applicable accessibility laws in an existing concession contract, the NPS will address the issue of compliance in the annual concession operating plan.

(See Physical Access for Persons with Disabilities 5.3.2; Accessibility for Persons with Disabilities 8.2.4 and 9.1.2. Also see Director's Order #42: Accessibility for Visitors with Disabilities)

10.2.6.3 Maintenance

Concession contracts will require concessioners to be responsible for all maintenance and repair of facilities, lands, and utility systems assigned for their use, in accordance with standards acceptable to the Service. Exceptions will be made only in extraordinary circumstances, as determined by the Director. All concession contracts must include a current maintenance plan as specified in the concession contract. Maintenance plans are an exhibit to the concession contract and will be considered an integral part of a concessioner's contractual performance compliance.

Maintenance of historic properties and cultural landscapes will be carried out in a manner consistent with applicable provisions of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

10.2.6.4 Utilities and Services

Utilities include, but are not limited to, electricity, fuel, natural gas, water, disposal of wastewater and solid waste, and communication systems. The Service may provide utilities to the concessioner for use in connection with the operations required or authorized under the contract, when available, at rates to be determined in accordance with applicable laws. If the Service does not provide utilities to the concessioner, the concessioner will, with the written approval of the Director, and under any requirements prescribed by the Director, (1) secure necessary utilities at its own expense from sources outside the area; or (2) install the utilities within the area, subject to conditions mentioned in the contract.

(Also see Director's Order #35B: Sale of Park Utilities and Services to Support Activities Within Parks)

10.2.6.5 Closure of Commercial Operations During Government Shutdown

The Anti-Deficiency Act requires federal agencies to suspend all non-essential activities whenever there is a failure to enact an appropriations bill or adopt a continuing resolution. All concessioner-operated programs and services must cease, and visitors must be asked to leave within 48 hours.

All commercial facilities and services in a park will be closed in order to protect the safety of visitors and the integrity of park resources. Exceptions to this policy include concessions that are required for health and safety purposes or protection of the environment, or necessary to support park operations that are deemed essential, such as law enforcement. Commercial facilities located on through-roads (roads or public highways that begin and end outside of a park, plus parkways) and public highways may remain open if doing so does not result in additional costs to the park (for example, the staffing of entrance stations). These commercial facilities may include operations such as service stations, food services, stores, and lodging, or portions of such operations that will not contribute to additional park expenses. The commercial facility in question should have access directly from the road or highway, and not require the re-opening of park roads having other destinations.

More specific aspects of closures may be guided by a Service-wide shutdown plan.

10.2.7 Concessioner Employees and Employment Conditions

10.2.7.1 Non-discrimination

Concessioners will comply with all applicable laws and regulations relating to nondiscrimination in employment and the provision of services to the public.

10.2.7.2 Substance Abuse

In compliance with state and federal regulations condemning substance abuse, the NPS prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol. The Service also prohibits the unlawful manufacture, cultivation, processing, or transportation of illicit drugs. This policy applies to concessioners and their employees, at any facility or in any activity taking place on National Park Service lands. Concessioners are required to provide and advise employees about the availability of Employee Assistance Programs addressing substance abuse problems.

10.2.8 National Park Service Employees

10.2.8.1 Accepting Gifts and Reduced Rates from Concessioners

National Park Service employees may not receive concessioner goods or services at a discount unless it is in connection with official business, is to the government's advantage, and is provided for under the terms of a concession contract. However, employees may accept reduced rates or discounts offered by the concessioner when those same reduced rates or discounts are available to the general public.

National Park Service employees may not solicit or accept, directly or indirectly, any gift, gratuity, favor, entertainment, loan, or any other thing of monetary value from a concessioner or other person who conducts operations and activities that are regulated by the Department of the Interior. Employees should consult with their assistant ethics counselor regarding the limited exceptions to the general prohibition on accepting gifts from outside sources.

10.2.8.2 Employment of NPS Personnel or Family Members by Concessioners

Federal law prohibits government employees from making recommendations, decisions, or approvals relating to applications, contracts, controversies, or other matters in which the employee or the employee's spouse or minor child has a financial interest. Park employees may not make decisions, approvals, or recommendations related to concession activities when their spouse or dependent child is employed by a park concessioner in that particular park. For example, the spouse or dependent child of the superintendent, assistant superintendent, concession staff, environmental manager, or public health specialist may not be employed by a concessioner in the specific park in which the NPS employee works.

(Also see Director's Order #37: Home Businesses in Parks)

10.2.8.3 NPS Employee Ownership or Investment in Concession Businesses

Department of the Interior policy prohibits employees and their spouses and minor children from acquiring or retaining for commercial purposes any permit, lease, or other rights granted by the Department for conducting commercial services on federal lands. Therefore, no National Park Service concession contract or commercial use authorization to conduct commercial services in a park will be issued to National Park Service employees or their spouses and minor children who are owners, partners, corporate officers, or general managers of any business seeking such a

contract in federal land managed by the Department of the Interior. Further, to avoid the appearance of partiality and conflicts of interest, and to comply with ethics laws that apply to all federal employees, National Park Service employees may not work on any matter involving a business in which they, their spouse, or their minor children have a financial interest.

10.2.8.4 Concession Management Personnel Qualifications

To effectively carry out the concession management program, managers and supervisors will make every effort to ensure that personnel selected for positions meet the essential competencies established for the position being filled. When concession management personnel lack the full complement of essential competencies or require refresher training for their position, managers and supervisors will ensure that those employees are trained and certified as competent. All personnel vacancy announcements issued for concession management must include program competencies.

10.3 Commercial Use Authorizations

Commercial (CUAs) may be issued under the authority of 16 USC 5966. CUAs are not considered concessions contracts.

As of the date of publication of this edition of Management Policies, the NPS has not yet issued policies or regulations for the administration of CUAs. However, the applicable provisions of law are quite prescriptive and should be carefully considered. A more detailed discussion of CUAs will be included at a later date in implementing regulations and Director's Order 48B: Commercial Use Authorizations.

Appendix A

Laws Cited in Text

Abandoned Shipwreck Act of 1987 43 USC¹ 2101—2106; PL 100-298

(commonly known as the Acquired Lands Mineral Leasing Act)

30 USC 301—306; May 21, 1930, ch. 307, 46 Stat. 373

Administrative Procedure Act (APA)

5 USC 551 et seq.²; June 11,1946, ch. 324, 60 Stat. 237

Alaska National Interest Lands Conservation Act (ANILCA)

16 USC 3101-3233; PL 96-487

American Indian Religious Freedom Act (AIRFA)

42 USC 1996-1996a; PL 95-341, 103-344

Americans with Disabilities Act of 1990 (ADA)

42 USC 12101—12213; PL 101-336

Animal Welfare Act

7 USC 2131—2159; PL 89-544, 94-279

Anti-Deficiency Act

31 USC 1341; July 12, 1870, ch. 251, 16 Stat. 251. PL 97-258

Antiquities Act of 1906

16 USC 431—433; June 8, 1906, ch. 3060, 34 Stat. 225

Archaeological Resources Protection Act of 1979 (ARPA)

16 USC 470aa-470mm; PL 96-95

Architectural Barriers Act of 1968 42 USC 4151—4157; PL 90-480

Clean Air Act

42 USC 7401-7671q: PL 88-206

Coastal Zone Management Act of 1972 (CZMA)

16 USC 1451—1465; PL 89-454, 92-583

Commemorative Works Act

40 USC 1001—1010; PL 99-652

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)

42 USC 9601—9675; PL 96-510

Endangered Species Act of 1973

16 USC 1531-1544; PL 93-205

Energy Policy Act of 1992

42 USC 13201-13556; PL 102-486

Federal Advisory Committee Act (FACA)

5 USC App. 1—16; PL 92-463

Federal Cave Resources Protection Act of 1988 (FCRPA)

16 USC 4301-4310; PL 100-691

Federal Insecticide, Fungicide and Rodenticide Act

7 USC 136-136y; PL 92-516

Federal Managers' Financial Integrity Act of 1982

31 USC 3512(d); PL 97-255, 97-258

Federal Water Pollution Control Act (commonly known as the Clean Water Act) 33 USC 1251—1387; PL 92-500, 95-217

Freedom of Information Act (FOIA)

5 USC 552; PL 89-554, 90-23

General Mining Act of 1872

30 USC 22 et seq.³; May 10, 1872, ch. 152, 17 Stat. 91

Geothermal Steam Act of 1970

30 USC 1001-1028; PL 91-581, 100-443

Government Performance and Results Act of 1993 (GPRA)

31 USC 1115 et seq.4; PL 103-62

Hazardous Materials Transportation Act 49 USC 5101—5127; PL 93-633, 101-615, 103-311

Historic Sites, Buildings and Antiquities Act 16 USC 461—467; Aug. 21, 1935, ch. 593, 49 Stat. 666

Land and Water Conservation Fund Act of 1965

16 USC 460I-4-460I-11; PL 88-578

Mineral Leasing Act

30 USC 181—287; Feb. 25, 1920, ch. 85, 41 Stat. 437

Mining in the Parks Act

16 USC 1901—1912; PL 94-429

(commonly known as the Museum Act)

16 USC 18f—18f-3; July 1, 1955, ch. 259, 69 Stat. 242, PL 104-333⁵

National Cemeteries Act of 1973

38 USC 2400-2410; PL 93-43

National Environmental Policy Act of 1969 (NEPA)

42 USC 4321-4370d; PL 91-190

National Historic Preservation Act (NHPA) 16 USC 470—470x-6; PL 89-665, 96-515

National Parks Air Tour Management Act of 2000

114 Stat. 61; PL 106-181 (title VIII)

National Parks Omnibus Management Act of 1998

16 USC 5901-60116; PL 105-391

National Park Service Concessions Management Improvement Act of 1998 16 USC 5951—5966; PL 105-391 (title IV)

National Park Service Organic Act 16 USC 1—4; Aug. 25, 1916, ch. 408, 39 Stat. 535

National Park System General Authorities

16 USC 1a-1 et seq.⁷; PL 91-383, 94-458, 95-250⁸

(commonly known as the National Park System Resource Protection Act) 16 USC 19jj—19jj-4; PL 101-337, 104-333

National Trails System Act 16 USC 1241—1251; PL 90-543, 98-11

Native American Graves Protection and Repatriation Act (NAGPRA)

25 USC 3001-3013; PL 101-601

Occupational Safety and Health Act of 1970 29 USC 651—678; PL 91-596⁹

Oil Pollution Act of 1990 33 USC 2701—2761: PL 101-380

(commonly known as the Omnibus Consolidated Appropriations Act, 1997) 16 USC 1g et seq. 10; PL 104-208

Privacy Act of 1974 5 USC 552a: PL 93-579

Rehabilitation Act of 1973 29 USC 701—797b; PL 93-112, 105-220

Rivers and Harbors Appropriation Act of 1899

33 USC 401 et seq. 11; Mar. 3, 1899, ch. 425, 30 Stat. 1121

The Robert T. Stafford Disaster Relief and Emergency Assistance Act

42 USC 5121—5204c¹²; PL 93-288, 100-707, 103-337

Solid Waste Disposal Act

42 USC 6901—6992k; PL 89-272, 94-580¹³,98-616¹⁴

Stevenson-Wydler Technology Innovation Act of 1980

15 USC 3701-3717; PL 96-480, PL 99-50215

Surface Mining Control and Reclamation Act of 1977

30 USC 1201-1328; PL 95-87

Telecommunications Act of 1996 47 USC 332 note; PL 104-104¹⁶

Toxic Substances Control Act 15 USC 2601—2692; PL 94-469

Volunteers in the Parks Act of 1969 16 USC 18g—18j; PL 91-357

Wild and Scenic Rivers Act 16 USC 1271—1287; PL 90-542

Wilderness Act 16 USC 1131—1136; PL 88-577

- ¹ The United States Code (USC) can be accessed on the Internet, e.g., at <www4.law.cornell.edu/uscode/>. Similarly, the text of Public Laws enacted by the 101st or a later Congress (1989 onward) can be accessed at the Library of Congress's THOMAS website, <thomas.loc.gov/>
- ² Act of June 11, 1946, ch. 324, has been codified to 5 USC §§551—559, 701— 706, 1305, 3105, 3344, 4301, 5335, 5372, and 7521
- ³ The General Mining Act of 1872 was the basis of 30 USC §§22-24, 26-30, 33-35, 37, 39-43, and 47.
- ⁴ PL 103-62 was codified to: 5 USC 306; 31 USC 105(a)(29), 1115—1119, 9703, 9704; and 39 USC 2801—2805.
- ⁵ Section 804 of division 1, title VIII of PL 104-333, the Omnibus Parks and Public Lands Management Act of 1996, amended 16 USC 18f, and enacted §§18f-2 and 18f-3.
- ⁶ In addition to enacting §§190 and 5901—6011 of title 16, PL105-391 amended 16 USC 1a-2, 1a-5, 1a-7, and 3, and repealed 16 USC 17b-1, 20, and 20a—20g.
- ⁷ PL 91-383, as originally enacted, added §§1a-1 and 1a-2, and amended §§1b and 1c, of title 16.

- ⁸ PL 95-250, an act expanding Redwood National Park, also amended the National Park System General Authorities Act by
- adding the second and third sentences to 16 USC 1a-1.
- ⁹ PL 91-596 enacted 29 USC 651—678 and 42 USC 3142-1, and amended 29 USC 553, 5 USC 5108, 5314, 5315, and 7902, 15 USC 633 and 636, 18 USC 1114, and §1421 of former title 49.
- The Omnibus Consolidated Appropriations
 Act, 1997 enacted §§1g and 1011 of title 16, and amended §§ 773, 773c, 917, 917a, 971, 971b, 971d, 971e, 972c, 973a, 1362, 1371, 1383a, 1387, 1417, 1432, 1445a, 1827, 2803, 2804, 3125, 3343, 3373, 3377, 3631, 4120, 5102, 5103, 5106, 5107a, 5107b, 5503, 5504 and 5609 of the same title.
- ¹¹ The Rivers and Harbors Appropriation Act of 1899 was codified to 33 USC §§401, 403, 404, 406—409, 411—416, 418, 502, 549 note, 686, and 687.
- ¹² The Federal Civil Defense Act of 1950, 50 USC App. 2251—2303, was repealed, and restated in title VI (42 USC 5195—5197g) of The Robert T. Stafford Disaster Relief and Emergency Assistance Act, by PL 103- 337.

- ¹³ The Solid Waste Disposal Act was amended and essentially re-written by PL 94-580, the Resource Conservation and Recovery Act of 1976.
- ¹⁴ PL 98-616, the Hazardous and Solid Waste Amendments of 1984, enacted §§6917, 6936 to 6939a, 6949a, 6979a, 6979b, and 6991 to 6991i of title 42 of the US Code (and provisions set out as notes to §§6905, 6921 and 6926), and amended §§6901, 6902, 6905, 6912, 6915, 6916, 6921 to 6933, 6935, 6941 to 6945, 6948, 6956, 6962, 6972, 6973, 6976, 6982 and 6984 of the same title.
- ¹⁵ PL 99-502, the Federal Technology Transfer Act of 1986, enacted 15 USC §§3710a—3710d, and amended other provisions of the broader Stevenson-Wydler Act.
- ¹⁶ The provision of the Telecommunications Act of 1996 dealing with the granting of rights-of-way, etc., by federal departments and agencies to wireless telecommunications providers is §704(c), title VII, of PL 104-104.

Appendix B

Executive Orders and Memoranda Cited in Text

Executive Order No. 11644 (Use of Off-road Vehicles on Public Lands)

Feb. 8, 1972, 37 FR 2877, as amended by **Ex. Ord. No. 11989**, May 24, 1977, 42 FR 26959; **Ex. Ord. No. 12608**, Sept. 9, 1987, 52 FR 34617 [42 USC 4321]¹

Executive Order No. 11988 (Floodplain Management)

May 24, 1977, 42 FR 26951, as amended by **Ex. Ord. No. 12148**, July 20, 1979, 44 FR 43239 [42 USC 4321]

Executive Order No. 11990 (Protection of Wetlands)

May 24, 1977, 42 FR 26961, as amended by **Ex. Ord. No. 12608**, Sept. 9, 1987, 52 FR 34617 [42 USC 4321]

Memorandum on Government-to-Government Relations with Native American Tribal Governments

April 29, 1994, 59 FR 22951 [25 USC 450]

Executive Order No. 13006 (Locating Federal Facilities on Historic Properties in Our Nation's Central Cities)

May 21, 1996, 61 FR 26071 [40 USC 601a]

Executive Order No. 13007 (Indian Sacred Sites)

May 24, 1996, 61 FR 26771 [42 USC1996]

Executive Order No. 13031 (Federal Alternative Fueled Vehicle Leadership Dec. 13, 1996, 61 FR 66529 [42 USC 13212]

Executive Order No. 13058 (Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace)

August 9, 1997, 62 FR 43451 [5 USC 7301]

Executive Order No. 13101 (Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition)
Sept. 14, 1998, 63 FR 49643 [42 USC 6961]

Executive Order No. 13112 (Invasive Species)

Feb. 3, 1999, 64 FR 6183

Executive Order No. 13123 (Greening the Government Through Efficient Energy Management)

June 3, 1999, 64 FR 30851

Executive Order No. 13148 (Greening the Government Through Leadership in Environmental Management)
April 21, 2000, 65 FR 24595

Executive Order No. 13149 (Greening the Government Through Federal Fleet and Transportation Efficiency)
April 21, 2000, 65 FR 24607

Executive Order No. 13175 (Consultation and Coordination with Indian Tribal Governments)

November 6, 2000, 65 FR 67249 [25 USC 450]

¹ The citation in brackets indicates where the Executive Order or Memorandum may be found in notes to the US Code.

Appendix C

Director's Orders

Director's Orders provide guidance for implementing certain aspects of NPS *Management Policies*, and are used as a vehicle for updating *Management Policies* between publishing dates. In many cases, Director's Orders are further supplemented by handbooks or reference manuals.

Director's Orders marked with an asterisk (*) in this list have not been completed as of the publication date of *Management Policies*. Copies of those that have been completed, and those that are completed or added in the future, may be obtained by contacting the NPS Office of Policy or the appropriate NPS program office, or by accessing the NPS World Wide Web site at http://www.nps.gov/refdesk/policies.html.

Please note that the numbers assigned to some of the Director's Orders on this list may be revised as the Directives system evolves in the future. A status chart at the web site should be consulted for the most current listing of Director's Orders.

1.	National Park Service Directives System	52A.	Communicating the NPS Mission
2.	Park Planning	52B.	Graphic Design Standards*
3.	Delegation of Authority*	52C.	Park Signs*
4.	Diving Management	52D.	Use of the Arrowhead Symbol*
5.	Paper and Electronic Communications	53.	Special Park Uses
6.	Interpretation*	54.	Management Accountability*
7.	Volunteers in Parks*	55.	(reserved)
8.	Budget and Programming*	56.	International Affairs*
9.	Law Enforcement Program	57.	Occupational Medical Standards,
10A.	Design and Construction Drawings*	07.	Health and Fitness
10A.		58.	
	Drawing and Map Numbers*		Structural Fire Management
11.	Information Management*	59.	(reserved)
12.	Conservation Planning and	60.	Aviation Management*
	Environmental Impact Analysis	61.	National Cemeteries*
13.	Environmental Leadership*	62.	Property Acquisition*
14.	(reserved)	63.	Geographic Names*
15.	NPS Wireless Spectrum Management	64.	Commemorative Works and Plaques
16A.	Reasonable Accommodation for	65.	Explosives Use and Blasting Safety
	Applicants and Employees with	66.	Freedom of Information Act and
	Disabilities		Protected Resource Information*
16B.	Diversity in the Workplace*	67.	Copyright and Trademarks*
16C.	Discrimination Complaints Process*	68.	Notification Protocol For Conduct of
17.	National Park Service Tourism	00.	Employee Investigations
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18.	Wildland Fire Management	69. 7 0	Serving on Boards of Directors*
19.	Records Management	70.	Internet and Intranet Publishing
20.	Agreements	71A.	Relationships with American Indians
21.	Donations and Fundraising		and Alaska Natives*
22.	Fee Collection*	71B.	Indian Sacred Sites*
23.	(reserved)	72.	(reserved)
24.	NPS Museum Collections Management	73.	(reserved)
25.	Land Protection	74.	Studies and Collecting*
26.	Youth Programs*	75.	Media Relations*
27.	Challenge Cost-share Program*	76.	Legislative Affairs Program*
28.	Cultural Resource Management	77-1.	Wetland Protection
29.	Ethnography Program*	77-2.	Floodplain Management
29. 30A.	Hazard and Solid Waste Management*	77-2. 77-3.	Domestic and Feral Livestock
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30B.	Hazardous Spill Response*	77 4	Management*
30C.	Damage Assessments*	77-4.	Substances Used for Wildlife
31.	Travel Procedures*		Management and Research
32.	Cooperating Associations	77-5.	(reserved)
33.	Archeology*	77-6.	(reserved)
34.	(reserved)	77-7.	Integrated Pest Management
35A.	Sale or Lease of Park Services,	77-8.	Endangered Species
	Resources, or Water in Support of	77-9.	In-park Borrow Material
	Activities Outside the Boundaries of	78.	Social Science*
	National Park Areas	79.	Relocation Policies and Procedures*
35B.	Sale of Park Utility Services to Support	80.	Facility Management Program*
	Activities Within the Boundaries of	81.	Maintenance Management Program*
	National Park Areas*	82.	Public Use Reporting*
36.	Housing Management*	83.	Public Health
37.	Home Businesses in Parks*	84.	Library Resources*
38.	Real Property Leasing*	85.	Garnishments and Levies*
39.	(reserved)	86.	(reserved)
40.	Dams and Appurtenant Works*	87A.	Park Roads and Parkways*
41.	Wilderness Preservation & Management	87B.	Alternative Transportation Systems*
42.	Accessibility for Visitors with Disabilities	87C.	Transportation System Funding*
43.	Uniform Program	87D.	Non-NPS Federal Aid Roads
44.	Personal Property Management	88.	Preparing Administrative Records*
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47.	Soundscape Preservation and Noise	91.	Advisory Boards and Commissions*
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48B.	Commercial Use Authorizations*		
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52A.

Communicating the NPS Mission

National Park Service Directives System

1.

50B.

50C.

51.

Occupational Safety and Health

Emergency Medical Services*

Visitor Safety*

Glossary

A list of terms relevant to managing the national parks is provided below. Although not exhaustive, this glossary highlights some of the key terms and evolving concepts that are important to understanding National Park Service management policies and principles. Further definitions may be obtained from Director's Orders and Reference Manuals that are either published or will soon be available. Statutory definitions can be accessed on-line, e.g., at

<www 4.law.cornell.edu/uscode/>.

Abbreviations

ACHP Advisory Council on Historic Preservation

ANILCA Alaska National Interest Lands Conservation Act

ATMP Air Tour Management Plan

BMP Best Management Practice **CFR** Code of Federal Regulations

CIP Comprehensive Interpretive Plan

CRM Cultural Resource Management (plan)

CUA Commercial Use Authorization

DM Department of the Interior Manual

EA Environmental Assessment

EFOIA/FOIA Electronic Freedom of Information/Freedom of Information Act

EIS Environmental Impact Statement

ESA Endangered Species Act of 1973

FR Federal Register

GIS Geographic Information System

GPRA Government Performance and Results Act of 1993

GMP General Management Plan

ICS Incident Command System

IPM Integrated Pest Management

LPP Land Protection Plan

LWCF Land and Water Conservation Fund NAGPRA Native American Graves Protection

and Repatriation Act

NEPA National Environmental Policy Act of 1969

NHPA National Historic Preservation Act

NIMS National Incident Management System

NMFS National Marine Fisheries Service

PL Public Law

USC United States Code

VERP Visitor Experience and Resource Protection

Definition of Key Terms

Accessibility—the provision of NPS programs, facilities, and services in ways that include individuals with disabilities, or makes available to those individuals the same bene- fits available to persons without disabilities. See also, "universal design."

Accession—a transaction whereby a museum object or specimen is acquired for a museum collection. Accessions include gifts, exchanges, purchases, field collections, loans, and transfers.

Administrative record—the "paper trail" that documents an agency's decision-making process and the basis for the agency's decision. It includes all materials directly or indirectly considered by persons involved in the decision-making process. These are the documents that a judge will review to determine whether the process and the resulting agency decision were proper.

Archeological resource—any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. An archeological resource is capable of revealing scientific or humanistic information through archeological research.

Backcountry—refers to primitive, undeveloped portions of parks, some of which may be categorized as "wilderness."

Best management practices (BMPs)-

practices that apply the most current means and technologies available to not only comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. See also, "sustainable practices/principles."

Carrying capacity (visitor)—the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in a park.

Commemorative work—any statue, monument, sculpture, plaque, memorial, or other structure or landscape feature, including a garden or memorial grove, designed to perpetuate the memory of a person, group, event, or other significant element of history.

Consultation—a discussion, conference, or forum in which advice or information is sought or given, or information or ideas are exchanged. Consultation generally takes place on an informal basis; formal consultation requirements for compliance with section 106 of NHPA are published in 36 CFR Part 800.

Cooperating associations—private, non-profit corporations established under state law which support the educational, scientific, historical, and interpretive activities of the NPS in a variety of ways, pursuant to formal agreements with the Service.

Critical habitat—specific areas within a geographical area occupied by a threatened or endangered species which contain those physical or biological features essential to the conservation of the species, and which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time of its listing, upon a determination by the Secretary of the Interior that such areas are essential for the conservation of the species.

Cultural landscape—a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or esthetic values. There are four non-mutually exclusive types of cultural landscapes: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.

Cultural resource—an aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places, and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

Defensible space—the space needed for firefighters to adequately defend structures from oncoming wildland fires, or to stop a structural fire before it ignites wildland vegetation. Defensible space describes the desired result of planning, siting, and constructing developed facilities in a way that minimizes their vulnerability to wildfire threats and maximizes their protection against wildfire hazards.

Derogation—see "impairment."

Developed area—an area managed to provide and maintain facilities (e.g., roads, campgrounds, housing) serving park managers and visitors. Includes areas where park development or intensive use may have substantially altered the natural environment or the setting for culturally significant resources.

Directives system—policy guidance system established by Director's Order #1 in 1996. The system replaces and updates guidance documents formerly known as NPS Guidelines, Special Directives, and Staff Directives. The system consists of 3 levels:

Level 1—NPS Management Policies—first overview level of the Directives system.

Level 2—Director's Orders—operational policies and procedures that supplement Level 1.

Level 3—Reference Manuals and other detailed guidance on how to implement Service-wide policies and procedures.

Ecosystem—a system formed by the interaction of a community of organisms with their physical environment, considered as a unit.

Environmental assessment—a brief NEPA document that is prepared (a) to help deter mine whether the impact of a proposed action or its alternatives could be significant; to aid the NPS in compliance with NEPA by evaluating a proposal that will have no significant impacts, but may have measurable adverse impacts; or (c) as an evaluation of a proposal that is either not described on the list of categorically excluded actions, or is on the list, but exceptional circumstances apply.

Environmental impact statement—a detailed NEPA analysis document that is prepared when a proposed action or alternatives have the potential for significant impact on the human environment.

Environmental leadership—advocating on a personal and organizational level best management practices and the principals of sustainability, and making decisions that demonstrate a commitment to those practices and principals.

Ethnographic landscape—an area containing a variety of natural and cultural resources that traditionally associated people define as heritage resources. The area may include plant and animal communities, structures, and geographic features, each with their own special local names.

Ethnographic resources—objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources eligible for the National Register of Historic Places are called traditional cultural properties.

Gateway community—a community that exists in close proximity to a national park, and whose residents and elected officials often have shared interests and concerns regarding decisions that are made in managing the park. Gateway communities usually offer food, lodging, and other services to park visitors. They also provide opportunities for employee housing, and a convenient location to purchase goods and services essential to park administration.

Geologic resources—features produced from the physical history of the earth, or processes such as exfoliation, erosion and sedimentation, glaciation, karst or shoreline processes, seismic, and volcanic activities.

General management plan (GMP)—a plan which clearly defines direction for resource preservation and visitor use in a park, and serves as the basic foundation for decision making. GMPs are developed with broad public involvement.

Historic property—a district, site, building, structure, or object significant in the history of American archeology, architecture, culture, engineering, or politics at the national, state, or local level.

Impact—the likely effects of an action or proposed action upon specific natural, cultural, or socioeconomic resources. Impacts may be direct, indirect, cumulative, beneficial, or adverse. Severe impacts that harm the integrity of park resources or values are known as "impairments."

Impairment—an impact so severe that, in the professional judgment of a responsible NPS manager, it would harm the integrity of park resources or values and violate the 1916 NPS Organic Act.

Implementation plan—a plan that focuses on how to implement an activity or project needed to achieve a long-term goal. An implementation plan may direct a specific project or an ongoing activity.

Integrated pest management—a decisionmaking process that coordinates knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage, by cost-effective means, while posing the least possible hazard to people, resources, and the environment.

Leave-no-trace (LNT)—principles and practices that emphasize the ethic of leaving a place free and clear of human presence; applied to all forms of recreation management within wilderness or backcountry areas.

Life cycle costing (analysis)—an accounting method that analyzes the total costs of a product or service, including construction, maintenance, manufacturing, marketing, distribution, useful life, salvage, and disposal.

Lightscapes (natural ambient-)—the state of natural resources and values as they exist in the absence of human-caused light.

Management prescriptions—a planning term referring to statements about desired resource conditions and visitor experiences, along with appropriate kinds and levels of management, use, and development for each park area.

Mission-critical—something that is essential to the accomplishment of an organization's core responsibilities.

Mitigation—modification of a proposal to lessen the intensity of its impact on a particular resource.

National park system—the sum total of the land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational or other purposes.

Native Americans—includes American Indians, Alaskan natives, native peoples of the Caribbean, native Hawaiians, and other native Pacific islanders.

NEPA process—the objective analysis of a proposed action to determine the degree of its environmental impact on the natural and physical environment; alternatives and mitigation that reduce that impact; and the full and candid presentation of the analysis to, and involvement of, the interested and affected public. Required of federal agencies by the National Environmental Policy Act of 1969.

Organic Act (NPS)—the 1916 law (and subsequent amendments) that created the National Park Service and assigned it responsibility to manage the national parks.

Paleontological/paleoecological resources—resources such as fossilized plants, animals, or their traces, including both organic and mineralized remains in body or trace form. Paleontological resources are studied and managed in their paleoecological context (that is, the geologic data associated with the fossil that provides information about the ancient environment).

Park—Any one of the hundreds of areas of land and water administered as part of the national park system. The term is used interchangeably in this document with "unit," "park unit," and "park area."

Record of decision (ROD)—the document which is prepared to substantiate a decision

based on an analysis (e.g., an EIS). When applicable, it includes a detailed discussion of rationale and reasons for not adopting all mitigation measures analyzed.

Sacred sites—certain natural and cultural resources treated by American Indian tribes and Alaska natives as sacred places having established religious meaning, and as locales of private ceremonial activities.

Soundscape (natural)—the aggregate of all the natural, non-human-caused sounds that occur in parks, together with the physical capacity for transmitting natural sounds.

Stakeholder—an individual, group, or other entity that has a strong interest in decisions concerning park resources and values. Stakeholders may include, for example, recreational user groups, permittees, and concessioners. In the broadest sense, all Americans are stakeholders in the national parks

Stewardship—the cultural and natural resource protection ethic of employing the most effective concepts, techniques, equipment, and technology to prevent, avoid, or mitigate impacts that would compromise the integrity of park resources.

Strategic plan—a Service-wide, 5-year plan required by GPRA (5 USC 306) in which the NPS states (1) how it plans to accomplish its mission during that time, and (2) the value it expects to produce for the tax dollars expended. Similarly, each park, program, or central office has its own strategic plan, which con-siders the Service-wide mission plus its own particular mission. Strategic plans serve as "performance agreements" with the American people.

Superintendent—the senior on-site NPS official in a park. Used interchangeably with "park superintendent" or "unit manager."

Sustainable design—design that applies the principles of ecology, economics, and ethics to the business of creating necessary and appropriate places for people to visit, live, and work. Development that has been sustainably designed sits lightly upon the land, demonstrates resource efficiency, and promotes eco- logical restoration and integrity, thus improving the environment, the economy, and society.

Sustainable practices/principles—those choices, decisions, actions and ethics that will best achieve ecological/biological integrity; protect qualities and functions of air, water, soil, and other aspects of the natural environment; and preserve human cultures. Sustainable practices allow for use and enjoyment by the current generation, while ensuring that future generations will have the same opportunities.

See also, "environmental leadership" and "best management practices."

Traditional—pertains to recognizable, but not necessarily identical, cultural patterns transmitted by a group across at least two generations. Also applies to sites, structures, objects, landscapes, and natural resources associated with those patterns. Popular synonyms include "ancestral" and "customary."

Traditionally associated peoples—may include park neighbors, traditional residents, and former residents who remain attached to a park area despite having relocated. For purposes of these Management Policies, social/cultural entities such as tribes, communities, and kinship units are "traditionally associated" with a particular park when the entity regards park resources as essential to its development and continued identity as a culturally distinct people; (2) the association has endured for at least two generations (40 years); and (3) the association began prior to establishment of the park.

Traditional cultural property—a property associated with cultural practices, beliefs, the sense of purpose, or existence of a living community that is rooted in that community's history or is important in maintaining its cultural identity and development as an ethnically distinctive people. Traditional cultural properties are ethnographic resources eligible for listing in the National Register.

Universal design—the design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design.

Value analysis/value engineering—an organized, multi-disciplined team effort that analyzes the functions of facilities, processes, systems, equipment, services, and supplies for the purpose of achieving essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety.

Visitor—defined as anyone who uses a park's interpretive and educational services, regardless of where such use occurs (e.g., via Internet access, library, etc.).

Visitor Experience and Resource Protection (VERP) framework—a visitor carrying capacity planning process applied to determine the desired resource and visitor experience conditions, and used as an aid to decision-making.

Waiver (of policy)—an exemption from a particular policy provision. A waiver may be granted only by the Director of the National Park Service or a higher authority (e.g., the Secretary of the Interior).

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