



CHAPTER 1: PURPOSE AND NEED

SUMMARY

This *Backcountry Management Plan, General Management Plan Amendment, and Environmental Impact Statement* provides specific direction for backcountry management and guides backcountry management decisions for Denali National Park and Preserve for the next 20 years. Existing management plans do not adequately cover the extensive areas added to the park by the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), nor do they address many of the current visitor experience, resource protection, and user conflict issues. The goal of the backcountry management plan is to describe how the National Park Service will act to provide future generations with a variety of opportunities to experience the park backcountry while protecting park wildlife and other natural resources, wilderness resource values, and subsistence resources. Proposed National Park Service actions are guided by established laws and policies, such as the National Park Service Organic Act, Mount McKinley National Park enabling legislation, the Wilderness Act, ANILCA, and National Park Service Management Policies. The plan also responds to public concerns identified during project scoping, public comments made during the National Environmental Policy Act (NEPA) review process, and the social and environmental impacts identified as part of NEPA review.

REVISED DRAFT ENVIRONMENTAL IMPACT STATEMENT (RDEIS)

This document is a Revised Draft Environmental Impact Statement, which replaces the *Draft Backcountry Management Plan, General Management Plan Amendment, and Environmental Impact Statement* (DEIS) released in February 2003. This RDEIS substantially changed the actions in the plan alternatives in response to public comment on the original draft. These changes were significant enough to require a new round of public review before publication of the final plan and environmental impact statement.

Summary of Changes Between Original and Revised Drafts

The National Park Service received 9,370 comments on the original draft of the Denali Backcountry Management Plan, including many substantive comments that recommended changes in the approach of the plan. Appendix A contains summaries of those comments and their NPS responses. After a thorough analysis of the comments and consultation with planning partners, the National Park Service determined the plan merited a new approach and that the changes would require a revised draft plan and environmental impact statement.

The major differences between the original plan and the revised draft are as follows:

- The alternatives of the revised draft provide for a more diverse set of potential outcomes for the future of the park and preserve backcountry than did the original draft, although the alternatives are still organized along a spectrum that at one end emphasizes limiting development and use levels to protect wilderness resource values and at the other end emphasizes the provision of access, services, and facilities to support a diversity of wilderness recreational activities.
- Management areas are described using specific indicators and standards in addition to narrative language.
- The number of management areas is expanded to provide a greater diversity of possible backcountry experiences. Mountaineering Study Areas are not used, but a new management area is introduced to preserve conditions sought by the mountaineering community. A Corridor zone is added to provide for high use travel routes.
- Management area designations are changed to reflect public interest in preserving the ecological and wilderness values of the northern additions and southwest preserve.
- The preferred alternative has few prescriptive measures for managing access. Instead, the alternative proposes a flexible approach to access management with a focus on achieving the goals set through management area standards. For example, there is no initial prohibition on airplane landings in the Old Park in the preferred alternative, but there are standards for minimizing noise and mechanized equipment in the backcountry and a set of access management tools that can be applied if those standards are not met.
- The preferred alternative imposes no new registration requirements, but it sets criteria for establishing new registration requirements. It is likely that some activities in some areas of the park additions and preserve will satisfy the criteria in the near future, and that eventuality is examined in the environmental consequences chapter.
- The preferred alternative contains no explicit authorization for recreational snowmachine access. All access by snowmachine is managed to achieve the desired future conditions specified for each management area.
- Appropriate locations, types, and scale of commercial services are clarified for all activities, including scenic air tours and guided hiking.
- Educational activities are distinguished from commercial services and are addressed in the Administration section.
- A flexible management system is set up to address impacts from educational programs and guided hiking activities.

The rationale for each of these changes can be found in the National Park Service's response to comments in appendix A.

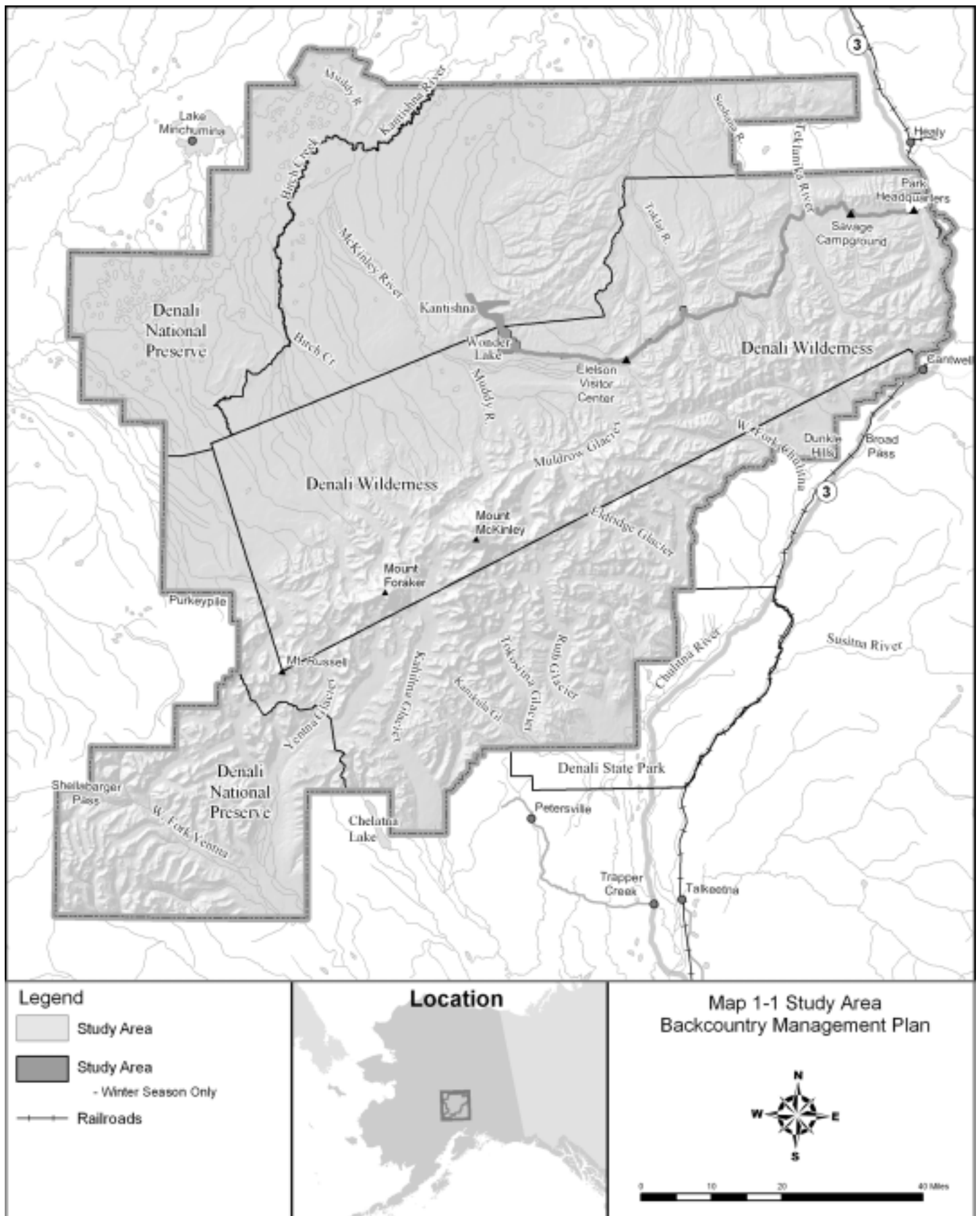
PURPOSE OF PLAN

The goal of the backcountry management plan is to describe how the National Park Service will act to provide future generations with a variety of opportunities to experience the Denali backcountry while protecting park wildlife and other natural resources, wilderness resource values, and subsistence resources. This plan will update and expand the 1976 *Backcountry Management Plan* and, once approved by a Record of Decision, will amend the 1986 *General Management Plan* for Denali National Park and Preserve. The 1997 *Entrance Area and Road Corridor Development Concept Plan (DCP)* and the 1997 *South Side Denali Development Concept Plan* also amended the 1986 *General Management Plan*. This plan will also serve as a *Soundscape Preservation and Noise Management Plan* as required by NPS Director's Order 47, as a *Wilderness Management Plan* as required by NPS Director's Order 41 (see appendix B), and as a *Commercial Services Plan* for the backcountry.

This new plan addresses management of all park and preserve lands, except the park road corridor and adjacent development zones and backcountry day use areas, which were addressed in the 1997 *Entrance Area and Road Corridor DCP*. The study area also includes the park road corridor west of park headquarters during the winter season. Some actions do affect the development and backcountry day use areas delineated in the 1997 *Entrance Area and Road Corridor DCP*; the new actions proposed in this plan, however, are consistent with the *Entrance Area and Road Corridor DCP* and the *South Side Denali DCP*. The study area for this plan is shown in Map 1-1. The study area includes congressionally designated wilderness and lands determined suitable for wilderness designation.

The National Park Service has prepared this environmental impact statement to evaluate the potential environmental impacts of the proposed backcountry management plan alternatives and to inform and seek input from the public, regulatory agencies, and other interested parties. The environmental impact statement findings and public comment will form the basis for a decision by the NPS Regional Director for Alaska on the final *Backcountry Management Plan and General Management Plan Amendment*. Implementing the plan may require promulgation of special regulations and public advisories in consultation with other federal and state agencies and the public. This environmental impact statement has been prepared according to the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR Part 1500).

This amendment to the *General Management Plan* does not change the fundamental purposes of the park as established in law and policy. Throughout the history of the park, management decisions have been oriented to the preservation of wilderness character and other wilderness resource values. There has also been an emphasis on protecting the park's intact natural ecosystem. This plan will retain that consistency in management but will introduce new ideas for addressing the issues of today and those anticipated in the next 20 years.



NEED FOR PLAN

There are four reasons why a new backcountry management plan is needed at this time, identified as planning issues during project scoping.

- 1) **The 1976 backcountry planning document predated ANILCA, and the 1986 GMP did not provide detailed guidance about managing backcountry uses in the park additions.**

As a result, there is a well-defined system for managing backcountry use in the former Mount McKinley National Park (the Old Park), but only a small portion of the ANILCA park additions have been incorporated into that management framework. In addition, ANILCA designated most of the Old Park as wilderness under the Wilderness Act and created legal mandates for special access that have never been addressed in backcountry planning.

- 2) **Visitation has grown dramatically for some backcountry activities, requiring new methods of management.**

Since 1986, general growth in the tourism industry statewide has brought more pressure for comfortable, convenient, and predictable access to Alaska's wild lands. The resident population of Alaska has grown more than 50 percent since 1980, providing a much larger year-round demand for recreational opportunities on the public lands. Twenty years ago the relatively few recreational users of the public lands were sparsely spread over a vast area, but today – particularly in areas that are accessible from the state road system – the use is much more dense, creating concerns about damage to resources and generating conflicts among different user groups. For many locations and activities, the National Park Service has little information about the extent and character of use. Laws, regulations, and agency management policies require the National Park Service to manage recreational and other uses to protect resources and to minimize conflicts among park users.

Specific issues identified during scoping include the following:

Aircraft Overflights and Airplane Landings: Scenic air tours and concession-permitted airplane landings have increased dramatically since the 1986 GMP was completed. Helicopter and fixed-wing aircraft encounters are a common occurrence in all of the popular hiking areas, particularly south of the park road along the flank of the Alaska Range and in glaciated areas around Mount McKinley. Airplanes making landings on Alaska Range glaciers – once primarily a way to transport mountaineers – now account for almost 3,000 landings a year; and more than two-thirds of those landings are brief stops with scenic tour passengers.

Aircraft are an important means of visitor access to remote areas of the Denali backcountry; but overflights and landings, generally unrestricted by management

plans in effect, have resulted in substantial changes in the natural sound environment and generated new conflicts with park users on the ground beneath flight corridors. Commercial jets traveling across the park, military flights in a Military Operations Area south of the Alaska Range, and NPS administrative use of aircraft also contribute to these issues.

Snowmachine (Snowmobile) Use: Recreational snowmachine use was very limited at the time of the 1986 GMP. Since then improved technology has extended the range of the machines and the terrain they are capable of traversing, so that snowmachine use is now widespread in the southern park additions and growing rapidly. Snowmachines can be an important means to access remote backcountry areas; but conflicts with other users, especially non-motorized winter recreationists and subsistence users, are increasing, and concerns have been raised about the effects of snowmachine use on wildlife, vegetation, water quality, air quality, natural soundscapes, and other park resources. There are currently few guidelines for managing use.

Hiking and Backpacking: The numbers of participants in backcountry park activities such as hiking are growing because of larger numbers of visitors. There are many more seasonal workers in the area who often use the park backcountry during their leisure time. Lodges in the Kantishna Hills are providing a much broader range of options for their guests than those available 15 years ago.

Climbing and Mountaineering: The number of climbers on Mount McKinley has doubled in the last 20 years. As climber numbers continue to rise, crowding on technical sections of popular routes, such as the fixed lines section of the West Buttress, could jeopardize visitor safety. Congestion at campsites also raises questions about the quality of the experience within this part of the Denali Wilderness, and the level of use has created a substantial human waste management concern. Several climbing areas in the park additions, such as Little Switzerland and the Eldridge Glacier, are becoming new popular destinations for climbers and mountaineers, leading to concerns about human waste and eventual crowding in those locations.

Guided and Commercial Uses: Increasing visitation has led to significant increases in demand by businesses and non-profit organizations to offer guided activities. The new Murie Science and Learning Center is bringing additional groups of visitors into the park for research and educational activities. The National Park Service has no management plan that describes the kind and level of guided and commercial uses appropriate in the Denali backcountry.

3) Anticipated increases in additional activities are expected in the next 20 years.

The National Park Service needs to act to anticipate changes in use. Off-road bicycle use, motorboat access, and pack animal use are activities that presently occur at minimal levels, but for which interest could increase at any time just as interest in snowmachine access increased during the 1990s. Non-motorized winter recreational

use (skiing, skijoring, snowshoeing, and dog mushing) has been modest, but also has potential for growth. This plan needs to provide guidance for managing these uses.

4) Changes in backcountry use require National Park Service action to protect park resources and wilderness character.

Underlying the need to manage visitor activities in the backcountry is the NPS responsibility to protect park resources and values. These include wildlife, vegetation, natural ecological relationships, natural sounds, and wilderness resource values. The changes in both visitor activities and administrative activities in the backcountry need to be managed to ensure these values are not compromised. Present plans do not adequately address these topics, particularly in the 1980 park additions and preserve, nor do they address resources that have only recently been identified as threatened, such as the park's natural soundscape.

BACKGROUND

Congress designated the original Mount McKinley National Park and the larger Denali National Park and Preserve for specific purposes as described in law. The park was created by Congress because it had particular significance – qualities that make it a superlative example of the natural, cultural, and wilderness landscapes of the United States.

Park Purpose

The purpose of Denali National Park and Preserve has evolved from the time Congress established the original Mount McKinley National Park to the present and has increased in complexity because of the different mandates that apply to the Old Park (the original Mount McKinley National Park), the national park additions (added by ANILCA), the national preserve (also added by ANILCA), and the designated wilderness (covering most of the Old Park).

Mount McKinley National Park (Old Park)

In 1917 Congress established Mount McKinley National Park as a “game refuge” to “set apart as a public park for the benefit and enjoyment of the people ... for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof ...” (39 Stat. 938).

Denali National Park and Preserve

In 1980 Congress passed the Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233, Pub. L. 96-487), which enlarged and renamed the park Denali National Park and Preserve. Section 101 of ANILCA describes the broad purposes of the new conservation system units throughout Alaska, including enlarged national parks and preserves such as Denali. These are the following:

- Preserve lands and waters for the benefit, use, education, and inspiration of present and future generations.
- Preserve unrivaled scenic and geological values associated with natural landscapes.
- Maintain sound populations of, and habitat for, wildlife species.
- Preserve extensive, unaltered ecosystems in their natural state.
- Protect resources related to subsistence needs.
- Protect historic and archeological sites.
- Preserve wilderness resource values and related recreational opportunities such as hiking, canoeing, fishing, and sport hunting.
- Maintain opportunities for scientific research in undisturbed ecosystems.
- Provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so.

Section 202 stated that the Denali National Park and Preserve additions are to be managed for the following additional specific purposes:

- To protect and interpret the entire mountain massif and the additional scenic mountain peaks and formations.
- To protect habitat for, and populations of fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans, and other waterfowl.
- To provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities.

Denali Wilderness

Section 701 of ANILCA designated the “Denali Wilderness of approximately one million nine hundred thousand acres” under the Wilderness Act as depicted on a map referenced in Section 202 of ANILCA and including 99% of the former Mt. McKinley National Park. According to the Wilderness Act, these lands are to be “administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.”

Denali National Preserve

Section 1313 of ANILCA addresses the purpose of national preserves created by the act.

“A National Preserve in Alaska shall be administered and managed as a unit of the National Park System in the same manner as a national park except as otherwise provided in this Act and except that the taking of fish and wildlife for sport purposes and subsistence uses, and trapping shall be allowed in a national preserve under applicable State and Federal law and regulation.”

Park Significance

Large Protected Area. Denali National Park and Preserve encompasses a vast six million acre area, about the size of the state of New Hampshire. Most of the two million acres of the original park has been in protected status since 1917. This large size enables a spectacular array of flora and fauna to live together in a healthy natural ecosystem and provides excellent opportunities to study subarctic ecosystems in settings largely undisturbed by humans. Because of these values, the United Nations Man and the Biosphere Program designated the park and preserve to be an International Biosphere Reserve.

Mountains and Glaciers. The park contains a major portion of the Alaska Range, one of the great mountain uplifts in North America. The Alaska Range is dominated by North America’s highest peak, Mount McKinley, with its summit at 20,320 feet above sea level. Towering 18,000 feet above the adjacent lowlands, the mountain’s dramatic vertical relief rivals any other mountain in the world, exceeding the vertical relief of Mount Everest measured from base to summit. A number of large glaciers originate in the park’s high mountains, including some of the largest in North America.

Wildlife and Habitat. The park was originally established in 1917 as a refuge for large mammals. Backcountry visitors and visitors traveling along the park road on the north side of the Alaska Range often observe Dall sheep, caribou, wolf, grizzly bear, moose, and fox. While populations fluctuate, nowhere else in America can such concentrations of these large species of wildlife be observed in as accessible a natural setting. The park is also significant for its diverse avian habitat that attracts birds from all over the world. The park’s rich and varied vegetation includes alpine tundra, shrub-scrub tundra, mixed spruce-birch and spruce-tamarack woodlands, taiga, wetlands, and extensive riparian and lowland forest areas. Denali has more than 10,000 mapped lakes. More than 753 species of flowering plants inhabit the slopes and valleys of the park.

Scenic Resources and Air Quality. Outstanding views of natural features, including mountains, glaciers, faults, and rivers dominate the park landscape. On a clear day, Mount McKinley can be seen from Anchorage, more than 130 air miles to the south. The exceptional air quality in Alaska and the lack of city lights near the park provide the conditions for outstanding daytime views and excellent night sky visibility in fall, winter, and spring. Denali National Park and Preserve is a designated Class I airshed under the Clean Air Act Amendments.

Cultural Resources. There are 257 known cultural resource sites within Denali's boundaries, including both prehistoric and historic sites. Because cultural resource inventories have been limited to date, this number likely represents a small fraction of the park's total sites. Known resources include archeological and historic sites associated with Athabascan Indian groups, early explorers, mining history, and the early days of the park. Major prehistoric sites in the park include the Teklanika Archeological District, a property listed on the National Register of Historic Places. Many historic structures are in the park headquarters area, which is listed on the National Register of Historic Places as a district, and on the boundaries of the Denali Wilderness (along the original park boundary). These are mainly patrol cabins and other structures dating back to early years of park management. Historic mining activity dates back to the early 1900s in the Kantishna Hills (which includes the national register-eligible Kantishna Historic District), the Stampede area, and the Dunkle Hills near Cantwell.

Mountaineering. Because it is the highest peak in North America, has a high northern latitude location, and is relatively accessible, Mount McKinley is considered one of the world's premier mountaineering destinations, drawing climbers from many countries. It is touted as one of the "seven summits of the world." Many other peaks in the park, including Mount Foraker, also offer outstanding expeditionary climbing opportunities.

Wilderness Recreation. Denali offers superlative opportunities for primitive wilderness recreation. Outstanding cross-country hiking, backcountry camping, and winter touring possibilities are available for those willing to approach the area in its natural condition. This huge park contains large areas with almost no trails and where evidence of human use is minimal to nonexistent. These conditions are in contrast to most wilderness areas in the contiguous 48 states where maintained trails, designated campsites, footbridges, and signs are standard. These conditions also contrast with much of Alaska, where similar opportunities abound, but are very difficult to reach. A large portion of Denali's backcountry is readily accessible to visitors who can reach the park by either highway or railroad from either Anchorage or Fairbanks – Alaska's two largest cities and major connection points for out-of-state visitors.

MANAGEMENT GOALS

General Vision

The National Park Service will preserve outstanding opportunities to view wildlife and mountain scenery, to experience wilderness, and to study wildlife, habitat, and ecosystem patterns and processes in the backcountry of Denali National Park and Preserve. Denali will retain its unique status as a park that offers an undeveloped Alaskan wilderness park experience distinct from the wilderness and park experience in the other states, while being more accessible than most national parks in Alaska because of the adjacent highway system and interior park road. In order to preserve the park's character and unique recreational opportunities, the National Park Service will seek to provide

recreational opportunities in the Denali backcountry that are compatible with the unique resources and values for which the park was established. Other recreational activities can occur on adjacent public lands that possess excellent wildland qualities but also have broader management mandates that are more appropriate for some uses.

Objectives

Specifically, actions described by this plan should

- protect and preserve the park’s natural and cultural resources, including natural soundscapes and subsistence opportunities;
- protect and preserve the park’s wilderness resource values, including its wilderness character and outstanding opportunities for solitude;
- provide for the public’s maximum freedom of use and enjoyment of the park’s backcountry and wilderness in a manner that is consistent with park purposes and the protection of park resources and values;
- define the recreational opportunities provided in Denali’s backcountry within the context of a spectrum of recreational opportunities available on public lands in the Denali region (primarily state parks, other state lands, and federal Bureau of Land Management lands);
- ensure all National Park Service management practices and research activities in the backcountry are consistent with park purposes; and
- provide for the means to achieve public understanding and support of backcountry and wilderness values.

APPLICABLE LAWS, REGULATIONS, AND POLICIES

Management of Denali National Park and Preserve’s backcountry must be consistent with the laws, regulations, policies, and plans of the federal government. The legal and policy framework that governs management of Denali is extensive; the following information summarizes the most important directives organized around categories of major actions. The directives are categorized as follows:

- Statute (law, legislation): Compiled in the United States Code (USC), these are the laws passed by Congress that provide the overriding direction for the management of national parklands and give the National Park Service its authority for management action. Citations may be found at <http://www4.law.cornell.edu/uscode/> or <http://uscode.house.gov/lawrevisioncounsel.php>.

- Regulation: Compiled in the Code of Federal Regulations (CFR), regulations are promulgated by the executive branch to interpret statutes. Citations may be found at <http://www.gpoaccess.gov/cfr/index.html>.
- Case Law: Disputes over the interpretation of law are resolved by administrative bodies, such as the Department of Interior's Office of Hearing and Appeals, and by the federal court system. Such interpretations then govern within the area of the court or administrative body's jurisdiction.
- Executive Orders: Executive Orders are instructions by the president to the federal agencies for carrying out their work. Citations may be found at <http://165.83.219.72/npspolicy/getEOs.cfm>.
- NPS Management Policies: Management Policies translate directives and guidance, including the Constitution, public laws, executive proclamations and orders, and regulations, into cohesive directions. They are published approximately every 10 years and apply servicewide. An electronic file of the current Management Policies is found at <http://data2.itc.nps.gov/npspolicy/index.cfm>.
- NPS Director's Orders: If and when it is necessary, Management Policies may be modified or supplemented by Director's Orders. These orders articulate new or revised policy on an interim basis between publication dates of NPS Management Policies. They also provide more detailed interpretation of Management Policies and outline requirements applicable to NPS functions and responsibilities. Full text files of the Director's Orders are found at <http://165.83.219.72/npspolicy/DOrders.cfm>.
- Park-specific Directives: Park-specific instructions, procedures, directives and other guidance supplemental to and in conformance with applicable NPS policies and regulations (such as hours of operation, the dates of seasonal openings, or procedures for implementing servicewide policies) may be set by superintendents within formal delegations of authority from regional directors. Denali's directives related to backcountry management are found primarily within park planning documents, particularly the 1986 *General Management Plan* and the 1976 *Backcountry Management Plan*, and within the annual *Superintendent's Compendium*.

Authority for the General Management Plan Amendment and EIS Process

National Parks and Recreation Act of 1978 (NPRA, 16 USC § 1 note, 92 Stat. 3467).

NPRA requires the National Park Service to prepare and revise general management plans in a timely manner for each unit. A general management plan or amendments must include resource protection measures; general development locations, timing, and costs; carrying capacity analyses; and boundary modifications.

National Environmental Policy Act of 1969 (NEPA, 42 USC §§ 4321-4370d)

NEPA mandates that any federal project or any project that requires federal involvement be scrutinized for its impact on the natural and human environment and that reasonable alternatives for accomplishing the project purpose be considered. The purpose of NEPA

is to help public officials make well-informed decisions that are based on an objective understanding of environmental consequences for any federal action with potentially major impacts. To ensure compliance with NEPA, a specified process for proposed projects must be followed. The steps in this process are:

1. Scoping
2. Draft Environmental Impact Statement (EIS)
3. Public Review of the Draft EIS
4. Final Environmental Impact Statement and Record of Decision

This document is a Revised Draft Environmental Impact Statement. The original Draft Environmental Impact Statement published in February 2003, needed sufficient revision after public review that it was necessary to return to step two of the process before completing the *Backcountry Management Plan and EIS*.

NPS Management Policies Chapter 2.

This chapter specifies that the National Park Service will maintain an updated General Management Plan for each unit of the national park system and review, amend, or revise the plans every 10-15 years or sooner if conditions change rapidly. Important guidance for this plan includes mandates for management zoning, public involvement, cooperative regional planning, and the examination of alternative futures.

General Direction for Public Enjoyment and Resource Protection

The National Park Service Organic Act of 1916 (16 USC §§ 1-4, 39 Stat. 535)

The Organic Act establishes the National Park Service and directs the agency to

... promote and regulate the use of the Federal areas known as national parks, monuments, and reservations... 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.

Importantly for all planning processes in the park system, the Organic Act provides a fundamental standard for management – that park resources should remain “unimpaired” for the enjoyment of future generations.

Redwood National Park Expansion Act of 1978 (16 USC §§ 1-1a, 92 Statute 166):

The Redwoods Act amends the Organic Act and clarifies the importance Congress placed on protecting park resources such that:

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.

NPS Management Policies Section 1.4. The NPS Management Policies use the terms “resources” and “values” to mean the full spectrum of attributes for which a park unit is established and managed, including the Organic Act’s fundamental purpose and any additional purposes as stated in a park unit’s establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the National Park Service is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them.

The evaluation of whether impacts of a proposed action would lead to impairment of park resources and values is included in the environmental consequences chapter of this document. Impairment is more likely when there are potential impacts to 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.

NPS Management Policies Chapter 8. The NPS management policies address recreational activities in general and backcountry uses in particular in sections 8.1 and 8.2. 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.

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 in the park;

- NPS interpretive, visitor service, administrative, or other activities;
- NPS concessioner or contractor operations or services; or
- other existing, appropriate park uses.

Case Law. *Wilkins v Department of the Interior*, 995 F.2d 850, 853 (8th Cir. 1993)
New Mexico State Game Commission v Udall, 410 F.2d 1197 (10th Cir. 1969)

These two cases demonstrate that the NPS need not wait for actual damage to occur before taking protective action to prevent degradation to wildlife and other natural resources. They were fundamental in the environmental assessment evaluating closure of the Old Park to snowmachine use (NPS 2000).

Mount McKinley National Park Backcountry Management Plan (NPS 1976). Increased visitation from increased access due to the opening of the George Parks Highway during the 1970s prompted Mount McKinley National Park (Old Park) to introduce use limits in 1974 and establish a quota system with the park's 1976 *Backcountry Management Plan*. The plan outlined use limits for designated units in the backcountry and institutionalized the concepts of dispersed use and self-reliance. Implicit to the visitor experience in the backcountry of Mount McKinley National Park was the “overpowering feeling of wilderness” as articulated in later plans.

Management Areas

NPS Management Policies Section 2.3.1.3. Management policies specify that GMPs provide for management zoning to illustrate where there are differences in intended resource conditions, visitor experience, and management activity.

NPS Management Policies Section 8.2.1. Management policies also specify that to determine carrying capacity (as required by NPRA), “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.” Appendix H of the original *Draft Backcountry Management Plan* provides detailed information about NPS visitor carrying capacity decision making, including the use of the Visitor Experience and Resource Protection process (NPS 2003d).

NPS Management Policies Section 4.9. The policy requires that the National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks. It requires the NPS to restore degraded soundscapes to the natural condition wherever possible, and to protect natural soundscapes from degradation due to noise (undesirable human-caused sound). The service is mandated to 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.

Director's Order 47, Soundscape Preservation and Noise Management. This directive establishes that natural sounds are intrinsic elements of the environment, and states that the National Park Service considers natural sounds an inherent component of “the scenery and the natural and historic objects and the wild life ...” protected by the Organic Act. Park managers are directed to preserve natural soundscapes and to eliminate, mitigate, or minimize inappropriate noise sources through the NPS planning processes, such as general management plans and amendments. Park plans will address 1) the baseline natural ambient sound environment in qualitative and quantitative terms; 2) identify sound sources and sound levels consistent with park legislation and purposes; 3) identify the level, nature, and origin of internal and external noise sources; 4) articulate desired future soundscape conditions; and 5) recommend approaches or actions to achieve those conditions or otherwise mitigate noise impacts.

Access

ANILCA Section 811 [16 USC § 3121(b)]. This section provides for continued access to public lands for subsistence use. Specifically, it states that “. . . rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on public lands” and “. . . the Secretary shall permit on the public lands appropriate use for subsistence purposes of snowmachines, motorboats and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulations.”

ANILCA Section 1110 [16 USC § 3170(a)]. This section provides for special access and access to inholdings. Of particular interest to this plan are the guarantees for special access – including motorized access – across public lands that are not generally allowed in national parks or wilderness areas outside of Alaska. Subsection (a) reads in part:

Notwithstanding any other provision of this Act or other law, the Secretary shall permit ... the use of snowmachines (during periods of adequate snow cover, or frozen river conditions in the case of wild and scenic rivers), motorboats, airplanes, and non-motorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the conservation system units ... and shall not be prohibited unless, after notice and hearing in the vicinity of the affected unit or area, the Secretary finds such uses would be detrimental to the resource values of the unit or area.

Airplane Access

National Parks Overflights Act (16 USC § 1a-1 note, 100 Stat. 91). In 1987 the U.S. Congress enacted the National Parks Overflights Act, which called for the National Park Service to recommend to the Federal Aviation Administration (FAA) actions for the substantial restoration of natural sounds to Grand Canyon National Park. It also required the National Park Service to report to Congress on the nature of the overflight problem and its effects on park units. In 1995 the National Park Service presented the *Report on Effects of Aircraft Overflights on the National Park System* (NPS 1995b), which recommended that the National Park Service use the following methods when resolving airspace issues over national parks:

1. Work with the FAA and with air tour operators to develop voluntary agreements to reduce noise over parks.
2. Develop incentives to encourage air tour operators to replace equipment with quieter aircraft.
3. Develop flight-free zones and flight corridors over parks.
4. Create minimum altitude restrictions.
5. Encourage the FAA to require operators to conform to certain operational requirements such as using quieter aircraft.
6. Treat all commercial services provided to visitors in parks as concessions, which ensures services will conform to minimum standards, are not priced unreasonably, and are consistent with park values.
7. Develop noise budgets at landing areas, landing strips, and airports to allot responsibility for and control of noise among operators.
8. Limit times of operations and notify visitors of the best times to experience natural sounds.

43 CFR § 36.11. This regulation implements the “special access” provisions of ANILCA 1110(a) and provides that “Fixed-wing aircraft may be landed and operated on lands and waters within areas, except where such use is prohibited or otherwise restricted by the appropriate Federal agency, including closures or restrictions pursuant to the closures of paragraph (h) of this section.” This direction is an exception to the regulations at 36 CFR § 2.17 that generally prohibit aircraft landings in national parks except by special regulation. However, helicopter landings are prohibited unless a special use permit is issued for that purpose.

FAA Advisory Circular 91-36C, Visual Flight Rules, Flight Near Noise-Sensitive Areas. In addition to the 500-foot above-ground-level (AGL) guideline for surfaces around non-congested areas (FAA, 2000a), this circular identifies 2,000 feet AGL as the minimum recommended altitude for overflights of noise sensitive areas, including units of the national park system. The suggested altitude minimums have been printed on the sectional aeronautical charts (scale 1:500,000) since the mid-1970s. The National Park Service recognizes that lower altitudes may be required at times because of weather conditions and emergencies (NPS, 1986 GMP).

NPS Management Policies Section 8.4. The National Park Service will monitor the effects of aircraft overflights on park resources and values and visitor enjoyment. Because the National Park Service has no direct authority or jurisdiction over airspace above parks, it will actively seek the assistance of the Federal Aviation Administration and Department of Defense to resolve overflight concerns.

Snowmachine Access

36 CFR § 2.18. This regulation generally prohibits snowmachine use in national parks , except on routes and water surfaces designated by special regulations. In Alaska, however, two snowmachine access regulations provide for exceptions: 36 CFR 13.46(a) and 43 CFR 36.11(c). The rules in 36 CFR 2.18 continue to regulate snowmachine speed limits, noise, headlights and taillights, brakes, and minimum age necessary for operating a snowmachine. This section also adopts state regulations for snowmachines.

36 CFR § 13.46(a). This regulation states that snowmachines and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses are permitted in park areas, except at those times and in those areas restricted or closed by the superintendent.

43 CFR § 36.11(c). This regulation allows the use of snowmachines (during periods of adequate snow cover and frozen river conditions) for traditional activities (where such activities are permitted by ANILCA or other law) and for travel to and from villages and homesites and other valid occupancies, except where such use is prohibited or otherwise restricted.

36 CFR § 13.63(h). This special regulation addresses snowmachine operations specifically in Denali National Park and Preserve. It (a) defines a “traditional activity” in the former Mount McKinley National Park (Old Park) and (b) prohibits the use of snowmachines in the Old Park. Part (1) of subsection 13.63(h) defines the term “traditional activity” for the Old Park pursuant to ANILCA Section 1110(a) as follows:

A traditional activity is an activity that generally and lawfully occurred in the Old Park contemporaneously with the enactment of ANILCA, and was associated with the Old Park, or a discrete portion thereof, involving the consumptive use of one or more natural resources of the Old Park, such as hunting, trapping, fishing, berry picking or similar activities. Recreational use of snowmachines was not a traditional activity. If a traditional activity generally occurred only in a particular area of the Old Park, it would be considered a traditional activity only in the area where it had previously occurred. In addition, a traditional activity must be a legally permissible activity in the Old Park. (36 CFR § 13.63 (h)(1))

State of Alaska Snowmachine Laws

The National Park Service enforces State of Alaska snowmachine laws on lands under NPS jurisdiction, including requirements for safety equipment, licensing, and registration.

Off-road Vehicle Access

Executive Order 11644, Use of Off-Road Vehicles on Public Lands. Section 3 of this Executive Order directed federal land management agencies to promulgate regulations on the designation of routes and areas for ORV use. This section requires designation take place as a special park regulation and established criteria that the agency must consider when designating routes and areas. These considerations include soil, watershed, vegetation damage; wildlife harassment or wildlife habitat disturbance; and potential user conflicts. The Executive Order also states that ORV use in national park system areas is permitted only upon a determination that such use would not adversely affect the natural, aesthetic, or scenic values of the area. Both this order and the Wilderness Act prohibit the use of ORVs in designated wilderness. The National Park Service implemented this executive order's directive in 36 CFR § 4.10.

43 CFR § 36.11(g). In addition to the process outlined by Executive Order 11644, this regulation provides that permits could be issued for ORV access on existing ORV trails if not in designated wilderness and if a finding shows that such access would be compatible with purposes and values for which the area was established.

Boating and Water Use Activities

43 CFR § 36.11(d). This regulation allows motorboat use on all area waters , except where such uses are prohibited or otherwise restricted in accordance with the procedures of 43 CFR 36.11(h). However, the use of personal watercraft (PWC) is prohibited, except where such use is designated by regulations at 36 CFR § 3.24. No NPS areas in Alaska are designated for such use.

Non-Motorized Surface Transportation

43 CFR § 36.11(e). The regulation at 43 CFR § 36.11(e) allows non-motorized surface transportation, such as dog teams, horses, and other pack or saddle animals on federal lands in Alaska , except where such use is prohibited or otherwise restricted in accordance with the procedures of 43 CFR § 36.11(h). Pack animals that have traditionally been used for transportation in support of subsistence activities would be allowed under 36 CFR § 13.46(a).

Closures and Public Use Limits

36 CFR § 1.5. This regulation provides authority for the park superintendent to close or restrict all or some public use or activities in an area. The use of permit, registration, or

reservation systems can be employed as a tool for accomplishing the public use limits. The superintendent must make a determination that such action is necessary “for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, aid to scientific research, implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities” and must explain why less restrictive measures would not suffice. The regulation at 36 CFR §13.30 provides guidance for restrictions and closures for specific activities identified in Part 13 for national park units in Alaska, and 43 CFR §36.11(h) provides guidance for restrictions and closures to special access under ANILCA 1110(a).

43 CFR § 36.11(h). This paragraph provides procedures for temporary or permanent closures to special access authorized under ANILCA 1110(a). The NPS “may close an area on a temporary or permanent basis to the use of aircraft, snowmachines, motorboats or non-motorized surface transportation only upon a finding by the agency that such use would be detrimental to the resource values of the area.” This paragraph also allows the agency to restrict or limit uses of an area under other statutory authority.

Wilderness Management

The Wilderness Act of 1964 (16 USC §§ 1131-1136, 78 Stat. 890).

The 1964 Wilderness Act established the National Wilderness Preservation System and identified the National Park Service as one of the four federal agencies responsible for protecting and preserving the nation’s wilderness resource. The Wilderness Act defines wilderness as follows:

- A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which
- (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable;
 - (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
 - (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and
 - (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The Wilderness Act prohibits construction of roads or structures and the use of motorized equipment and mechanical transport in designated wilderness areas, but provides for exceptions for certain administrative activities through a “minimum requirement” process.

Alaska National Interest Lands Conservation Act of 1980 (ANILCA, 16 USC §§ 3101-3233). ANILCA provides guidance about wilderness management at Denali.

- ANILCA Section 101 lists “preserve wilderness resource values” as a fundamental purpose of ANILCA.
- ANILCA Section 102(13), states that the term “wilderness” as used in ANILCA has the same definition as in the Wilderness Act.
- ANILCA Section 203(a) states that a fundamental purpose of the Denali park and preserve additions is to provide continued opportunities, including reasonable access, for wilderness recreational activities.
- ANILCA Section 1317 requires a wilderness suitability review and wilderness recommendations regarding the park additions and preserve lands added to Denali by ANILCA.

In addition, ANILCA provides some exceptions to national park and wilderness management practice that are detailed under the sections “Access,” described above, and “Facilities,” described below.

NPS Management Policies, Chapter 6. Section 6.3.1 establishes that suitable and proposed wilderness on NPS lands should be managed under wilderness policy.

For the purposes of applying NPS wilderness policies, the term ‘wilderness’ includes the categories of suitable, study, proposed, recommended and designated wilderness. NPS wilderness policies apply regardless of category. . . In addition to managing these classified areas for the preservation of their wilderness values, planning for these areas must ensure that the wilderness character is likewise preserved...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.

1986 General Management Plan. The 1986 GMP partially implemented the mandate of ANILCA Section 1317 by completing a wilderness suitability review of the Denali park additions and preserve. The review concluded that about 3.73 million acres of the park additions and preserve were suitable for wilderness designation, meaning that 95% of the entire park and preserve are either designated or suitable for designation as wilderness. The GMP concluded that “All lands determined suitable for wilderness designation will be managed under the terms of ANILCA to maintain the wilderness character and values of the lands until designation recommendations have been proposed and Congress has acted on these proposals.”

Denali National Park and Preserve Wilderness EIS (NPS 1988b). The park’s wilderness EIS described the status of designated, suitable, NPS proposed and recommended

wilderness. The National Park Service proposed recommending to Congress all of the park additions, except former mining districts in the Kantishna Hills and Dunkle Hills, and a few other areas along the south boundary and north of the Wolf Townships along the northeast boundary. None of the preserve areas was proposed for wilderness designation. This proposal was not forwarded by the secretary of interior to the president for a recommendation to Congress.

Map 3-1 shows designated wilderness and areas determined suitable for wilderness designation at Denali.

Guided Activities and Commercial Services

National Park Service Concessions Management Improvement Act of 1998 (Pub. L. 105-391, codified at scattered sections in the U.S. Code).

This act provides the requirements under which commercial visitor services are authorized in units of the national park system. Section 402(b) provides:

It is the policy of the Congress that development of public accommodations, facilities and services in units of the National Park System shall be limited to those accommodations, facilities and services that

- 1) are necessary and appropriate for public use and enjoyment of the unit of the national park system in which they are located; and
- 2) are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit.

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890). The Wilderness Act provides two pieces of guidance related to commercial activities in wilderness.

- Section 4(c): “Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise . . . within any wilderness area . . .”
- Section 6: “Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area.”

NPS Management Policies, Chapter 6. Management policies on wilderness clarify the Wilderness Act for management of commercial services on wilderness lands managed by the National Park Service:

6.4.4 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 U.S.C §§ 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.

NPS Management Policies, Chapter 10. These policies address commercial visitor services authorized either through concession contracts or commercial use authorizations. Section 10.2.2 specifies that commercial services planning will identify the appropriate role of commercial operations in helping parks to achieve desired visitor experiences. A decision to authorize a concession must be based on a determination that the facility or service

- is necessary and appropriate for public use and enjoyment and cannot be met outside of park boundaries;
- will be provided in a manner that furthers protection, conservation, and preservation of the environment; and
- will enhance visitor use and enjoyment of the park without causing unacceptable impacts to park resources or values.

Facilities

NPS Management Policies Chapter 9. The National Park Service will provide visitor and administrative facilities that are necessary, appropriate, and consistent with the conservation of park resources and values and will avoid the construction of buildings, roads, and other development that will cause unacceptable impacts on park resources and values. The policy provides parameters for constructing trails and backcountry campsites.

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890). Structures and installations are generally not permitted in designated wilderness, although there are exceptions for cultural and historic resources and certain administrative purposes. Special authorizations are also in ANILCA.

Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233)

- Section 1315(d) authorizes the construction of new public use cabins in designated wilderness “if such cabins and shelters are necessary for the protection of public health and safety.”
- Section 1316 authorizes the continuation and new establishment of temporary campsites, tent platforms, shelters, and other temporary facilities and equipment that are directly and necessarily related to the taking of fish and wildlife where those activities are allowed. The secretary may deny such use if it is determined that the use would be detrimental to the purposes for which the conservation system unit was established, including the wilderness character of any wilderness area within a unit.

Denali South Side Denali Development Concept Plan/EIS (NPS 1997a). This EIS evaluated the impacts of a proposed action and range of alternatives to phase in the development of visitor facilities and services on the south side of the Alaska Range. The final plan was a result of cooperative regional planning by the NPS, State of Alaska, Denali Borough, Matanuska-Susitna Borough, and two Native regional corporations (Ahtna, Inc., and Cook Inlet Region, Inc.). The plan included several backcountry facilities including:

- Five primitive fly-in campsites and up to two public-use cabins at Chelatna Lake.
- Four public-use cabins to be built on state land in the Tokositna area.
- Public access from the Dunkle Hills Road.
- A trail from a new visitor center on the Petersville Road to the park boundary.

The National Park Service is presently developing an implementation plan for portions of the *South Side Denali DCP* in conjunction with its partners, the State of Alaska and the Matanuska-Susitna Borough, but only the last of the items listed above will be addressed in this phase of implementation.

Denali Entrance Area and Road Corridor Development Concept Plan/EIS (NPS 1997b)

This plan addressed visitor use, resource protection, and related facility development in the “frontcountry” of Denali National Park and Preserve. The frontcountry includes all non-wilderness areas along the George Parks Highway, the Alaska Railroad, the entrance and headquarters areas, and the Denali Park Road corridor to the Kantishna airstrip. This plan included several backcountry facilities, including:

- Up to five walk-in campsites in the vicinity of Kantishna.
- Several hiking trails from the park road and the Parks Highway, including an upgraded Triple Lakes Trail and new trails on Thorofare Ridge from Eielson, Savage River, and a connecting trail between the Savage River Bridge and Savage Campground.

Americans with Disabilities Act (Pub. L. 101-336, 104 Stat. 327, codified at scattered sections in the U.S. Code).

The following language describes the relationship between ADA and the Wilderness Act:

Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair, and consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify conditions of lands within a wilderness area to facilitate such use. The term wheelchair means a device designed solely for the use by a mobility-impaired person for locomotion that is suitable for use in an indoor pedestrian area. (Section 507c).

Wheelchairs that meet this definition are allowed in the backcountry of Denali National Park and Preserve.

Administrative and Scientific Activities

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890). The Wilderness Act provided that administrative activities in wilderness must meet a “minimum requirement” test in order to be excepted from general prohibitions on temporary roads, use of motorized equipment and motorized or mechanized transportation, landing of aircraft, and structures or installations.

NPS Management Policies 8.4. Official NPS use of aircraft in and over parks will be limited to flights needed to support or carry out emergency operations or essential management activities where no practical alternative methods of access exist. National Park Service uses of aircraft will be planned and scheduled to minimize adverse impacts on park resources and values and visitor enjoyment.

Easements and Boundary Changes

National Parks and Recreation Act of 1978 (NPRA) (NPRA, 16 USC § 1 note, 92 Stat. 3467): The NPRA requires that general management plans for national parks consider boundary changes.

Alaska Native Claims Settlement Act, Section 17(b) [43 USC § 1616(b)]. Section 17(b) provides for the reservation of public access easements across Native corporation lands within or adjoining park and preserve lands. The purpose of these easements is to provide access from public lands and waters across the private lands to other public lands and waters. The National Park Service is responsible for managing these public access easements inside the park unit and for those assigned to the National Park Service outside of the park.

PLANNING ISSUES CONSIDERED BUT NOT ADDRESSED

The following planning issues were identified during scoping, but are not addressed in this document. Many issues are not addressed because this plan is only a limited amendment of the 1986 *General Management Plan* and focuses on issues for which the guidance in the GMP is either lacking in detail or out of date.

Major Facility Development. The *Denali Entrance Area and Road Corridor (Front Country) Development Concept Plan* and the *Denali South Side Development Concept Plan* amended the park *General Management Plan* and provided for anticipated visitor facility needs on both the north and south sides of the park.

Denali North Access. Language contained in Senate Amendment 39, page CR H14289 for Fiscal Year 1996 directed the National Park Service to conduct a North Access

Feasibility Study in cooperation with the State of Alaska and the tourism industry. This study was completed in April 1997. In transmitting this study to the Senate Committee on Energy and Natural Resources, the Department of Interior memorandum stated that:

The projected costs of either new road access or rail access into Denali would exceed the projected costs for the National Park Service's 10-year, visitor access development program for the entire State of Alaska. Thus, we believe this study must be considered in conjunction with the other National Park Service proposals for visitor facilities and access in Alaska—proposals developed with input from the State of Alaska, the visitor industry and the public.

This study is not to be interpreted in any way as implying that the National Park Service supports a northern route. Again, a new north access is contrary to the existing management plan for Denali National Park and Preserve (US Department of the Interior, 1997).

Congress has funded additional studies since the completion of the 1997 report. Funding was provided in fiscal year 2000 for a cooperative study with the State of Alaska to explore options for the location of campgrounds, trails, and other visitor facilities along the Stampede Road alignment, and that study was completed in August 2004. In 2002, the Denali Borough and the State of Alaska Department of Transportation and Public Facilities began a planning and reconnaissance study for a north Denali access route as directed by federal and state authorizations. Pending further decisions and actions on north access, the backcountry areas that might be affected by north access proposals need to be managed as the rest of the park additions.

Wilderness Suitability and Wilderness Recommendations. ANILCA section 1317(a) required the National Park Service to conduct a wilderness suitability review, which was included in the 1986 *General Management Plan* for Denali National Park and Preserve. The review concluded that about 3.73 million additional acres of the non-designated lands in the park and preserve were suitable for wilderness designation. An area within the Kantishna Hills was determined to be unsuitable for wilderness because of persistent disturbance caused by past mining and the road system; however, most of these lands are now suitable because of changing conditions. For example, most mining properties have been purchased and many of these areas are being restored. A new suitability study would likely result in additional acreage identified as suitable in the Kantishna Hills, but that study is not included with this plan.

In 1988, the National Park Service forwarded an environmental impact statement for wilderness recommendations to the secretary of the interior. The preferred alternative identified 2.25 million acres of the 3.73 million suitable acres to be proposed for wilderness designation. The secretary of the interior did not forward the proposal to the president to send to Congress for approval. Pending action by the secretary of the interior, president, and Congress, the wilderness values of the recommended lands will continue

to be preserved under NPS policy. Because of the complexity of the process and the fact that wilderness designation requires congressional action, wilderness recommendations are not addressed in this plan.

Subsistence Management. Subsistence management for Denali National Park and Preserve is addressed in the 2000 *Subsistence Management Plan* (NPS 2000i) that was prepared in cooperation with the Denali Subsistence Resource Commission. The backcountry management plan, therefore, does not include recommendations for managing subsistence uses. Because of the importance of these uses and because of potential conflicts from other uses, however, subsistence is included as an impact topic.

Snowmachine Access in Old Park by Individuals with Disabilities. The National Park Service has determined that any snowmachine use would be detrimental to the resource values of the Old Park. As a result, areas of the park that are closed to snowmachine use (such as the Old Park) would not be open to snowmachine use by persons with disabilities. This decision treats all potential users equally in that snowmachine use is prohibited for everyone in the old park. The commercial dog sled companies that operate in the old park have expressed a willingness to take any interested individuals, including those with disabilities, into the Old Park.

Off-Road Vehicle (ORV) Use. The use of ORVs, except on established roads is generally prohibited in Denali (36 CFR § 4.10, 43 CFR § 36.11). ORV use can occur on state right-of-ways. ORVs have been authorized in the past and may be authorized in the future to access inholdings in the Kantishna Hills pursuant to a right-of-way permit. ORVs are not authorized for subsistence purposes under ANILCA 811 because they were not traditionally employed for subsistence purposes.

Natural and Cultural Resource Management. Priorities for studies and procedures for managing natural and cultural resources are not addressed in the backcountry management plan since they are included in the 1998 *Resource Management Plan*. That plan outlines management and study of air resources, aquatic resources, geological resources, terrestrial biota, wildland fire, cultural resources, and subsistence resources.

Minerals Management. This topic is included in the 1991 *Record of Decision on the Cumulative Impacts of Mining in Denali* and the 1998 *Resource Management Plan* so is not addressed in the backcountry management plan.

IMPACT TOPICS

Impact Topics Considered In This Document

Potential Effects on Soils and Water Resources. Methods and routes of access and the intensity and levels of use in various backcountry management areas could lead to impacts on soil and water. Of particular concern are potential damage to ice-rich

permafrost soils from surface travel and potential localized degradation of water quality where visitors are concentrated on glaciers.

Potential Effects on Vegetation. The levels and intensity of backcountry uses (aircraft access, snowmachining, mountaineering, hiking, camping) could have adverse effects on vegetation and wetlands. Design of management areas, access corridors, group sizes, and means of transportation could all be factors in the extent of these impacts.

Potential Effects on Fish and Wildlife. Various backcountry uses and means of access could affect fish and wildlife habitat, wildlife behavior (habituation), and wildlife distribution. The design of management areas and the levels of use within them must consider the potential effects on wildlife behavior and the possible effects to wildlife populations and their habitat.

Potential Effects on Natural Soundscapes. Quiet and solitude were identified as key values of the park and preserve. Various uses of motorized equipment or changes in the level of any human activity may adversely affect natural soundscapes.

Potential Effects on Wilderness. The various forms of access and uses in the park and preserve could affect wilderness resource values. ANILCA designated 99% of the Old Park as the Denali Wilderness and almost all of the park additions and preserve have been determined suitable for wilderness designation.

Potential Effects on Subsistence. Changes in backcountry use have the potential to impact wildlife numbers and distribution for subsistence species. Increased access to preserve areas could create more competition for harvest from sport hunters. ANILCA and NPS policy require proposed actions within Alaska national parks to address potential effects on the area's legally permitted subsistence uses. A section 810 subsistence evaluation and finding is included as appendix C in the environmental impact statement.

Potential Effects on Cultural Resources. Increased access into backcountry management areas of the park by various user groups could disturb historical resources, such as historic backcountry patrol cabins. The design of management areas and use levels within them should consider the potential impacts on cultural resources.

Potential Effects on Recreational Opportunity and Visitor Safety. Prescriptions for access, management tools, guided activities and commercial services, and other plan components could affect visitor numbers, how visitors access the park, what kind of activities visitors participate in, the type of experience available, and visitor safety.

Potential Effects on Local and Regional Economy. The allocation of uses in and over management areas in the park and preserve could affect the regional and local economies of Southcentral and Interior Alaska, particularly the recreational and tourism sectors.

Potential Effects on Park Management and Operations. The actions described in most alternatives could affect park management and operations, requiring staff, equipment, and facilities to fulfill the responsibilities necessary for successful implementation.

Impact Topics Considered But Not Addressed

Effects on Air Quality. Exhaust emissions from internal combustion engines associated with motorboats, snowmachines, and airplanes could have adverse impacts on air quality. Denali is designated a Class I airshed under the Clean Air Act amendments and has exceptionally clean air. However, at projected levels of dispersed use, resource experts believed there would be no more than minor impacts to air quality under any alternative.

Effects on Soils from Hiking and Camping. Excessive concentration of hiking and camping on trails and campsites can lead to deterioration of surface soils, compaction of mineral soils, and severe erosion on slopes. Impacts to soils in Denali National Park and Preserve from hiking and camping would be detectable along established trails; however, in all management scenarios, trails constitute a small part of the park (< 1%) and are generally constructed by NPS to prevent worse erosion from social trail formation; therefore, overall impacts to soils from these activities would be negligible to minor.

Effects on Slope Stability, Hydrologic Regimes, and Drainage Patterns. Trail construction could affect slope stability, but there are not enough proposed trails to assume an impact of any significance. Bank erosion could occur from motorboat use but use is not expected to increase to a level that would cause anything more than a minor impact to bank stability on rivers in the park. Changes in hydrologic regime and drainage patterns would be negligible to minor for all alternatives. Trail construction in the Kantishna Hills would alter surface hydrology, including sheet flow of water; however, impacts would be minimal given the low level of expected trail development and the tendency for trails to develop on ridge-tops and areas of mineral soil.

Effects on Water Quality: The impact to water quality from motorized vehicle access and human waste was investigated as a separate topic. The impact to overall water quality was considered to be minor or negligible in all alternatives and was eliminated from general consideration. However, there were site specific concerns for fish habitat and drinking water quality that are addressed under the Wildlife section and Recreational Opportunity and Visitor Safety sections respectively.

Effects on Threatened and Endangered Species. The American peregrine falcon was the only threatened and endangered species in the park area, but this species was removed from the threatened and endangered species list on August 25, 1999 (64 FR 46542).

Effects on Cultural Landscapes. Of the four cultural landscapes identified at Denali, only two are within the scope of the plan: Kantishna and part of the Teklanika Archaeological District. Neither has been described so impacts are difficult to determine. While there are potential future impacts, the actions described in the plan are unlikely to have more than minor impacts on these two cultural landscapes.

Effects on Ethnographic Resources. There are known ethnographic resources in the park. However, there are not yet any traditional cultural properties identified. While there could be impacts identified in the future (e.g. high visitor use near burial sites, disruption of traditional fish camp sites, etc.), no more than minor impacts could be determined at this time.

Effects on Minority Populations and Low-Income Populations. Executive Order 12898 requires federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The backcountry management plan would not result in significant direct or indirect adverse effects on any minority or low-income population or community.

