

Appendix A: Public Comments and Response

Characterization of Comments Received

National Park Service staff at Denali National Park and Preserve received 9,370 comments on the *Draft Backcountry Management Plan*. This total includes both written comments and verbal comments made during seven public hearings held in Anchorage, Wasilla, upper Susitna valley, Cantwell, Healy, Fairbanks, and Minchumina.

Comments were received from agencies, organizations, and individuals. Comments from individuals included verbal testimony, personally written letters or e-mail messages, and form letters originated by organizations and signed by members or supporters. The number of comments received from each source is as follows:

Agencies	2
Organizations	27
Individuals	9,341
Public Hearing Testimony	17
Non-Form Comments	1,023
Form Letters	8,301
TOTAL Comments	9,370

Although 43 individuals and organizations provided some form of testimony at the public hearings, all but 17 of those individuals also submitted written comments. Some individuals also submitted more than one written comment. In these instances, park staff consolidated multiple comments from one source to preserve the entire substance of the comments, but counted each individual only once for tallying purposes.

Individual Comments

The location of residence addresses provided by individuals who commented on the plan are recorded in the table below.

Local	52
Alaska	251
United States	8,821
International	13
Unknown	204

"Local" includes residence addresses between Willow and Nenana along the Parks Highway and its spur roads as well as the Bush communities of Lake Minchumina, Telida, Nikolai, and Skwentna. "Alaska" includes all other addresses in the state of Alaska excluding those covered under "Local." "United States" includes all residence addresses within the US and its territories excluding Alaska. "International" includes all residence addresses outside the US. "Unknown" identifies those letters for which an address is not known, generally because the individuals sent an e-mail message and did not include address information.

Most individuals expressed a preference for one of the alternatives although there were a substantial number that commented only on specific issues or requested a modification even in the alternative they preferred. General preferences by the location of residence address are indicated on the table below.

	No Alt Selected	А	в	с	D	E
Local	18 35%	1 2%	29 56%		2 4%	2 4%
Alaska	96 38%	5 2%	138 55%	1 0%	7 3%	4 2%
United States	232 3%	1 0%	8,525 97%	2 0%	59 1%	2 0%
International	3 23%		10 77%			
Unknown	142 70%	2 1%	31 15%		29 14%	
TOTAL INDIV COMMENTS	491 5%	9 0%	8733 93%	3 0%	97 1%	8 0%

Of those 491 comments that did not indicate a preference for a particular alternative, approximately 300 addressed only aircraft issues. While most of these comments asked specifically for the Old Park to remain open for landings or for general aviation to remain unrestricted in general, many asked the NPS variously not to prohibit general aviation overflights, not to close the McKinley or other airstrips, or not to close the entire park to airplane landings, none of which were proposed in any of the alternatives. There were also approximately 50 comments (not included in the 300) that specifically asked for restrictions on aircraft use in the park.

Of the comments that did not indicate an alternative preference, only 27 opposed restrictions on snowmachine use in the park and preserve while 104 supported restrictions or a complete ban on recreational snowmachine use. Since most individuals who selected Alternative A did so specifically because of opposition to restrictions on snowmachine use, it is reasonable to state that about 36 individuals took this position in response to the draft plan. By contrast, most of the individuals who sent in form letters or selected Alternative B specifically expressed opposition to recreational use snowmachines at Denali in addition to the 104 mentioned above who supported restrictions or a ban.

Organizations

Twenty-seven organizations submitted detailed comments covering the entire range of issues covered in the plan. Most indicated an alternative preferred by that organization, although almost all suggested considerable modifications. The organizations and these general preferences are indicated below.

	Organization	Preferred Alternative
1	Access Fund	No general preference – addressed specific actions
2	Aircraft Owners and Pilots Association	A or E for aircraft landings
3	Alaska Airmen's Association	
4		A for general aviation
4	Alaskan Aviation Safety Foundation	No general preference – addressed specific aviation-related actions
5	Alaska Center for the Environment	В
6	Alaska Professional Hunters Association	Oppose D and the application of management zoning in the plan
7	Alaska Quiet Rights Coalition	В
8	Alaska State Snowmobile Association	Α
9	Alaska Travel Industry Association	D
10	American Alpine Club	Mixture of C and D
11	American Recreation Coalition	D with modification by E
12	Bluewater Network	В
13	Denali Citizens Council	No general preference – addressed specific actions
14	Greater Fairbanks Chamber of Commerce	Â
15	International Snowmobile Manufacturer's	Oppose D and the application of
	Association	management zoning in the plan
16	Mat-Su State Parks Citizens Advisory Board	No general preference – addressed specific actions
17	National Parks and Conservation Association	B
18	Northern Alaska Environmental Center	B, oppose C,D,E
19	Off-Road Business Association	D
20	Quiet Use Coalition	В
21	Seaplane Pilots Association	No general preference – addressed specific aviation-related actions
22	Sierra Club	A and B, until GMP updated and park zoned for subsistence
23	Trustees for Alaska	Oppose snowmachine framework in D
24	Wilderness Society	Oppose A,C,D,E
25	Wilderness Watch - Alaska	В
26	Wilderness Watch	B, oppose D
27	Winter Wildlands Alliance	B, oppose D

Agencies

In addition to the comments from individuals and organizations, the National Park Service received comments from the State of Alaska and the US Environmental Protection Agency.

The State of Alaska provided detailed comments on various issues, but the thrust of its letter was to raise some questions about the basis upon which the National Park Service proposed to manage access into Denali. The State commented that the management area zoning described in the plan would broadly restrict or close access to portions of the park and preserve. The state also commented that under ANILCA 1110(a) the National Park Service must show detriment to park resources in order to restrict access and the resource affected must be a physical resource, not an intangible or aesthetic resource.

The US EPA suggested that the National Park Service examine adopting Alternative B management prescriptions for snowmachines because it would be the most responsible form of management consistent with the intent of wilderness recommendations for the park additions and would minimize risk of damage to environmental resources until wilderness designation occurs.

Both letters appear in their entirety at the conclusion of the appendix. Extracts of substantive comments appear below accompanied by the National Park Service response.

AGENCY COMMENTS

U.S. Environmental Protection Agency

NPS has concluded that most snowmachine impacts are to soundscapes and wilderness human values such as solitude, and that these values can be quickly restored once a wilderness designation is made and snowmachines are excluded (Adrian Hall, NPS staff, pers. comm.). However as we have discussed above, the EIS describes predicted physical resource impacts from snowmobiles to wetlands, soil, fish and wildlife which might prove to be long-term and not easy to repair, such as alterations to hydrologic functions in wetlands; wildlife ranges and survival rates; and water quality in surface waterways. Resulting impacts could be widespread in the Park Addition, not easy to control, and highly dependent on enforcement.

EPA suggests that the NPS examine adopting the Alternative B management area snowmobile prescriptions, or a hybrid form of them into the preferred plan. We believe that an alternative which restricts or excludes snowmobiles from all but the most limited high-use areas of the Park Addition would be the most responsible form of management consistent with the intent of the wilderness recommendation for this area. It would involve less risk of damage to environmental resources until designation occurs.

NPS Response:

The solutions proposed in the alternatives for managing snowmachine access have been altered considerably in the revised draft. In the preferred alternative, there is no longer a proposal to allow snowmachine use for recreational access, although the absence of a definition for "traditional activities" also means that the National Park Service would not immediately provide any distinction among the activities for which snowmachines are used for access. Instead, the NPS preferred alternative would establish a set of standards to maintain in various assigned management areas within the park and preserve. If conditions threaten to exceed standards, the National Park Service would then act to manage access, which could include defining the term "traditional activities" as part of a rulemaking.

The impacts to wetlands, soil, fish, wildlife, and water of concern to the EPA are different under the revised alternatives. For most of these resources, park experts believed that impacts were likely to be negligible for the life of the plan because limiting conditions by using management area standards would result in management action before use would grow to a level that soil, water, or wildlife would be harmed. There are exceptions identified in chapter 4 under Environmental Consequences; however, while adverse impacts would occur none of them would impair park resources or values. As explained in NPS Management Policies 1.4, the NPS Organic Act, and the General Authorities Act, as amended, "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 actions proposed in the four action alternatives of this plan meet these criteria.

State of Alaska

The proposed use of management areas, defined, in part, by types and levels of visitor uses constitutes an inappropriate de facto closure of allowable access provided under ANILCA. Congress established a high bar for federal agencies to clear before restricting public access in Alaska park units. The access provisions of ANILCA were a key component to the compromises that were necessary to pass the legislation. The zoning concepts in the draft plan – based on subjective aesthetic values – is a significant deviation from Congressional intent to limit manager's discretionary authority to restrict access.

NPS Response: While the National Park Service does not agree with all of the opinions stated or implied in the above comments, the opinions have been considered in developing the revised draft. Management areas are now described in terms of goals for desired future social and resource conditions, not in terms of a particular set of management actions. The revised draft presents a list of 10 access management tools and the National Park Service intends to use the least restrictive tool necessary to achieve desired conditions. As in the previous draft, any closures or restrictions would require following applicable law, including ANILCA 1110(a) and implementing regulations.

State of Alaska: While the draft plan acknowledges (page 1) that implementation may require promulgation of special regulations, Section 1110(a) clearly states "*the Secretary shall permit*" such uses, and "*such use shall not be prohibited unless* . . . *the Secretary finds such use would be detrimental to the resource values of the unit or area.*" Such resource values do not include immeasurable, intangible aesthetic values and experiences. Unlike lower 48 parks, Alaska park units are considered "*open until closed*" to public activities not otherwise prohibited by law. Restrictions and closures require a factual determination of impact on tangible, measurable resources of the unit as part of the rulemaking process (43 CFR Part 36)

NPS Response: Like the previous draft plan, the revised draft follows the language of ANILCA Title I – "...intent of Congress...to preserve wilderness resource values..." and Title II – "The [Denali] park additions and preserve shall be managed...to provide continued opportunities...for...wilderness recreation activities." Based on this legislative direction, the National Park Service believes that intangible values inherent in wilderness character are among the resource values of Denali intended by ANILCA to be protected. The revised draft quantifies desired conditions in terms of indicators and standards.

State of Alaska: A stated purpose of the draft plan is to serve as "*Soundscape Preservation and Noise Management Plan as required by Director's Order #47*" (excerpt on page 15). Further, the draft plan heavily emphasizes noise reduction and soundscape management. The Director's Order was among a number of recent national orders and policies, including the Management Policies of 2001, which fail to recognize the statutory protections under ANILCA for Alaska park units. Consequently, the State of Alaska objected to these management documents and their application in Alaska. Even though these policies are now final, the Service may not use administrative policy to override statutory intent (as implied in the draft plan on page 20.) Any motorized access or mechanized equipment may cause sounds that wilderness enthusiasts find disruptive, and we recognize that natural sound is a legitimate value shared by many park visitors. However, ANILCA-mandated access and use may not be subjectively curtailed by noise concerns. The Service has the responsibility to insure that soundscape management is properly implemented within the framework of ANILCA, including quantifiable findings of damage to resource values.

NPS Response: The revised draft clarifies the hierarchy of guidance for management of the backcountry of Denali National Park and Preserve, in response to the concern that NPS Management Policies would be used to override statutory intent. The National Park Service believes that the Alaska National Interest Lands Conservation Act provides overall direction for managing the backcountry of the park additions and preserve lands in Titles I and II, and the revised draft puts this language into a context above and separate from NPS Management Policies.

The National Park Service disagrees with the stated responsibility to include "quantifiable findings of damage to resource values," noting that Section 1110(a) of ANILCA uses the phrase "would be detrimental to the resource values" of the park.

The service's authority to set restrictions and limits to the use of motorized equipment for traditional activities is provided for in the language of ANILCA Section 1110(a) and in regulations at 43 CFR 36.11(h)(6). The revised draft presents quantified standards for the protection of natural soundscapes in the backcountry. The NPS acknowledges the State's ongoing concerns about the adequacy of baseline data and the methodologies used to determine soundscape standards and measure impacts. The plan therefore commits to a comprehensive review and, as necessary, revisions to the standards in five years after further research. The initial standards will assist the NPS and partners in identifying areas where improvement in soundscape conditions would be a goal, where there are developing concerns for protection, and where we can make progress by working with the Aircraft Overflights Working Group and others even while additional information is being collected.

State of Alaska: The State believes that the draft plan wilderness management intent does not properly respond to ANILCA, nor the Wilderness Act itself. Unlike wilderness management in other states, ANILCA amends application of the Wilderness Act to allow motorized transportation, cabins (sections 1303 and 1315), and other uses in designated wilderness in Alaska. In addition to the often-recognized sections 811 and 1110 access provisions, ANILCA Section 1316 also protects the pre-ANILCA use of mechanized equipment necessary for the taking of fish and wildlife (operation of camps, such as water pumps and generators) in wilderness.

Where wilderness is considered, we request the plan broaden or replace the singleminded focus on "solitude" to reflect the entire concept included in Section 2(c) of the Wilderness Act: "... outstanding opportunities for solitude or a primitive and unconfined type of recreation." The ANILCA purposes for Denali include "wilderness recreational activities," but do not include "solitude." The characterization of "solitude" in the draft plan implies an extremely low tolerance for the very types of uses that ANILCA allows. Incorporating the extended Wilderness Act concept to include *primitive recreation* would empower the Service to more effectively marry the Wilderness Act and ANILCA. This approach would also better reflect Section 1133(a) of the Wilderness Act, which states that use of wilderness areas "in National Parks are hereby declared to be within and supplemental to the purposes for which units of the National Park system were established."

NPS Response: The protection of "wilderness resource values" is a fundamental purpose of conservation system units found in Title I, section 101(b) of ANILCA. The term "wilderness" is defined the same as in the Wilderness Act by Title 1, section 102(13) of ANILCA. Both opportunities for "solitude" and "primitive recreation" are characteristics of wilderness identified in the Wilderness Act. The Senate Report on ANILCA specifies on page 171 that management of the1980 Denali additions shall recognize the desire of the users for "solitude." The revised draft plan provides additional guidance for the meaning of both "solitude" and "primitive recreation" in Chapter 2, under the heading "Wilderness Management." The revised draft acknowledges the exceptions to Wilderness Act management for Alaska conservation system units, as specified by ANILCA. These exceptions are described in chapter 1 and mentioned again in the Wilderness Management section of chapter 2.

State of Alaska: We are still concerned, however, that mandatory registration requirements proposed in the park additions for overnight camping, motorboat use, horses, and – in alternative B – hiking and airplane landings, constitute a restriction under ANILCA and places undue burden on the public. Since the voluntary registration system for mountain climbers on the south side of the Alaska Range has proven successful, we request implementation of a similar voluntary system for the remainder of the park additions to gather user data and disseminate park information.

We believe that mandatory registration and permit requirements are a form of closure requiring new regulation. Moreover, we note it could be difficult to show the required detriment to resource values based on intangible user experience attributes.

NPS Response: The service's authority to set restrictions and limits to the use of motorized equipment for traditional activities is provided for in the language of 1110(a) and in 43 CFR 36.11(h)(6). In seeking to use the least amount of restriction necessary to achieve management objectives, the NPS scaled back the registration requirement for the preferred alternative of the revised draft plan. Instead of immediately instituting new mandatory registration requirements, the revised draft establishes criteria for when such requirements might be needed. These criteria are: 1) use levels are large enough that

user conflict and/or resource damage is occurring or is expected to occur; and 2) other methods for obtaining accurate information on visitor use and conveying essential visitor safety and resource protection information are unlikely to be successful. The revised draft further indicates that in the near future these conditions are likely to be met in the park additions south of the Alaska Range and east of and including the Kahiltna Glacier.

State of Alaska: During scoping, the state requested the Service to re-evaluate the quotas for backcountry units in the Old Park and consider advance reservation for some backcountry units or for a certain percentage of users. The Service responded that a recent survey of backcountry users investigated visitor satisfaction with the quota system in the Old Park and determined that there is a high rate of satisfaction with this system (Swanson 2002).

The survey, however, was flawed since it did not question displaced users, i.e., those that were turned away because there were no desirable units available, or those that gave up coming to the park to camp overnight in the backcountry. The draft plan states that park managers will continue to adjust unit quotas either up or down, yet the draft plan includes no commitment to do this nor explanation of how it will be done. Finally, the response to comments (page 393) states that potential use of an advance reservation system is proposed as part of the alternatives though we found no discussion regarding this. We request reconsideration of this issue.

NPS Response: The backcountry management plan establishes standards for management areas, including the Old Park where there are backcountry camping quotas presently in place. However, evaluating the specific quotas is an implementation activity that would take place separately from the plan. The standards for crowding in the backcountry are not expected to change in the Old Park, and visitor survey data show that these conditions are generally being met. As a result, changes to the existing quota system after plan completion are unlikely to be necessary. The monitoring goals outlined in Table 2-6 include a component for reaching displaced visitors in future surveys.

The preferred alternative in the plan calls for the establishment of an advance registration system for overnight camping in the Kantishna Hills. This system would be experimental, to test how or whether such a system could be implemented at Denali. The revised draft reiterates the commitment made in the original draft to "study and deploy the most efficient, cost-effective, and user-friendly system for park visitors to register or obtain permits to access the park backcountry where required." This investigation would specifically include advance registration as a topic.

State of Alaska: The State strongly disagrees with application of the old Denali park definition of "traditional activities" (defined on page 421) to any ANILCA designated unit and unit additions. Access in Alaska park units by snowmobiles, airplanes, and motorboats is protected under ANILCA Section 811 for subsistence by "*traditional methods*" and under Section 1110(a) for "*traditional activities*." Pre-ANILCA "*traditional activities*" include subsistence and recreation. While subsistence uses may

only occur in the Denali park/preserve additions, "*traditional activities*" such as mountain climbing, wildlife viewing, sightseeing, camping, occur throughout the entire park and preserve unit. These have been undeniably traditional activities throughout the park since its creation in 1917. It is not appropriate to arbitrarily exclude recreation from the definition simply because it is more difficult to manage.

NPS Response: We have invited the State and others to provide examples from the legislative history of ANILCA that show Congressional intent to include sightseeing, wildlife viewing, and picnicking within the meaning of the phrase "traditional activities" as used in Section 1110(a). The Senate Report on ANILCA states that: "The Committee amendment guarantees access subject to reasonable regulation by the Secretary...for traditional or customary activities, such as subsistence and sport hunting, fishing, berrypicking, and travel between villages."

State of Alaska: We agree that plan implementation, as proposed, could cause cumulative impacts to visitor use on non-park adjacent lands. Visitors to the region desire to go to Denali National Park and Preserve because it is a premier visitor attraction. To minimize these regional impacts, we urge the Service to reevaluate its management and provide more diverse opportunities for park users throughout the unit.

NPS Response: The National Park Service believes that the Revised Draft Backcountry Plan calls for a wide range of user opportunities within the boundaries of the park and preserve, consistent with the purposes for which the area was designated. In addition, the revised draft plan and accompanying Environmental Impact Statement acknowledge that there are diverse recreational opportunities available on general State land, BLM land, and private lands adjacent to Denali National Park and Preserve. Overall, this provides for a broad range of user opportunities in the Denali region consistent with the purposes of each respective land designation.

State of Alaska: We also request the plan address the possibility of an extended hiking trail from the park road north along the Savage River to state land. The south end on park land has already been constructed.

NPS Response: The National Park Service intends to continue its policy first articulated in the 1976 Backcountry Management Plan and reemphasized in the 1986 General Management Plan of not constructing trails in backcountry areas, particularly in the Denali Wilderness and northern park additions. This policy is necessary to preserve the unique wilderness character and wilderness recreational experience available at Denali. Exceptions have been made in previous plans such as the 1997 Entrance Area and Road Corridor Development Concept Plan, and in some alternatives of the original and revised drafts of this plan. These exceptions provide for visitor opportunities at popular destinations along the road corridor and address resource damage where use has become concentrated. Exceptions also provide for access to some areas on the south side of the Alaska Range where thick vegetation makes cross-country travel very difficult. A connector trail to state land through the Savage River Canyon would not fit these criteria. The existing trail at the south end of the Canyon was constructed to provide for day use from the parking area on the east side of the Savage River and is suitable for that common visitor activity. Longer trips through the canyon are possible following existing backcountry management policies.

State of Alaska: The draft plan appears to be responsive to accommodating some of the expected increase in park visitation, as evident by the proposals to construct a wall tent for winter use at Mile 7 of Park Road and campsites in Little Switzerland. However, the draft plan falls short in addressing public use cabins on a park wide basis. Such cabins are proposed to be placed only on state lands outside the park boundary and only under Alternative E (page 64). We request the Service re-evaluate this position and consider placement of public use cabins on park lands, such as those public use cabins in other federal areas managed by the U.S. Fish and Wildlife Service, U.S. Forest Service and the Bureau of Land Management. In addition we request the Service consider including possibilities for a system of huts that would provide a new and unique way for people to experience the park.

pages 187-188: ANILCA Section 1302 provides for cabins for uses other than subsistence. In addition, ANILCA Section 1315 allows for existing cabins and provides for the construction of new cabins for public use in ANILCA Wilderness Areas. We request these specific ANILCA provisions be addressed in the plan with management options included among the alternatives.

NPS Response: ANILCA Section 1302 addresses land acquisition within conservation system units and is not relevant to the issue of public use cabins. ANILCA Section 1303 addresses improved property claimed or constructed by private individuals on National Park system lands and is not relevant to the issue of public use cabins.

ANILCA Section 1315(d) reads in part, "Within wilderness areas designated by this Act, the Secretary (of the Interior) or the Secretary of Agriculture as appropriate, is authorized to construct and maintain a limited number of new public use cabins and shelters if such cabins and shelters are necessary for the protection of public health and safety" (emphasis added). The National Park Service did not receive any comments indicating a public health or safety need for public use cabins during either public scoping or during public comment on the draft plan. Because cabins and permanent shelters do not fit the plan's vision or legal mandates for the Denali Wilderness or lands suitable for wilderness designation in the park additions and preserve (see Chapter 2, Wilderness Management), public use cabins have not been included in the revised draft except as cooperative projects on adjacent lands. The NPS supported, in the 1997 South Side Development Concept Plan/EIS, construction of six public use cabins in the Tokositna and the Chelatna Lake areas at significant entry points into the park.

INDIVIDUAL AND ORGANIZATION COMMENTS

Individuals and organizations provided a wide variety of comments and perspectives on the draft plan. The pages that follow provide the National Park Service responses to the substantive comments raised in letters and public testimony by individuals and organizations. If a comment was addressed in response to an agency comment, it is not addressed again in this section. Most substantive points were raised by more than one comment. For the responses below, a single representative version of the comment is reproduced. In a few cases in which several comments can be addressed by the same response, the concept is summarized and prefaced by the phrase: "Summary Comment." Comments and responses are organized by topic.

Overall Vision

Comment: Don't adversely affect the hope that the Park can someday become a practical place for the family, for people who are not on tour company trips, for people who don't have a lot of money and/or time and other common people to experience the Park. The Park seems not accessible to those types of visitors; it needs more access points, more trails, more efficient transportation, and family-friendly accommodations.

NPS Response: The National Park Service is committed to providing a diversity of opportunities for visitors of all interests and abilities consistent with park purposes. The National Park Service believes that the Entrance Area and Road Corridor Development Concept Plan and the South Side Denali Development Concept Plan provide a sufficient development program to meet needs for interpretive facilities, trails, and visitor services. Several of the alternatives in the Revised Draft Backcountry Management Plan provide additional trails in selected areas as well as additional opportunities for guided services and access to assist visitors who need more assistance in the way of facilities, access, or guidance. The National Park Service believes that the areas identified for providing additional facilities and access in the preferred alternative of the revised draft will meet the needs of these visitors for the 20-year life of the plan. Facilities and services are limited to those that are consistent with the purposes for which the national park and preserve was established.

Comment: Programmatic plans such as Soundscape, Wilderness and Subsistence should be done before activity plans such as the BCMP. The Northern Alaska Environmental Center (NAEC) is concerned that by implementing an action plan prior to the finalization of the aforementioned programmatic ones that the programmatic plans will be constrained by the latter...The NAEC recommends that the National Park Service approach planning for recreational use in Denali's Backcountry after it has finalized the resource protection plans and not the other way around.

NPS Response: General management plans (GMPs) are the fundamental document for national park planning. Other planning documents are derived from the overall guidance provided in the GMP. The Backcountry Management Plan (BCMP) is an amendment to

the 1986 General Management Plan, including the 1997 amendments contained in the Entrance Area and Road Corridor Development Concept Plan and the South Side Denali Development Concept Plan. For items not in the scope of the Backcountry Management Plan, the 1986 General Management Plan and other amendments are the appropriate documents to consult. The Backcountry Management Plan contains components necessary to meet the requirements of the Wilderness Management Plan (see appendix B) and Soundscape Preservation and Noise Management Plan. The Denali National Park and Preserve Subsistence Management Plan was completed in 2001 and is available for review at Park Headquarters.

Comment: Denali National Park is two parks: the North Park, which is wildlife, tundra, backpackers, and tour buses, and the South Park, which is mountains, glaciers, climbers and aircraft. The two sides have different climates, different geography, different ecosystems, different users, and different needs.... One plan does not fit both sides of the park. In addition, the needs of the users and visitors are different North and South. The new Backcountry Plan should address the needs of the different visitors and users and not lump them into one plan.

NPS Response: The National Park Service agrees with this assessment, but would add that there are other types of topography and experience available besides the two mentioned. For example, visitors to the northwestern part of the park and preserve primarily travel by boat along rivers and by floatplane to lakes; summer travel is very difficult otherwise. Other areas are similar to the Old Park in topography but are far from the road system and accessible generally by airplane at remote landing strips. In the revised draft, the National Park Service has broadened the range of management areas to allow greater diversity in management. These management areas are applied differently in each alternative, so some alternatives seek to preserve a greater diversity of backcountry conditions than others do.

Comment: Had the agency chosen to revise the existing general management plan as the necessary prelude to its backcountry plan, it would have been obliged to address an issue that it ignores in the draft backcountry plan. That issue is Congress's directive in ANILCA that the agency identify traditional subsistence use areas in the 1980 park additions. Traditional use areas are to be managed under the subsistence provisions of ANILCA, while areas that were not traditionally used are to be managed in the same manner as the "old park," i.e. as traditional park areas closed to the consumptive use of wildlife.

NPS Response: With the backcountry management plan, the National Park Service will have completed three general management plan amendments for Denali since 1997, which together address the entire national park and preserve and comprise an essentially new General Management Plan. Regulations at 36 CFR 13.41 authorize subsistence uses by local rural residents "where such uses are traditional," and indicate that the National Park Service may further designate areas but does not require the agency to do so.

Management Area Descriptions

Comment: The plan lacks specific analytical information or rationale to justify or explain how decisions were made to identify proposed management areas as reflected in each of the alternatives....A clear and concise explanation detailing how these units were determined under each alternative would have provided the public (and perhaps the NPS) with more meaningful information with which to make substantive comments (sound management decisions) on the proposed management areas...

NPS Response: An introduction to each alternative of the revised draft explains in summary the management vision for the alternative. Management area allocation follows from the vision.

Comment: Allocation of management areas is a prescriptive process that describes the desired conditions rather than existing conditions.... A map depicting, or a description of, the present uses in the park and where they are occurring would have assisted the public with a means of comparison from which to draw its own conclusions. As it stands now, the reader and presumably the National Park Service is uninformed about present uses and use levels that are occurring in the Park Additions.

NPS Response: The revised draft includes additional information and maps under the "Visitor Use" section of Chapter 3 to assist the public in understanding present levels and types of use in the park and preserve. These maps include Map 3-4: Popular Climbing and Mountaineering Areas, Map 3-6: Guided Hunting Areas, Map 3-7: Primary Snowmachine Access Areas, and Map 3-8: Commonly Used Overflight Routes and Areas.

Comment: The Access Fund opposes the use of the "human encounter" methodology as the singular measure by which the NPS would manage wilderness and non-wilderness areas in alpine zones such as exist within Denali NPP ...an inflexible focus on the number of human encounter in a given area may unnecessarily limit the number of climbers who have the opportunity to climb a given route or peak, but will do nothing to protect the mountain resource.

Comment: The American Alpine Club is concerned that Park management has already selected human encounters as an indicator of solitude for management of Park visitors...The BMP should be amended to reflect that other indicators and standards may be developed in the future that possess greater relevance to managing some wilderness recreational pursuits, specifically climbing and mountaineering, and that these will be incorporated into the BMP.

NPS Response: The National Park Service recognizes that mountaineering and climbing involve a different style of travel and different expectations than is true for other activities in the Denali backcountry. However, the agency is responsible for protecting the "wilderness resource values" of the area in addition to providing for the mountaineering activity. In the revised draft, there is a new management area ("C") that allows a higher number of encounters in some mountaineering areas to maximize mountaineering opportunities and account for some of the differences in the activity (restricted routes, longer sight distances). The National Park Service is also using a broader set of indicators that are of concern to climbers, particularly those related to the amount of motorized noise. Finally, there is flexibility built into the system of indicators and standards so that they can be refined as additional information is obtained. See Tables 2-2 to 2-9.

Comment: One aspect of the draft BMP that the AAC fundamentally opposes is the comment in endnote 1 for Table 2-2 on page 35 (also located on page 73) that "user" does not include "aircraft in flight." This comment implies that there are effectively no "encounters" with aircraft in flight, precisely the visitor group that is growing fastest and that poses the greatest intrusion on the wilderness experience for mountaineers and other primitive recreation visitors to the backcountry. Such a comment runs counter to social science research, which concludes that encounters with like visitors cause less disruption than those with dissimilar visitors (Manning, *Journal of Leisure Research*, 1985).

NPS Response: Indicators must be considered collectively. In the revised draft, impacts of encounters with aircraft in flight are captured as part of the "Natural Sound Disturbance" indicator rather than as part of the encounter rate indicator. This solution is appropriate since it is the noise of the aircraft that has the greatest effect on resource conditions and visitor experience on the ground. In addition, the use of encounter rate is meant to serve as an indirect indicator for related resource qualities such as opportunities to view wildlife, which do not correlate to aircraft in flight.

Comment: The encounter rates have to be tailored to the user; a skier or musher who meets two groups, of up to 11 snowmachiners each (22 snowmachines!), on a day's trip will hardly consider it to be a "high quality wilderness experience" in a primitive area, whereas that number of individuals encountered may well be fine with a snowmachiner. If you rely on questionnaires to ascertain the successes of your encounter rates, you will miss the non-motorized user will have long since been displaced.

NPS Response: In the revised draft, there will be no distinction in the encounter rate standards between motorized and non-motorized users, but snowmachine use must respond to standards for three distinct indicators: Encounters with People, Natural Sound Disturbance, and Evidence of Modern Human Use. The application of multiple standards helps to balance the greater resource impacts of snowmachine access as compared to non-motorized access.

Comment: Backcountry Zone – The conditions that you describe for this zone should not be encountered in any national park backcountry. The encounter rate of 10 parties (of up to 12 people) per day is too great...Such high levels of use will very likely damage the soundscape in the case of snowmachines and could be damaging to the landscape in the

case of hikers. There should be no area in the park except perhaps the entrance area where there are more than five encounters with another hiking party.

NPS Response: The revised draft significantly revises management areas. Standards for Management Area A, which is most comparable to the "Backcountry" area in the original draft, allow five encounters per day. No more than two of those groups could have more than six people. Corridor and Special Use Management Areas provide for higher encounter rates to meet specific needs, but these areas are generally very limited in geographic scope.

Summary Comment: Desired conditions for Natural, Primitive, or Backcountry areas should not include any motorized access. Desired conditions for soundscape in Natural or Primitive areas should be 100% natural sounds.

NPS Response: ANILCA 811(b) and 1110(a) provide for various types of motorized access into Denali, including for "traditional activities" and subsistence. For this reason, the National Park Service cannot conclude that Congress intended for there to be a complete absence of motorized noise within the park and preserve. In the revised draft, the National Park Service has proposed management areas with a range of acceptable conditions for natural soundscapes, all of which include at least some motorized noise per legislative direction.

Comment: A maximum encounter level of 250 to 300 per day may provide a more realistic margin (for Mountaineering Special Use Area). In any event, we certainly would not want to see a limited use permit system implemented to control where on the West Buttress teams may camp at any given time so that the 200 encounters per day limit is not exceeded.

NPS Response: There is no longer an encounter rate standard for the West Buttress Special Use Area. The season limit for the number of climbers would control use levels.

Comment: In table 2-2, Portal, Visitor Use column, 10 encounters per day is too low. A portal is a portal, not a section of trail. If you restrict the numbers at portals too much, you take away their capacity to serve as a portal for entry and exit. Portals should be described as having higher encounter rates than adjoining management areas.

NPS Response: There would be no encounter rate standard for Portals in the revised draft. However, standards in the surrounding area will indirectly influence the numbers of visitors who are able to occupy a Portal.

Comment: The AAC strongly recommends that the MSA designation also be used as a way for climbers, who make a long-term investment in experiencing the unique mountain environment, not have their experience degraded by larger numbers of people having a two-hour-long entertainment flight. Climber commitment in time and expense to experience the Park in its natural state for a primary purpose of the Park should take

precedence over tourists engaging in a use that degrades the overall wilderness character of the area.

NPS Response: Mountaineering Study Areas (MSAs) were eliminated in the revised draft. Instead, management area "C" was added, which is intended to capture the conditions desired by the mountaineering community. To reduce user conflict in these areas, scenic air tour landings would be restricted or not allowed in any location designated as management area "C."

Comment: The wording for the Backcountry Management Area is not quantifiable at all, and needs to be replaced with words that measurably define acceptable landscapes and soundscapes for the purpose of effective monitoring.

NPS Response: The revised draft plan includes indicators and standards to accompany all narrative descriptions of desired conditions for management areas, as well as a rough description of how monitoring is to be accomplished.

Comment: The indicators and standards listed on pages 68-72 similarly do not include references to mountaineering and primitive recreation...Potential indicators and standards that could be included in the BMP to protect mountaineering include:

• Percentage of time aircraft or snowmachines are audible during the course of a mountain climb.

• Number of times during a climb that climbers are unable to communicate belay commands—which are vital to climber safety—due to noise intrusions from aircraft and/ or snowmachines.

• Percentage of time climbers are prevented from attempting their primary climbing objective due to the permitting process or the presence of other climbing parties on their intended route.

• Percentage of times climbers are displaced from their intended climbing objective due to noise conflicts with other users.

NPS Response: The revised draft plan includes more diverse and specific indicators and standards than the original draft. Indicators were selected using several criteria, including the ability of the National Park Service to monitor them over time. All of the concerns expressed in the examples given above are intended to be captured with the Natural Sound Disturbance indicator and the Encounters indicator. Note that the monitoring strategy for Encounters provided in Table 2-6 includes a commitment to include displaced users in visitor surveys to determine the effectiveness of the backcountry management.

Comment: ...the NPS does not describe a clear program for how they will monitor the affects of certain uses, with emphasis on recreational snowmobiling, on the park's resources or non-motorized visitor experiences.

Comment: ...there is no allocated funding expressly for monitoring the impacts of the use of snowmobiles in the backcountry. As this 'on the ground use' has many known negative impacts to resources and social conditions, the NAEC suggests that a gradation of funding resources {by alternative} ...be added to the budget specifically for this purpose.

NPS Response: The revised draft plan includes a budget for sufficient enforcement and monitoring. A narrative description is found under Park Operations and Management in Chapter 4: Environmental Consequences, and a specific cost analysis is provided in appendix F.

Management Area Designations

Comment: Congress annexed the Northern Additions to the Park in 1980 via ANILCA because of their importance for ensuring an intact ecosystem for the greater Denali region, acting as a buffer for the Old Park, and to provide critical winter habitat for wolves and caribou...Dispersed use of snowmobiles in the region would run the risk of intentional or unintentional harassment and/or destruction of the natural and cultural resources within the region. The Northern Additions receive relatively low visitor use at the present time....the NAEC recommends that the entire Northern Additions be zoned for the most restrictive protection possible under the management area schematic, Natural Area, to ensure that this region retains the highest quality wildlife habitat and wilderness recreation opportunities possible.

NPS Response: The National Park Service agrees that the northern additions were added to the park for their ecological values and should receive a high degree of protection. Three alternatives of the revised draft plan – including the preferred alternative – propose a management area designation for the northern additions that would be comparable to the Natural Area designation in the original draft. Only the four backcountry units near the park road in the Kantishna Hills and the northeastern spur of the park would be designated as higher-use areas in the preferred alternative. See Maps 2-2, 2-3, and 2-4.

Comment: It sounded like you (the Park) were not aware of the current level of use of the Muddy River, which during open-water time probably exceeds three parties per week. Certainly Denali West Lodge goes down there frequently, perhaps several times a week. Other residents go down occasionally during the summer, especially when taking visitors boating. The float trip from Minchumina to Manley also brings one or two parties almost every year to the area as well. During moose hunting, especially the State season, there are often over three parties per day, including locals, previous residents and their descendents (Bishops, Blackburn's etc.), and non-locals....Even after September 20 it is not uncommon to see one or two or more boats on the river each day.

NPS Response: In all alternatives of the revised draft plan the Muddy River is designated a Corridor area. The National Park Service developed this new management area to

address conditions on rivers and other travel routes where use is concentrated. The standards for Corridor areas allow encounters of up to 10 parties per day. This action is appropriate where rivers, constructed trails, or other logical travel corridors provide the only reasonable means of access because dense vegetation or other significant obstacles discourage dispersed use. Corridor areas are also applied to designate high-use backcountry routes that can be used to access inholdings or provide a way for many visitors to pass through accessible areas of the backcountry before dispersing.

The NAEC opposes the "cherry-stemming" type management proposed for the West Fork of the Yentna River, in Alternative C and D. This method of dangling areas of high-use, with emphasis on the proposed corridors for snowmobiling, into a region that is proposed to be a Natural Area offsets any benefits that may be gained under the stricter management guidelines. The NAEC recommends that the entire southwest portion of the Preserve, inclusive of all of Units 81, 82, 83, 84, 85 and the West Fork of the Yentna River be managed as Natural Area.

NPS Response: Management areas in the revised draft differ from those in the original draft, and Alternative 2 explores the suggestion provided in the comment. However, in three of the four action alternatives, including the preferred alternative, both forks of the Yentna River are still designated as Corridor areas. Because these are logical travel routes that provide access through an area of Denali where cross-country travel is difficult, it is reasonable to allow a higher level of use.

Permits and Registration

Comment: When folks are accessing Alaska's remote park's including the remote portions of Denali via airplane, it is not reasonable to require them to come into a visitor center and obtain a backcountry permit. There have been many times in my travels across the state where a site we selected to fly into was inaccessible because of weather. Then we chose some other, safer place to camp. Having a backcountry permit system where you are required to camp in a specific location or zone on a given night is not wise in rural Alaska. For people traveling off the road system, there aren't phones or Internet access to obtain backcountry permits. The new requirement seems unduly burdensome to me and certainly is not in the spirit of Alaska's parks....The whole concept of quotas for specific areas of our remote Alaska park strikes me as totally unnecessary over management.

NPS Response: While some backcountry areas of Denali beyond the park road corridor remain remote and rarely visited, others are experiencing a significant rise in visitation and associated impacts. To make the most informed management decision possible, the National Park Service needs accurate information about the extent of use, and required registration is the most accurate and reliable mechanism to obtain such information, particularly in places where use and entry points are dispersed. In addition, the National Park Service has found that it can accommodate more visitors with less impact and greater visitor safety if everyone follows simple guidelines related to food storage, bear encounters, and Leave-No-Trace. However, the National Park Service needs an effective way to communicate these guidelines and insure that visitors understand them. Requiring visitor contact via required registration also serves this function. For these reasons, two alternatives in the plan mandate actions to require permits for some activities in some areas. In the preferred alternative, however, there are criteria established for new registration requirements: 1) use levels must be sufficient that user conflicts and/or resource damage are occurring or are expected to occur, and 2) other methods for obtaining accurate information on visitor use and conveying essential visitor safety and resource protection information would be unlikely to succeed.

Neither the original draft plan nor the revised draft suggests the imposition of quotas in the park additions; the only new quota in either draft is a seasonal limit for the number of climbers on Mount McKinley. Limiting visitor numbers for activities or areas remains a tool that could be used in the future if necessary to protect park resources and values and if less restrictive mechanisms would be ineffective.

Comment: Minchumina residents do occasionally use the Park, including the Old Park, for recreational uses. Currently, there is no convenient, publicized way to get camping permits, regulations, etc., without going through Park Headquarters, which people just don't do... a local point of registering may work.

Comment: It should be possible to come to the Park and get into the backcountry for a day or a weekend, if that is all the time available, as is often the case for "local" residents who may live as far away as Fairbanks.... Obstacles to the backcountry include:

- same-day registration permitting process,
- separate bus ticket purchasing process,
- road conditions that force buses to travel slowly, and
- buses that stop so often to accommodate people who have no intention of walking that those who want to disembark must endure an extended, frustrating ride their destination.

NPS Response: As in the original draft plan, the revised draft contains a commitment by the National Park Service to conduct a thorough investigation of the most convenient and cost-effective ways to make backcountry permits available to visitors. The preferred alternative in the revised draft includes an experimental reservation system for backcountry permits in the Kantishna Hills. For the National Park Service a key feature of any such system is that it must insure that visitors receive the same essential visitor safety and resource protection information as they do in the present system.

Climbing Limits on Mount McKinley

Comment: The cap of 1,500 people on McKinley would be a problem if the cap was reached (in the future), and an experienced party wanted to climb a non-West Buttress route on short notice to take advantage of a nice weather window. Put the cap on the

West Buttress to minimize impacts, but recommend allowance for climbing a non-West Buttress route on late notice in good weather.

NPS Response: This option was considered but dismissed for safety reasons. There is a concern that if the West Buttress were at capacity, climbers who lack the necessary experience would be tempted to try a route beyond their ability. Also, the limit of 1,500 climbers per season in the preferred alternative of both the original and revised drafts was selected because that is the maximum number that mountaineering rangers believe they can manage with their existing program and facilities, based on several years of experience. The existing program and facilities presently serve all climbers on Mount McKinley, not just those on the West Buttress.

Comment: We question the basis for selecting current use levels on Mt. McKinley as the appropriate level of use to allow....It is our understanding that crowding is already a problem on the mountain, often compounded by periods of bad weather. Simply adopting the current status quo as the acceptable level of use appears highly arbitrary...At a minimum, the plan should freeze use at the level that occurred in 2001 when this planning process was initiated until a fact-based assessment can be made regarding the social and resource carrying capacity of Mt. McKinley.

NPS Response: The capacity limit suggested in the preferred alternative of both the original and revised drafts is proposed because it represents the number of climbers that several years of recent experience has shown can be managed with the existing mountaineering program. Educational and patrol components of this program are important both for resource protection and climber safety. The success of the program is illustrated by the fact that the number of injuries and deaths has declined and the physical condition of the West Buttress route has improved. For example, the amount of abandoned material and litter and exposed human waste has decreased even as climber numbers have increased. Mountaineers on Mount McKinley have generally expressed a tolerance for conditions more crowded than generally expected in wilderness areas in return for having the opportunity to climb. The short climbing season, necessarily lengthy expeditions, and the popularity of Mount McKinley among climbers because it is the tallest mountain in North America make it a unique situation within U.S. wilderness areas.

Human Waste

Comment: The Access Fund encourages the NPS to require the use of Clean Mountain Cans on the entire West Buttress route of Denali.

NPS Response: The National Park Service acknowledges that human waste is an issue along the entire West Buttress route. However, below 14,000 feet there are options for waste management (such as crevasse disposal and latrines) that make use of Clean Mountain Cans less critical. NPS mountaineering staff are concerned that the resources and logistics necessary for waste removal from the entire West Buttress would be substantial, would compete with other needs, and might be unachievable. For that reason, the plan specifies that waste removal below 14,000 feet would be encouraged but not required.

Group Size

Summary Comment: A group size limit of 12 is too large; resource impacts would occur with groups of that size. Group size should be limited to 6 or 9.

NPS Response: NPS Discovery Hikes have had a cap of 15 people plus the ranger guide since the mid-1990s. Resource impacts from these hikes have been within an acceptable range during that period. However, resource experts and interpretive staff and partners agree that for interpretive purposes as well as to minimize resource impacts, a limit of 12 is usually appropriate. For that reason, the revised draft would limit both guided and unguided hikes to a group size of 12, including the guide. The original draft plan allowed a group size of 15 plus a guide in the preferred alternative.

Aircraft Overflights and Access

Comment: The Park Service should do whatever it takes to establish meaningful overflight regulations and limits on scenic tour landings. To achieve desired future resource conditions, NPS must adequately address both flight patterns and levels of use.

NPS Response: Alternatives in the revised draft plan establish specific indicators and standards for desired future resource conditions and identify a set of access management tools, which could include access regulations that would be used to achieve those conditions.

Comment: Our visits and camping trips to the Ruth amphitheater were impacted by the steady stream of commercial flight seeing planes landing just to let their clients stand on a glacier. This is also not access, and should be prohibited throughout the Park. Aircraft access should be clearly defined as dropping people off to experience the remote areas of the Park in the spirit of a wilderness experience.

Flightseeing is an inappropriate way to "experience" the Park, and I urge the agency to do whatever it can in this plan to discourage this growing menace. The constant drone of flightseeing aircraft over the Ruth during nearly all daylight hours degrades the experience of those who come seeking to experience its otherwise sublime character.

While Denali has many special characteristics, one of the most significant is the incredible magnitude of its mountains and the park itself. For visitors to fully appreciate the significance, viewing the park from the air and being able to explore some of its more remote corners is essential. This implies both the ability to over fly the park and land in a reasonable number of appropriate sites.

NPS Response: Much of Denali is difficult to access by traveling overland for almost all visitors because of the difficulty of terrain and/or the amount of time required. The National Park Service believes that air access is appropriate in the park and preserve as long as it does not impair park resources or create user conflicts. The actions suggested in the various alternatives of the revised plan are designed to prevent impairment and minimize user conflicts while still allowing this form of access to occur at reasonable levels.

Summary Comment: Wonder Lake should not be closed to landings because

- there is no substantiation of adverse impacts from landings
- the lake has traditionally been used for float- and ski-plane landings
- it is the only viable float-plane landing area in the Old Park
- denial of access is a safety issue as no other water landing area is nearby

NPS Response: Wonder Lake – and the rest of the Old Park except the McKinley Park Station Airport – was closed by regulation to all airplane landings prior to ANILCA. The NPS preferred alternative in the revised draft plan does not include a prohibition on airplane landings on Wonder Lake as long as desired resource conditions are met. However, this would not preclude future NPS action to protect park resources. Two of the alternatives in the revised draft plan contain actions that would prohibit airplane landings on Wonder Lake. In all alternatives the lake would remain available for emergency landings.

Summary Comment: The Old Park should not be closed to landings because

- terrain and weather already severely limit landing locations
- general aviation landings in the Old Park cause little impact compared to commercial aviation south of the range, overflights, or any form of surface access
- general aviation is not increasing, particularly not pilots or planes capable of landing off-airport
- existing regulations require a finding of detriment before such a closure can be instituted.

Comment: We support prohibiting all airplane landings in the Old Park, except for emergencies and essential administrative activities...(this closure is) a true reflection of the intent of ANILCA when Old Denali was designated a Wilderness area. Access for hiking in the Western part of the Old Park can be made from outside the park. Airplane landings...will detract from the solitude and Wilderness character known to exist in the area.... We advocate no airplane landings in the Old Park...The western Old Park, Units 21 and 22, will have access for backpacking mainly from airstrips outside the park in other areas marked as Natural.

NPS Response: The suggested prohibition on airplane landings in the preferred alternative of the original draft plan was intended to protect the wilderness character of the former Mount McKinley National Park to the degree that it had been prior to 1980, when ANILCA inadvertently changed the existing regulation that prohibited aircraft landings. Regulations at 43 CFR 36.11(f) implementing 1110(a) of ANILCA provide that NPS can close an area to airplane landings only upon a finding by the agency that such use would be detrimental to the resource values of the area. The NPS preferred alternative in the revised draft would establish desired conditions for the Old Park management areas including indicators and standards. It would not prohibit landings, but sets up a framework for managing access that would include the possibility of restrictions or closures if necessary to achieve desired conditions. Two other alternatives in the revised draft do propose closing the Old Park to airplane landings through special regulations or legislation that would exempt the Old Park from 1110(a).

Comment: We strongly oppose any day-use landings anywhere in the park and preserve with the possible exception of the established tradition of sightseeing landings at the Ruth Amphitheater and Kahiltna Base Camp. The wilderness character of Denali should not be reduced by making motorized day trips possible into the remote reaches of the park. Denali should be managed to preserve its unique and wild qualities, not managed primarily as a motorized sight-seeing area.

NPS Response: Alternative 2 of the revised draft plan would limit all airplane landings except those for traditional activities to designated Portals and frontcountry airstrips. Alternative 3 would eliminate airplane landings in the Old Park except at frontcountry airstrips. In the preferred alternative of the revised draft plan, general aviation is addressed only through the standards assigned to various management areas; general aviation could continue as long as standards are met. For commercial scenic tour landings, Alternative 2 of the revised draft would implement the suggestion above by limiting these landings to two locations: Kahiltna Base Camp and the Ruth Amphitheater. Other alternatives would limit scenic tour landings to glaciers in Management Area A.

Comment: We urge NPS to include a provision in the plan that will prohibit airplane camping anywhere in the park...The continued presence of a plane on the ground not only offers a constant link with civilization from within the wilderness, but has visual and psychological impacts on other visitors' experience of the area as wilderness.

NPS Response: The National Park Service agrees that encountering airplanes or other mechanized equipment in the backcountry can detract from wilderness character and experience, and the revised draft plan seeks to minimize the degree of these encounters by including standards for Evidence of Modern Human Use as part of management area descriptions. Achieving the standard is the NPS objective rather than targeting any particular form of use, as in airplane camping, for example. ANILCA 1110(a) and implementing regulations do establish that some level of encounters with airplanes and snowmachines can occur in Alaska conservation system units, including wilderness areas. In addition, use of aircraft will sometimes meet the minimum tool requirement for administrative purposes.

Comment: Develop flight-free zones and flight corridors over the Park...A model would be the proposed Flightseeing and Air Taxi Routes map and proposals for Alternative B at

page 17 of the Special Winter 2001 Edition of the Denali Dispatch...Failing to even propose those actions in the BMP puts the interests of those commercial operators above the interests of the American public for whom the Park was established and fails to provide the public and the decision-maker with a reasonable range of alternatives to consider.

NPS Response: In the preferred alternative of the revised draft plan, the NPS seeks to manage the park to assure standards are met rather than suggesting specific prescriptive actions. In any case, at present the National Park Service lacks the statutory authority to establish flight-free zones or flight corridors. However, the revised draft includes recognition that the National Park Service could work through the regulatory authorities of other agencies to manage access as needed to achieve management area standards.

Snowmachine Access

Summary Comment: The National Park Service should not authorize dispersed or concentrated recreational snowmachine access to the park additions and preserve because

- There is no legal authority for the proposed recreational access
- Recreational snowmachine use was not envisioned by the framers of ANILCA
- It is incompatible with the purposes of the park, such as maintaining habitat for fish and wildlife and protecting wilderness values such as solitude
- It is detrimental to resource values such as wildlife and natural soundscapes
- It conflicts with NPS policy mandates to protect lands suitable for designation as wilderness
- To meet the goal of planning in a "regional context" the NPS should emphasize non-motorized recreational opportunities since other public lands in the region are open to recreational snowmachining.
- Snowmachines displace other users such as skiers, snowshoers, and dog mushers
- Recreational snowmachine use disrupts subsistence use.

NPS Response: ANILCA directs that the National Park Service provide "reasonable access" to wilderness recreational activities (ANILCA Section 202(3)(a)). The NPS believes that managed snowmachine access is reasonable to consider among strategies to provide this access without causing substantial harm to resources or displacing other users. In the revised draft, Alternatives 3, 4, and 5 provide for varying levels of managed snowmachine use for access to wilderness recreational activities. These alternatives also contain provisions that illustrate how this form of access could be compatible with future wilderness designations. Alternative 2 does not provide for recreation-related snowmachine access. The NPS has the authority under the Organic Act to issue a special regulation to provide for the type of access indicated in each alternative.

Comment: The NPS has failed to define within the context of the BMCP the need to address the ANILCA term "traditional activities" for the Park Additions....as the "majority of commentators supported applying the NPS definition of the term "traditional activities" from the final rule to all the park additions and preserve," [p.23]

the NPS should either act on behalf of the public's wishes or provide some rationale, beyond expressing that the challenge is too great, as to why they have chosen inaction on this issue.

NPS Response: Two alternatives in the revised draft plan suggest a definition for "traditional activities" to be implemented by future regulation. The definition plays an important role in fulfilling the vision of each of these alternatives. In the preferred alternative of the revised draft, the National Park Service emphasizes setting goals while retaining the flexibility to prioritize which tools would best assist in meeting those goals. If desired conditions are not achieved in some areas of the park, defining "traditional activities" to manage access would remain an option.

Summary Comment: Restricting snowmachine travel to corridors in the concentrated use areas is a poor idea because

- Encounter rates would be increased
- Visitor experience would decline because of the visual intrusion of signs and markers
- Environmental impacts would be greater
- If the corridor is not groomed, the trail would become rough and adversely affect visitor experience
- Restrictive corridors are contrary to the plan's stated goal of "provide for the public's maximum freedom of use and enjoyment of the park's backcountry and wilderness" and opportunities to explore remote areas would be diminished
- Repetitive use on the same marked route would lead to damage of vegetation and trail development.

NPS Response: Several alternatives in the revised draft plan include a "corridor" concept that differs from the corridors proposed in the original draft plan. First, the Corridor is described as a management area with its own standards. Second, the Corridor is not specifically a snowmachine area, but simply an area that provides many visitors the opportunity to travel deep into the backcountry along a designated route before dispersing, either in summer or in winter. Third, visitors would not be restricted to the Corridor, but the Corridor would allow for a higher level of activity than surrounding areas. Corridor areas could lead to damage of vegetation and trail development, but care would be taken during implementation to site the Corridors where surface damage would be minimized. In many cases the designated Corridors would be on waterways or existing trails. Visual intrusions of route markers are a concern that is documented in Chapter 4, Environmental Consequences, under the Wilderness section.

Comment: The prohibition on riding on glaciers contained in Alternatives B and C is necessary to protect visitor safety both due to the tremendous hazards involved, as well as to avoid conflicts with climbers in terrain that historically has been visited by mountaineers.

NPS Response: Although the activity is not specifically prohibited, the provisions of Alternatives 2 and 3 in the revised draft plan would still effectively prohibit riding snowmachines on glaciers. This provision is not included in the preferred alternative, which generally does not specify prescriptive actions for managing access but rather provides a set of tools that could be used to achieve the specified goals. These tools could include a future action to close glaciers to snowmachines.

Comment: Any allowed snowmobiling in support of traditional activities and subsistence cannot be permitted to occur without rules and guidelines...that limit speed, location, group size, number of groups per day in each management area, etc. and must be managed so as to limit encounters that impact other park users. These guidelines need to appear in regulation.

NPS Response: All use of snowmachines in the park and preserve would be subject to existing state and federal regulations, which include speed limits, as well as encounter rate standards and group size limits specified by the backcountry management plan. The plan would be implemented through regulation as necessary. Encounter rates are established in the management area definitions, as are limits on the number of encounters with large groups (more than six individuals). The maximum group size would be set at 12 in all alternatives.

Comment: The Tokositna Valley to the Kanikula glacier is a wonderful little stretch of wilderness, it should be closed to snow machines regardless of which alternative is chosen. There is no place upstream from Bunco Lake for either people or wildlife to get away from the snow machines. I think there should be some of this valley set aside for non-motorized forms of recreation. Accordingly, I urge you to close unit 79, in its entirety, to snowmachine use.

NPS Response: Alternative 2 of the revised draft plan would close the area described to snowmachine use except for access to subsistence activities and traditional activities as defined for the Old Park. Alternative 3 would do the same, but would allow snowmachine access for recreation along defined corridors to the toes of the Kanikula, Tokositna, and Ruth Glaciers.

Comment: The reason for excluding snowmobiles from subsistence areas does not seem justified. Certainly people taking photos should have a lower impact than people who are hunting. What subsistence activity is being impacted by snowmobiles? Is it possible that the snowmobiling and subsistence take place at different times or different seasons? The Park Service could do public education to resolve many of the perceived issues regarding snowmobiles.

NPS Response: The preferred alternative of the revised draft plan does not exclude snowmachine use from areas used for subsistence. Instead, it specifies that the National Park Service would use the access management tools described in chapter 2 to protect subsistence resources and opportunities, which could include future actions to close areas seasonally or permanently to snowmachine use if necessary to accomplish this goal.

Comment: There may be millions of acres available for snow machines, but it's not Denali National Park {Old Park}. The problem that people with -- that do not have physical disabilities do not understand is that these people want to be able to see the same things that people that aren't disabled see. They want to be able to have access to the same lands, not just another pretty mountain. They want to be able to see Sable Pass, they want to see Highway Pass, and they'd love to be able to see Denali in the wintertime.

NPS Response: This issue was raised during public scoping and addressed in chapter 1 of the original and revised draft plans. 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 (65 FR 37871).

Motorboats

Comment: I personally feel the Tokositna should be a rafting type of no motor area in that short section that it's within the park. And I would expect the Park Service to do everything they can to reduce motorboat use in that area where there is very definitely a conflict with what is apparently not only an excellent experience, but one of the few good boating rivers in the park.

NPS Response: Alternative 2 of the revised draft plan would restrict motorboat use on the Tokositna River to traditional activities as defined for the Old Park. Other alternatives would allow motorboat use for all purposes, consistent with existing regulations, but such use would be constrained by management area standards, including those that provide minimally acceptable conditions for noise and encounters. These standards would protect the visitor experience along the river. Because of ANILCA's legal mandates allowing motorboat use for traditional activities and the presence of private inholdings – including commercial tourism properties – for which the river is the primary summer access, this river is not a good candidate for being a "no motor area."

Comment: I can't see where your draft distinguishes among various types of motorboats, and the plan should do so. Airboats and jet skis are the antithesis of the purposes of the Park and Preserve and of the management goals.... Airboats should be categorically banned from all areas of Denali National Park and Preserve. Jet skis... should likewise be banned outright.

NPS Response: Motorboats are generally allowed in Alaska national parks by 43 CFR 36.11(d). However, while NPS has not issued a nationwide rule, regulations have tended to treat airboats as something other than a "motorboat." Regulations for Big Cypress National Preserve at 36 CFR 7.86(a) define airboats as motorized vehicles along with swamp vehicles, air cushion vehicles, automobiles, and trucks, distinguished from motorboats that are driven by a propeller in water. Regulations for the Alaska National Wildlife Refuges at 50 CFR 36.2 define airboats as off-road vehicles, not as motorboats.

Use of personal watercraft (some of which are sold under the brand name "Jet Ski") is prohibited in all units of the national park system except in designated areas by 36 CFR 3.24. Motorboats are defined in 36 CFR 13.1 to exclude personal watercraft. There are no designated areas in Alaska.

Off-Road Vehicles

Comment: In February 2003... the Park Service issued *Off-road Vehicle (ORV) Use in Alaska National Park Units....* In reviewing the BCMP and the ATV report, we have discovered alarming discrepancies between the two documents regarding the number of trails and types of use occurring in Denali National Park and Preserve. In light of this new information, we believe that Park Service must clarify NPS ATV policy and legal use in the BCMP.

NPS Response: NPS policy regarding off-road vehicles (ORVs) in Denali is unchanged. The use of ORVs in the backcountry is generally prohibited throughout the national park and preserve consistent with existing regulations (36 CFR 4.1, 43 CFR 36.11). ORV use can occur on state right-of-ways and has been authorized in the past, and may be authorized in the future to access inholdings in the Kantishna Hills pursuant to a rightof-way permit. ORVs are not authorized for subsistence purposes under ANILCA 811 because they were not traditionally employed for subsistence purposes. The NPS is evaluating ORV use in the Cantwell area for subsistence purposes, but no determination has yet been made. The indication of trails in the report Off-Road Vehicle (ORV) Use in Alaska National Park Units (February 2003) did not include descriptive information so that readers would understand that these trails included those used for inholder access in Kantishna, a state right-of-way, sections of trail near Cantwell that are being considered for subsistence use, and trespass trails that are a current concern for enforcement.

Non-Motorized Winter Activities

Comment: With little snowfall occurring over the past three years within the park, the south side portion of the range could be a viable alternative for cross-country skiers, snowshoers, dog mushers and others who wish to experience the beauty and majesty of this area. In fact, this would be a wonderful addition to the wilderness portion of the park. NPS would need to promote this area to the public to generate this type of interest, and perhaps consider snowcats to transport tourists, x-c skiers, snowshoers, etc. into this area, if it would not interfere with wilderness designation.

NPS Response: The Broad Pass visitor contact station proposed in alternatives 3, 4, and 5 of the revised draft plan could assist in promoting the south side of the Alaska Range for non-motorized winter recreation. Securing access to the 17(b) easement from Cantwell to Windy Creek would also be helpful. Finally, the marking of corridors to the Old Park boundary in the Dunkle Hills area would assist in steering skiers and other visitors to the park's southern additions. This additional information and guidance should assist visitors in recognizing and finding the beauty of the south side of the Alaska Range.

Commercial Services

Comment: Especially in Wilderness, the "test" for allowing specific commercial operations in the Park must be more restrictive. Any and all efforts to use Denali to pry into people's wallets would meet the "e" criteria of providing some education...., where recreational use needs to be limited, no one who comes to experience Wilderness as Wilderness, should be displaced by someone who merely buys the experience. Preference should be given to private parties... Small-scale operators should be given any preference possible over the big operators. And each alternative should have provision for some commercial-free zones, where money will not influence the place, where the experience cannot be bought, but must be earned.

NPS Response: NPS Management Policies 6.4.4 provide for the following:

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.

The National Park Service provides criteria for "necessary and appropriate" under the Commercial Services section of Actions Common to All Action Alternatives in the revised draft. Among the criteria are those mandating a strong educational component for commercial services for all areas of the backcountry, not just designated wilderness. This section also includes direction that the minimum requirement test as provided in appendix E would apply throughout the backcountry. Alternative 2 provides for substantial areas that do not allow for guided services. Alternatives 3 and 4 provide for very limited activities in some portions of the park.

Guided Hiking

Comment: AWA would like Denali National Park to consider adding a commercial guided hiking option in the wilderness area to the Backcountry Management Plan,

Alternative D. Our guests have a strong interest and desire to day hike from the park road within the wilderness boundary but when unguided they have a tendency to feel apprehensive about leaving the shuttle bus.

NPS Response: The preferred alternative (Alternative 4) of the revised draft would allow commercial guided hiking in the Old Park at the same level as at present. While there is one operator who is entitled by law (ANILCA Section 1307(a)) to offer guided hiking at the level offered in 1979, the extra increment added since 1979 by that concessioner would be subject to competition under NPS concessions law in the next contract period. Alternative 5 provides for an expansion in commercial guided hiking in the Old Park, including overnight backpacking opportunities.

Comment: I question whether limiting all group hikes to two per season for a particular non-gravel bar or trail route is reasonable. The major commercial operator now leading guided hikes in the old park has had no similar restrictions on the past and this might impose a hardship now.

Comment: We suggest a revised approach to this aspect of the overall plan. Just as a working group has been envisioned for overflights, we suggest such a task force be convened consisting of the most effective user groups identified in the plan, the NPS, the Denali Science and Learning Center, Denali National Park Wilderness Centers, Ltd., and individuals representing independent hikers.

NPS Response: In the revised draft, the limitation on guided hikes to two visits per season to a particular location is only found in Alternative 2. In Alternatives 3, 4, and 5 NPS relies on the strategy described under the Cross-Country Travel heading in the Access section of Actions Common to All Action Alternatives. This strategy provides for a flexible approach to managing both guided hiking and private hiking that responds to specific landscape conditions and formally coordinates the activities of the various groups leading guided hikes in the park or delivering hikers to the backcountry.

Guided Sport Hunting and Fishing

Summary Comment: Commenters variously asked for two guide areas covering the entire southwest preserve, three guide areas covering the entire southwest preserve, guide areas in the northwest preserve, and the explicit creation of a no-guide area in the southwest preserve.

NPS Response: The National Park Service believes all of these suggestions are reasonable, and the revised draft includes each of these options in one or more of the alternatives and hopes to receive additional comments during public review. The preferred alternative proposes two guide areas covering the entire southwest preserve because the lack of activity over several years from the existing concessions (see Chapter 3, Visitor Use section) indicates that the current areas may be too small. The preferred alternative does not include a guide area in the northwest preserve because NPS subsistence managers believe a guide area would have significant impacts on subsistence resources and users. Alternative 5 proposes a guide area only in the southern portion of the northwest preserve where the conflict with subsistence could be minimized.

Comment: I would like to provide guided fishing trips in Denali National Preserve. The specific area would be in the mouth of the clearwater streams flowing into the East and West Forks of the Yentna River. I would like the National Park Service to create a guided fishing concession for the above-mentioned area.

NPS Response: The National Park Service has included guided fishing as an opportunity with the guided sport hunting concessions in the southwest preserve. The National Park Service intends to continue linking guided fishing opportunities in the southwest preserve to the sport hunting concession if all criteria for commercial services are otherwise met.

Commercial Airplane Landings

Comment: There is a segment of the population with various handicaps that preclude hiking, backpacking, tent camping and enjoying the beauty of the park and the mountain from surface transportation. These people can be readily accommodated in small airplane tours that leave no marks on the surface and create very little noise.

NPS Response: The revised draft alternatives include provisions for continued airplane scenic tour landings at Denali. The desired resource conditions for various management areas could mean that these tours and landings might be limited in the future, just as other kinds of access to Denali (such as use on the park road) are limited.

Comment: I might also ask that the Park Service analyze an alternative that would allow commercial aviation use in the area where aircraft first landed in the park, and that's the Muldrow Glacier where Joe Crossman $\{sic\}$ Jerry Jones landed in 1932, and then subsequently aircraft were used to support climbing activities on the Muldrow Glacier, and the traditional route up McKinley until the early 50s at which time the West Buttress route was, I would say, pioneered by Thad $\{sic\}$ Washburn. I'm just curious why the Park Service would want to restrict use in an area that had the first use, commercial use.

Comment: In the early spring climbing season, when no other general park visitors would be interrupted, I would like the Park Superintendent to be able to authorize landings in Units 44, 48, and 87 for support of climbing parties on the North side.

NPS Response: There is no need for airplane support to climbers on the north side of the Alaska Range because the National Park Service already authorizes a concessioner to deliver supplies to the base of Mount McKinley by dog team during winter months. Climbing parties hike from the park road and retrieve their supplies before starting their climbs (see Chapter 3, Visitor Use). This is a unique challenge and opportunity that is consistent with the wilderness values of the Old Park and is also consistent with historical mountaineering and exploration of the Old Park. Several climbing parties each year ascend Mount McKinley or other peaks from the north side.

Comment: I would develop a South Side Scenic Flight Plan that would separate climbers from the casual visitor.... The Southwest Fork of the Kahiltna could be developed for scenic flights, with NPS presence, for the entire May through September season.

NPS Response: The revised draft includes this concept within the alternatives. There is a division within southern glaciers between management areas "A" and "C" where scenic tour landings are allowed in "A" but are restricted or not allowed in "C." The amount allocated to each management area varies among alternatives. The Southwest Fork of the Kahiltna includes a designated Portal/Major Landing Area so that it could accommodate more use than the surrounding area; however, scenic tour operators rarely land there at present even though it is open for such landings.

Comment: Identify two or three specific locations (for scenic tour landings) and not allow any proliferation of scenic landing sites

NPS Response: This concept is included in Alternative 2 of the revised draft plan.

Comment: There should be no commercial scenic tour landings on the park's north side.

NPS Response: The preferred alternative of the original draft would have allowed scenic air tour landings in some locations in the northern park additions as a result of management area zoning. There was no evidence of demand for such landing locations. In the preferred alternative of the revised draft plan, the alternatives clarify that scenic air tour landings would be allowed only on glaciers in Management Area A, effectively restricting them to areas presently used on the south side of the Alaska Range.

Comment: Some areas should remain closed to all commercial airplane landings to provide wilderness areas that will only be accessible through self-reliant, non-motorized means. The sense of accomplishment that hikers get from traveling in remote areas that CANNOT be reached by motorized means is an integral part of the wilderness experience and opportunities for such experiences should always remain intact in Denali National Park.

NPS Response: In all alternatives, the Denali Wilderness remains closed to commercial airplane landings. Additionally, there are significant areas in the park and preserve that do not have landing strips or other areas suitable for airplane landings.

Comment: Carrying capacities must... be applied to airplane landings in the New Park.... Scenic flight seeing trips and glacier landings numbers should be capped.

NPS Response: The National Park Service is obligated by the National Parks and Recreation Act of 1978 to address carrying capacity in its general management plan documents. The Visitor Experience and Resource Protection (VERP) model is typically used by the National Park Service for carrying capacity planning. VERP defines capacity by a set of desired resource and social conditions, not by absolute numbers of visitors. This revised draft plan was developed consistent with the VERP process; however, Alternative 2 of the revised draft does provide specific caps on the number of scenic air tour landings.

Summary Comment: The National Park Service should regulate commercial and/or all aircraft operators to achieve desired conditions by one or all of the following mechanisms:

- Technology requirements
- Temporal zoning (hours, days, months, or seasons when landings would not be allowed)
- Minimum altitude restrictions
- Flight-free zones

NPS Response: The revised draft plan sets desired conditions for the different management areas and provides a set of tools for managing access that will assist in meeting those conditions. All of the suggestions provided by the public are covered by this "toolkit." The plan is primarily goal setting; the specific prescriptions would be developed during implementation under most alternatives. The National Park Service does not have the authority to issue regulations regarding flight-free zones or altitude because airspace is under the jurisdiction of the Federal Aviation Administration. However, utilizing the regulatory authority of other agencies is within the set of access management tools.

Administrative Use of Aircraft

Comment: The plan should specify that in Wilderness, the minimum requirement exception only provides for actions necessary for "the administration of the area for the purpose of this act." That purpose is wilderness. Not research, not other things agencies sometimes like to do that are not necessary for protecting wilderness....Helicopters seldom really meet this requirement and should be prohibited except for emergency and law enforcement use. They should be prohibited for recreational access, flight seeing, and agency research.

Comment: Any changes which might come to be will require group cooperation. The Park Service must set a standard by truly controlling and restraining its own air operations.

NPS Response: As in the original draft plan, the National Park Service commits to meeting the minimum requirement/minimum tool mandates of the Wilderness Act even in backcountry areas that are not designated under that act. In addition, the plan pledges that the National Park Service would complete an implementation plan for administrative and research uses of aircraft that includes goals and specific objectives for minimizing helicopter and airplane use. The National Park Service retains its flexibility to use all forms of aircraft administratively if, in fact, the airplane or helicopter is the "minimum tool" for particular tasks. This includes scientific research, which is a specified purpose for ANILCA conservation system units. "Scientific" purposes are also identified as purposes of wilderness areas under the Wilderness Act.

Trails

Comment: Of particular importance is the need for you and your staff to maintain open communications directly with MSB concerning design and management of trail systems in the Park that will connect to trails on Borough lands and other landowners.

Comment: Trail plans should be a cooperative agreement with the Alaska State Parks, Matanuska-Susitna Borough, and the National Park Service.

Comment: Mutual funding cooperation agreements between the National Park Service, Alaska State Parks, and the Matanuska-Susitna borough should be required to provide improvements such as trails and facilities that will mutually impact operations, maintenance, and visitor services on national, state and borough lands on the south-side of Denali.

NPS Response: In the preferred alternative of the revised draft plan, there is only one trail that would connect to borough and state lands, running along Wildhorse Creek and connecting to trails that were planned as part of the 1997 South Side Denali Development Concept Plan. Additionally, in Alternative 5 other trails could be planned within Management Area A in the lowlands surrounding the lower Kahiltna, Tokositna, and Ruth Glaciers. In alternatives 2 and 3, either no trails are proposed or short trails are proposed near the park road. The National Park Service has solicited extensive public comment and agency collaboration in the preparation of the Backcountry Management Plan, which is a concept-level document. For specific implementation plans for the trails described above, the National Park Service views cooperation with the Borough and the State as essential for success.

Comment: We've made many requests to the Service over the last decade to allow us to do mitigation on the Wonder Lake Backcountry Trail. It is a wildlife/social trail that begins on NFL land, then on the parkland (some of it formerly BLM land), and has been used for 30 years by CD/NFL guests as an alternative to the road to access the north end of Wonder Lake.... We would like to engage in a more creative, timely partnership with regard to this historic route.

NPS Response: The preferred alternative of the revised draft includes a commitment to formalize a trail system in the Kantishna area. The specific trails would be identified and constructed as part of implementation. This implementation phase could include consideration of the described "Wonder Lake Backcountry Trail."

Comment: There is no alternative for new trails and that needs to be addressed. Suppose we found a new area that warranted a trail — (the "bubbling spring") — there should be an alternative to establish new trails whether commercial guided or not.

NPS Response: Alternative 5 in the revised draft plan provides for the possibility of new trails in areas on the south side of the Alaska Range where future demand could be high enough to warrant them and where vegetation and topography make cross-country travel very difficult.

Comment: The Park Service needs to work with DOT and the RR to ensure there are safe parking areas and crossings to access the Park (by snowmachine).

Comment: We oppose the proposal under alternative D to plan for connecting statewide winter snowmobile trail systems and improving parking along the Parks Highway. Such trail systems and parking will bring unacceptable impacts to those who live along the routes on the lands adjacent to Denali National Park.... It is not essential that they connect and it is not essential that they cross or utilize national park land.

NPS Response: The revised draft plan does not address support for recreational snowmachine access through connecting trail systems or improved parking. Unlike the original draft, the revised draft does not provide for areas that are explicitly managed for recreational snowmachine access, thereby lowering NPS prioritization for such support facilities.

Park Road

Comment: I am adamantly against changing the traditional winter use of the park road to mile 7. Even though the park road is not official wilderness it IS de facto wilderness in the winter. Though it's not explained in the plan, it is known the proposal to plow the road to mile 7 is for the convenience of the road crew. The justifications for this proposal are unsubstantiated and do not justify changing the quiet reality of that section of the park. The presence and reminders (oil drips, tracks, plow marks) of heavy equipment ruin the pristine winter experience traditionally available to anyone within a stone's throw of headquarters. This is an example of a false need that will contribute to incremental degradation of the park.

NPS Response: The park road is not included within either legislatively designated wilderness or within areas determined suitable for wilderness designation. Nevertheless, the National Park Service recognizes that plowing the road in winter has effects on the wilderness experience of visitors on and near the park road, as well as both positive and adverse impacts on recreational experience. These impacts are identified in the environmental analysis of chapter 4 in this revised draft. The reason for plowing the park road is to enable equipment to control the build-up of overflow ice on the road surface between miles 4 and 7. The accumulation of this ice represents a safety hazard and a major obstacle to road maintenance crews when opening the park road in the spring for summer season use, resulting in more time and effort being required to open the road. Alternative 2 of the revised draft plan does not provide for road plowing until necessary for preparing the road for summer use.

Land Exchange

Comment: I'd like to see the Cantwell Creek be the boundary, if this is possible, for some land exchange for the subsistence hunting use, because the park boundary zigzags across the side of the mountain there. It's very hard to find. The creek would make a clear definite boundary.

NPS Response: Large sections of the 1980 park additions north of Cantwell Creek are the subject of unresolved land selections by Ahtna, Inc. Contemplation of land exchanges in this area would be premature until Ahtna's selections are completed.

NEPA Sufficiency

Comment: ... The Draft Plan fails to consider a sufficient range of reasonable alternatives to the proposed action.... In the Draft Plan, the Park Service fails to evaluate reasonable alternatives across the spectrum of uses. For instance, as applied to snowmachine use, the Draft Plan simply does not consider any alternatives that would not allow snowmachine use in the additions, yet this was clearly an issue raised in scoping comments. Also, the Draft Plan does not consider implementing snow coaches for access to the Park. Instead, the Plan relies on the status quo for access to Denali's backcountry — single user snow machines — despite the fact the snow coaches have been found elsewhere, in certain circumstances, to be appropriate and feasible.... Nor does the Draft Plan consider voluntary agreement with air tour or air taxi operators, even though the environmental benefit had been previously acknowledged. The Plan does not explain its omission of these reasonable alternatives.

NPS Response: Alternative 2 of the revised draft plan would limit snowmachine access to the park additions and preserve to the type of "traditional activities" described in the regulation that closed the Old Park to snowmachine access. The section Actions Considered but Rejected at the end of chapter 2 explains why the National Park Service did not include alternatives for closing the park additions to all snowmachine use or employing snow coaches for access.

The original draft plan included an Aircraft Overflights Working Group composed not only of commercial air taxi and scenic tour operators but representatives of private pilots, commercial transportation services, and others that overfly the national park as well as parties affected by overflights. This group would address "voluntary measures" for achieving management area standards at Denali. This concept is retained for the revised draft.

Comment: In the DEIS, the Park service sets the "no action" alternative up for failure by characterizing it as involving no management, rather than simply involving no changes in the management direction expressed in the Organic Act, NPS regulations, the 1986 *General Management Plan* for Denali, and other Denali-specific documents. For instance, the DEIS states that as to snowmachine use, under the "no action" alternative

such use in Denali "would be managed only through enforcement of existing laws and regulations.... otherwise, there would be no limits on the location or amount of snowmobile use in these areas." This explanation ignores the fact that there is currently no regulatory authority for the cross-country, non-subsistence use of snow machines in Denali.

NPS Response: In general, the No Action alternative does describe a continuation of existing management direction. However, in some instances the existing management direction offers limited guidance, as in the case of snowmachine use in ANILCA units. The controlling regulation is 43 CFR § 36.11(c), which provides for the use of snowmachines for traditional activities where such activities are permitted by ANILCA or other law. Until the term "traditional activities" is defined, determining whether snowmachine use is for traditional activities is difficult. Consequently, the "no-action" alternative correctly describes the current circumstances.

Comment: The draft plan also looks at the impacts of specific activities on specific resources in isolation, despite NEPA's mandate that the agency consider the cumulative impacts of the proposed action and the alternatives. For instance, the DBCMP does not evaluate the cumulative impacts of a year-round motorized activity (snow machines in winter, air tours in summer). Instead, it simply looks at the effects that each activity will have in isolation.... The Park Service should conduct a new environmental effects analysis, looking at the cumulative impacts of a year-round motorized activities, as well as other reasonably foreseeable actions impacting the park. Simple one-sentence conclusions about the effects do not suffice under NEPA; actual analysis must be evident in the EIS that is supported by the record. Such conclusory statements are arbitrary and do not explain to the public the impacts of the alternatives being considered.

NPS Response: In the revised draft plan and accompanying environmental impact statement, the significance of noise disturbances are evaluated in terms of the indicators and standards provided in the management area descriptions. The level of noise is considered year-round, and a conclusion is drawn for the resource under each alternative based on all the effects from plan actions. Cumulative impacts consider the combined effect of the actions in the plan and any other past, present, or future actions that would contribute to the benefit or harm of the same resource.

Comment: NPS application of impact levels is arbitrary and capricious. It is unclear how the Park Service has come to the conclusion that major impacts to these resources and values do not constitute impairment to the purposes and values for which the Park was established.

NPS Response: The general Methodology section in Chapter 4, Environmental Consequences, of the revised draft contains a description of the criteria used to define impact levels and impairment of particular resources; some individual topics have specialized criteria presented in their topic-specific Methodology sections. These criteria have been revised from the criteria that appeared in appendix E of the original draft plan.



0 4 JUN 2003

Reply To Attn Of: ECO-088

Ref: 99-077-AFS

Mike Tranel, Chief of Planning Denali National Park and Preserve Post Office Box 9 Denali Park, AK 99755

Dear Mr. Tranel:

The Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (DEIS) for the proposed **Denali National Park and Preserve Backcountry Management Plan Amendment**, Council on Environmental Quality {CEQ} Reference # 030078) dated February 25, 2003 in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. We have assigned a rating of EC-2 (Environmental Concerns, Insufficient Information) to the draft EIS. This rating and a summary of our comments will be published in the *Federal Register*. A copy of the rating system used in conducting our review is enclosed for your reference.

The four action alternatives all establish management areas for the entire park and contain a range of beneficial uses, with each alternative prioritizing and distributing the uses differently. Alternative B seeks to emphasize wilderness resource values and non-motorized recreation, managing almost 49% as natural areas, the management area category with the lowest intensity of human use. Alternatives C and D attempt to emphasize dispersed wilderness recreational uses but allow some motorized recreation, with Alternative D allowing more non-wilderness recreation and concentrated use in some areas. Alternative E would greatly expand visitor services, facilities, and increased motorized use, with only 17% of the park managed as natural areas. Snowmobile use would be completely forbidden in most areas in Alternative B, aside from subsistence activities such as hunting, fishing and gathering (see below).

We have focused our review on the potential impact of snowmobile use on the environment at Denali National Park because we believe that snow machine use, among all proposed uses under the Backcountry Management Plan, has the greatest potential to cause significant environmental impacts, and because snowmobile use is likely to grow rapidly at Denali National Park during the life of the proposed Plan, as Chapter 1 of the EIS states. We also focused on snowmobile use because it has become a major environmental issue in Park Management Plans in the continental United States.

The EIS states that snowmobile use will disturb wildlife and cause damage to wetlands, vegetation, fish, and water quality outside the Old Park Special Resource Protection Area (in the Park Addition) portions of Denali National Park, where

snowmobile use would take place under Alternatives C, D, and E. However, the impact analysis is largely a generic discussion of the risks of snowmobile use which does not tie these impacts to locations of concern in the Park Addition where the most valuable or sensitive resources might be. Thus, impacts remain largely undefined. The uncertainty raises concerns because this EIS will, for the first time at Denali National Park, result in the establishment of guidelines permitting widespread snowmobile use without a full understanding of the risk to environmental resources within the Park Addition.

Snowmobiles and Environmental Impacts:

Physical and Biological Resources:

1. Soils, Vegetation and Wetlands: Park areas incurring impacts from concentrated snowmobile use would increase from estimated 2% to 3.5%, to 20% in Alternative C, D and E. While impacts are characterized as minor overall, the EIS is clear that Alternative E would cause the most damage. Soils would be compacted, particularly in high use areas where repeated passes occur. In windy locations, soil erosion would occur. Vegetation would be damaged, particularly on more heavily used trails and paths where effects could be intense, both from direct compression and removal of snow normally acting as an insulator. Compaction from repeat snowmobile passes, leakage and discharge of fuel and unburned hydrocarbons onto the surface could also affect wetland processes such as toxicant retention and nutrient cycling. The EIS should estimate how many acres of soils, vegetation and wetlands might be adversely impacted, and displayed graphically if possible.

2. Wildlife, Fish and Water Quality: Under alternative B, snowmobile use would decrease in the park, resulting in fewer impacts to fish and wildlife. Under alternative C, 18% of the park area would be accessible to snowmobiles under dispersed use; and under Alternatives D and E, 46% and 42% of the park area would be accessible. Studies of wildlife behavior and hormonal changes cited in the EIS indicate that there is a high probability of inflicting additional stress on large mammals such as wolves, bears, elk, moose, bighorn sheep, lynx, and wolverines. If this occurs during winter, when animals are already under greater stress, this could result in displacement from traditional ranges and increased mortality of individuals and species populations. Affects on small mammals, and ungulates has also been associated with compaction and altering of trails. Under Alternatives C, D and E, effects could be widespread throughout the Park, and severe in major snowmobile corridors and other high use areas. The EIS should show where wildlife and fish populations and streams might be affected by snowmobile route placement and guidelines in each alternative.

Snowmobiles would affect fish by degrading water quality with runoff to streams carries deposited contaminants from engines such as hydrocarbons, carbon monoxide and particulates. Such affects would probably be more localized than wildlife impacts, under Alternative C, D and E, but the analysis suggests that these impacts would take much more time to repair. The EIS should confirm whether this is true, and if so, how long it may take to "fix" damaged resources, and how impacts might be mitigated.

Natural Soundscapes: Alternatives C, D, and E would allow varying levels of impacts from increased snowmobile access and increased density over the life of the Backcountry Management Plan. The EIS should include clearer information about what standards or thresholds will be used to measure impacts on the natural soundscape, how the natural soundscape will be monitored, and how and when exceedance of these standards might require a change in

soundscape management. The proposed use designations in the Plan should be designed so that if monitoring demonstrates that soundscape exceedances are occurring, the conditions of use can be adjusted without major amendments or revisions to the Plan. This is important particularly if the reasonably foreseeable road and facility improvements discussed in the EIS result in improved access and sharply increased snowmobile use in certain portions of the park.

Traditional Activities under Alaska National Interest Lands Conservation Act (ANILCA) (94 Statute 2371) in Denali National Park: ANILCA allows snowmobile use for traditional activities related to subsistence as defined in the Act. However, the ANILCA definition of traditional activities from Section 11.10a of the Act only applies in 95% of the original Mount McKinley National Park, and does not apply in the Denali National Park Additions, which were added with the passage of ANILCA in 1980 (and referred to as the park additions in the DEIS). The NPS, in the alternatives to be analyzed in the DEIS, has developed management area zones under most of the alternatives to permit a broad range of diverse uses, from traditional subsistence to backcountry recreation, rather than interpreting how ANILCA meant to define traditional activities and subsistence for the Park additions. While these management zones accommodate a greater range of interests of current park users, they also allow a broader range of activities than the Act intended, as the EIS notes (DEIS, Appendix F).

EPA sees some difficulties with this approach. First, once the precedent for broader snowmobile use is established, it may be difficult to eliminate or even curtail it later, even if environmental impacts prove significant, conflicts between subsistence use and recreational use become more common (DEIS, pg. 402), or snowmobile use continues to increase in area and frequency. Second, we are concerned with the approach because under the proposed plan, protection of environmental resources in the Park Additions from snowmobiles would rely heavily on enforcement and monitoring.

Enforcement would have to be successful over a much broader area than at present to ensure exclusion of snowmobiles from prohibited zones and to prevent snowmobile practices prohibited by NPS inside the Park such as racing at high speed, jumping, or "high marking". According to the DEIS (Page 209, in Chapter 3), even information on existing snowmobile use levels and locations appears fairly sketchy. The effectiveness of an expanding enforcement responsibility would be highly reliant on an adequate budget for enforcement activities including regular monitoring, so that adjustments for snowmobile use permits can be adjusted as necessary. Enforcement and monitoring relies upon future fiscal commitments to work. The EIS and Record of Decision must therefore include commitments to improved monitoring of ongoing snowmobile use, the documenting of environmental effects from them, the assurance of adequate enforcement of routes and guidelines, and a commitment to employ contingencies such as mitigation or snowmobile exclusion if impacts prove unacceptably severe.

Consistency With the Wilderness Act: The DEIS States that the NPS completed an EIS in 1988 that recommended an additional 2.25 million acres be designated as wilderness. The Act states that until designation, the area should be managed as a wilderness, and wilderness values preserved. Snowmobiles would not be a permitted use in a designated wilderness. Alternative B would preclude snowmobile use in the Park Addition, while the other action alternatives would allow snowmobile access. NPS has concluded that most snow machine impacts are to soundscapes and wilderness human values such as solitude, and that these values can be quickly restored once a wilderness designation is made and snow machines are excluded (Adrian Hall, NPS staff, pers. comm.). However as we have discussed above, the EIS describes predicted

physical resource impacts from snowmobiles to wetland, soil, fish and wildlife which might prove to be long-term and not easy to repair, such as alterations to hydrologic functions in wetlands; wildlife ranges and survival rates; and water quality in surface waterways. Resulting impacts could be widespread in the Park Addition, not easy to control, and highly dependent on enforcement.

EPA suggests that the NPS examine adopting the Alternative B management area snowmobile prescriptions, or a hybrid form of them into the preferred plan. We believe that an alternative which restricts or excludes snowmobiles from all but the most limited high-use areas of the Park Addition would be the most responsible form of management consistent with the intent of the wilderness recommendation for this area. It would involve less risk of damage to environmental resources until designation occurs.

Thank you for the opportunity to review this Draft EIS. Should you have any questions, please feel free to contact Mr. Jonathan Freedman of my staff at (206) 553-0266.

Judith Leckrone Lee, Manager Geographic Implementation Unit

cc: Alaska Department of Environmental Conservation

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

STATE OF ALASKA

OFFICE OF THE GOVERNOR

ANILCA IMPLEMENTATION PROGRAM

May 30, 2003

Paul Anderson Superintendent Denali National Park and Preserve P.O. Box 9 Denali Park, Alaska 99755

Dear Mr. Anderson:

The State of Alaska has reviewed the February 2003 Draft Backcountry Management Plan for Denali National Park and Preserve General Management Plan Amendment Environmental Impact Statement. This letter represents the consolidated views of state agencies. We appreciate the opportunity to submit these comments and hope they will assist the Service in developing a final plan that serves the public and meets the intent of the Alaska National Interest Lands Conservation Act.

Summary of Issues and Concerns

The State of Alaska's most significant concern is use of management area "zoning" to broadly close or restrict public access based on inadequately defined criteria or unquantified impacts. We recognize that Denali National Park and Preserve has a particularly large constituency advocating maximum protection of wilderness values with minimum human presence, especially in the form of motorized access. This public pressure, while understandable, does not excuse the National Park Service from following the letter and spirit of the Alaska National Interest Lands Conservation Act (ANILCA). In the compromise effort to gain passage of ANILCA, Congress chose to combine large acreage withdrawals with special accommodations for motorized access and other uses not commonly allowed in national parks and wilderness units elsewhere. ANILCA and its implementing regulations lay out detailed procedures that must be followed to manage (close or restrict) these uses. We find that the Denali Backcountry draft plan falls short of meeting the requirements of ANILCA, especially Section 1110(a).

The State has additional concerns with management intent addressing soundscapes and wilderness. In attempting to apply more recent *administrative* policy developed at the national level, the existing *statutory* guidance in ANILCA has been systematically overlooked. The proposed implementation of the subjective management intent is inconsistent with ANILCA's required finding of damage. We are also concerned that the original intent of the Wilderness Act is applied too narrowly. The current emphasis on opportunities for "*solitude*" appears to overshadow the Wilderness Act's equal emphasis on "*primitive and unconfined type of recreation*." In light of the constraints in ANILCA, we believe steering the wilderness management intent toward primitive recreation would be more appropriate.

FRANK H. MURKOWSKI GOVERNOR

550 W. 7^{hr} AVENUE, SUITE 1660 ANCHORAGE, ALASKA 99501 PH: (907) 269-7477 / FAX: (907) 269-3981 Sally_Gibert@gov.state.ak.us These and other equally significant concerns are detailed in this letter by topic, followed in some cases by related page specific comments.

Management Area "Zoning"

The proposed use of management areas, defined, in part, by types and levels of visitor uses constitutes an inappropriate de facto closure of allowable access provided under ANILCA. Congress established a high bar for federal agencies to clear before restricting public access in Alaska park units. The access provisions of ANILCA were a key component to the compromises that were necessary to pass the legislation. The zoning concepts in the draft plan – based on subjective aesthetic values – is a significant deviation from Congressional intent to limit manager's discretionary authority to restrict access.

We note that the purposes of the plan include to "update and expand the 1976 Backcountry Management Plan." The 1976 plan was adopted for the original park before ANILCA expanded and re-designated the unit under significantly different management guidelines. So while the 1976 plan is, by definition, not in compliance with ANILCA, many of its pre-ANILCA features have not been modified to reflect the 1980 statutory guidance. This carry over of management intent may explain why some significant management decisions remain at odds with ANILCA provisions.

While the draft plan acknowledges (page 1) that implementation may require promulgation of special regulations, Section 1110(a) clearly states "the Secretary shall permit" such uses, and "such use shall not be prohibited unless . . . the Secretary finds such use would be detrimental to the resource values of the unit or area." Such resource values do not include immeasurable, intangible aesthetic values and experiences. Unlike lower 48 parks, Alaska park units are considered "open until closed" to public activities not otherwise prohibited by law. Restrictions and closures require a factual determination of impact on tangible, measurable resources of the unit as part of the rulemaking process (43 CFR Part 36). Significantly more and accurate data are needed before the significant restrictions proposed by zoning (e.g., 3 encounters per week for Natural Areas – page 37) are considered.

Soundscape Management

A stated purpose of the draft plan is to serve as "Soundscape Preservation and Noise Management Plan as required by Director's Order #47" (excerpt on page 15). Further, the draft plan heavily emphasizes noise reduction and soundscape management. The Director's Order was among a number of recent national orders and policies, including the Management Policies of 2001, which fail to recognize the statutory protections under ANILCA for Alaska park units. Consequently, the State of Alaska objected to these management documents and their application in Alaska. Even though these policies are now final, the Service may not use administrative policy to override statutory intent (as implied in the draft plan on page 20.) Any motorized access or mechanized equipment may cause sounds that wilderness enthusiasts find disruptive, and we recognize that natural sound is a legitimate value shared by many park visitors. However, ANILCA-mandated access and use may not be subjectively curtailed by noise concerns. The Service has the responsibility to insure that soundscape management is properly implemented within the framework of ANILCA, including quantifiable findings of damage to resource values.

We request the relationship between aircraft/airspace management and soundscape management be addressed in the soundscape management section (p.173). We also request the page 227 explanation of regulatory authority be referenced wherever soundscape management is addressed.

The data provided in citation for this section is exclusively from the National Park Service. We request that the Service include citations from independent researchers on quantification and impacts related to natural soundscapes. The information provided does not document research conducted on the influence of natural soundscapes on recreational satisfaction of visitors or on wildlife resources.

Wilderness

The State believes that the draft plan wilderness management intent does not properly respond to ANILCA, nor the Wilderness Act itself. Unlike wilderness management in other states, ANILCA amends application of the Wilderness Act to allow motorized transportation, cabins (sections 1303 and 1315), and other uses in designated wilderness in Alaska. In addition to the often-recognized sections 811 and 1110 access provisions, ANILCA Section 1316 also protects the pre-ANILCA use of mechanized equipment necessary for the taking of fish and wildlife (operation of camps, such as water pumps and generators) in wilderness. Service management activities to protect wilderness values under the Wilderness Act must accommodate these exceptions for Alaska. In addition, backcountry planning documents must make these exceptions clear to increase the applicability and relevance of public comment.

Where wilderness is considered, we request the plan broaden or replace the single-minded focus on "solitude" to reflect the entire concept included in Section 2(c) of the Wilderness Act: "... outstanding opportunities for solitude or a primitive and unconfined type of recreation." The ANILCA purposes for Denali include "wilderness recreational activities," but do not include "solitude." The characterization of "solitude" in the draft plan implies an extremely low tolerance for the very types of uses that ANILCA allows. Incorporating the extended Wilderness Act concept to include *primitive recreation* would empower the Service to more effectively marry the Wilderness Act and ANILCA. This approach would also better reflect Section 1133(a) of the Wilderness Act, which states that use of wilderness areas "in National Parks are hereby declared to be within and supplemental to the purposes for which units of the National Park system were established."

Primitive recreation implies a true backcountry experience, but does not necessarily imply an absolute "absence of distractions such as large groups, mechanization, unnatural noise, signs, and other modern artifacts." (from bullets at top of page 30) We request the plan consider, for example, that even if a few planes a day fly overhead, a remote backcountry traveler can still appreciate a wilderness experience. Carrying this example another step, the Service could provide educational information about more highly used overflight areas so that those backcountry users who are particularly sensitive to aircraft sounds will know what areas to

avoid. The Service and backcountry users themselves share some responsibility for realistic accommodation of other uses; just as pedestrians and cyclists must accommodate each other on a multi-purpose city trail.

page 5, Denali Wilderness: The correct citation in the first sentence is Section 701.

- page 5, <u>Legislative Intent</u>: The isolated quotes from the 4-year legislative history do little to clarify the Congressional directives for management of Wilderness areas in Alaska park units. We request this section include a more comprehensive range of legislative history (which we could assist in providing) or – preferably – just delete it.
- page 176, <u>Wilderness</u>: Reword the first sentence in the second paragraph to specifically reflect the 1.9 million acres of Denali wilderness established by Section 701 of ANILCA. Also, we request that the last sentence in this paragraph more clearly explain that park additions created by ANILCA are "open until closed," including wilderness designated areas.
- page 347, <u>Socioeconomics</u>: As mentioned above, wilderness areas in Alaska have different management provisions than wilderness in other areas. This necessarily alters management criteria, thus decreasing the applicability of these wilderness valuation studies in Alaska park units.

Registration and Permit Requirements

The draft plan proposes to extend registration and permit requirements to the park additions on the basis that registration of overnight users is essential to gaining accurate information on which to base management decisions. We appreciate the response to our concerns regarding registration and permit requirements on page 393 of the draft plan. We are still concerned, however, that mandatory registration requirements proposed in the park additions for overnight camping, motorboat use, horses, and – in alternative B – hiking and airplane landings, constitute a restriction under ANILCA and places undue burden on the public. Since the voluntary registration system for mountain climbers on the south side of the Alaska Range has proven successful, we request implementation of a similar voluntary system for the remainder of the park additions to gather user data and disseminate park information.

We believe that mandatory registration and permit requirements are a form of closure requiring new regulation. Moreover, we note it could be difficult to show the required detriment to resource values based on intangible user experience attributes.

Quota System in Old Park and Use of Advance Reservation System

During scoping, the state requested the Service to re-evaluate the quotas for backcountry units in the Old Park and consider advance reservation for some backcountry units or for a certain percentage of users. The Service responded that a recent survey of backcountry users investigated visitor satisfaction with the quota system in the Old Park and determined that there is a high rate of satisfaction with this system (Swanson 2002). The survey, however, was flawed since it did not question displaced users, i.e., those that were turned away because there were no desirable units available, or those that gave up coming to the park to camp overnight in the backcountry. The draft plan states that park managers will continue to adjust unit quotas either up or down, yet the draft plan includes no commitment to do this nor explanation of how it will be done. Finally, the response to comments (page 393) states that potential use of an advance reservation system is proposed as part of the alternatives though we found no discussion regarding this. We request reconsideration of this issue.

ANILCA 1301(b)(4) Access and Transportation Plan

The consultation section at the bottom of page 393 states that the Backcountry Plan meets the planning requirements of ANILCA Section 1301. This remains an issue because in the late 1980's it was generally recognized that the general management plans (GMPs) for all Alaska park units did not meet the specific requirement for an access and transportation plan under 1301(b)(4). When the Alaska Land Use Council, established by ANILCA in part to review such plans, recommended adoption of the GMPs, it did so with the understanding that access and transportation plans for all park units would be subsequently developed. We appreciate that the Service has kept this commitment in mind; however, the State does not believe that the intent of Section 1301(b)(4) requirement can be fully met until pre-ANILCA access methods and means have been identified.

We request the Service cooperate with the State of Alaska in a study to document pre-ANILCA traditional activities and methods of access prior to making assertions of what is "traditional." The Service and ADF&G completed such a cooperative study that documents pre-ANILCA access activities and methods for Wrangell-St. Elias Park and Preserve, which could be used as a template. This is baseline information necessary to effectively limit "traditional" uses protected by ANILCA Sections 811 and 1110(a). We believe documentation of such use is an essential component of Section 1301 that remains unfulfilled.

Without such a study it is inappropriate to categorically view ORV use, for example, as incompatible with the purposes and values of the unit.

Definition of Traditional

The State strongly disagrees with application of the old Denali park definition of "traditional activities" (defined on page 421) to any ANILCA designated unit and unit additions. Access in Alaska park units by snowmobiles, airplanes, and motorboats is protected under ANILCA Section 811 for subsistence by "traditional methods" and under Section 1110(a) for "traditional activities." Pre-ANILCA "traditional activities" include subsistence and recreation. While subsistence uses may only occur in the Denali park/preserve additions, "traditional activities" such as mountain climbing, wildlife viewing, sightseeing, camping, occur throughout the entire park and preserve unit. These have been undeniably traditional activities throughout the park since its creation in 1917. It is not appropriate to arbitrarily exclude recreation from the definition simply because it is more difficult to manage. We objected to this approach in our January 2000 review of the regulations for the "old Park," and we even more strenuously disagree with extending this narrow definition to the ANILCA additions.

Recognizing recreational activities as traditional does not mean that the Service must resign itself to, for example, unlimited snowmachine use. It does mean, however, that a rigorous process to identify measurable impacts must be followed. This was precisely the intent of Congress when Section 1110(a) was incorporated into the final ANILCA compromise.

We also object to the application of the national policy (articulated on page 16) that prohibits new forms of recreation or technological advances until the Service completes an environmental assessment. ANILCA legislative history reveals that Congress intended to allow new technology for access for traditional activities. Limitations to access are ONLY based on findings of damage to resources, not the technology used for traditional activities such as recreation, subsistence, and other public uses.

Aircraft Overflights

We appreciate that the Service is willing to work with the aviation community to explore voluntary methods of reducing aircraft noise over the park. However, we caution against approaches that too closely tie "voluntary" compliance with renewal of concession or other commercial use authorizations. We encourage discussions and eventual actions to fully consider possible impacts on safety in Alaska's terrain and weather conditions, administration (including ADF&G research), as well as impacts on allowed activities such as hunting, fishing, and other traditional activities.

Denali National Park is centrally-located between the two most populated cities in Alaska, with significant commercial and small aircraft traffic between them and to other destinations in Alaska and beyond. Service commitments that natural sounds will "almost never" be interrupted by aircraft overflights, whether by Alaska Airlines at 20,000 feet or smaller aircraft flying the requisite 2000 feet above ground level within FAA-managed airspace are impractical and may create false expectations (e.g., page 37 – Natural Area; page 38 – Old Park). Much of the draft plan implies that a high degree of natural soundscapes can be achieved, when in fact sound management is not always within Service's management control. Specifically, we request the document clarify that only the Federal Aviation Administration (FAA) has jurisdiction to control airspace above Denali National Park and Preserve.

Process

We appreciate the opportunity to participate in scoping meetings, to review the Affected Environment chapter and an internal review draft of the plan. However, during early phases of the planning process, the planning team committed to providing specific opportunities to review how data on fish and wildlife and related uses and access were being used to develop management proposals. This commitment was not fulfilled. Before the plan is finalized, we request opportunities to cooperatively evaluate how this information was used and how the resulting management proposals are expected to affect state fish and wildlife management.

Conduct of Research

It is not readily apparent if the intent under the headings "National Park Service Administration and Research" in each of the descriptions of the alternatives apply to non-Service entities. If it does apply to more than the Service, we disagree with the proposed management of, limits on, and criteria for conducting research under the various alternatives, e.g. must be necessary for park management (page 51), tied to the "*Inventory and Monitoring Program*" (page 60) or subject to the Minimum Requirement procedures (Appendix I). The Service may choose to adhere to these guidelines, but we request they not be automatically imposed on other government agencies that have different mandates and needs within park boundaries. The ADF&G manages fish and wildlife on all lands in Alaska, including those lands within CSUs. Research criteria and approval processes for entities other than the park managers and the state fish and wildlife managers were delineated in the Resource Management Plan for Denali National Park and Preserve and in the Master Memorandum of Understanding between the Service and ADF&G. These processes allow for development of appropriate stipulations that meet the needs of the Service and affected agencies. We request that the plan defer to these or similar processes under all alternatives.

State Fish and Wildlife Authorities

Section 1314 of ANILCA confirms that the State of Alaska retains authority to manage fish and wildlife on public lands. Clarification of this role and a commitment to cooperate in related matters is addressed in the Master Memorandum of Understanding between the Service and ADF&G. We request that the respective roles of the Service and State, and a Service commitment to cooperation, be fully recognized in the plan, ideally in the "Actions Common to All Alternatives." Specifically, we request the plan and planning process more fully recognize the state's authorities that overlay the Service's land management responsibilities.

- page 13, <u>Boating</u> (and throughout the draft plan). The state remains on record strongly objecting to existing national regulations that extend the Service's jurisdiction over management of state waters. In addition to the inappropriate national precedent, ANILCA Section 103(c) precludes the application of regulations adopted for management of Alaska's conservation system units to the non-federal public lands within those units, including navigable waterways.
- pages 68-72, <u>Indicators</u>: We request that the Service's use of indicators and monitoring of fish and wildlife be cooperatively designed and conducted with ADF&G. At a minimum, such evaluations necessitate consultation with ADF&G.
- page 164 Wildlife section: A wildlife table similar to the fish table (page 162) would be useful.
- page 167-168, <u>Moose</u>: ADF&G does not consider moose densities of less than 1 per mile as abundant. Therefore, the average of 0.4 to 0.5 moose per mile would be considered low density. Abundance of 0.1 moose per mile is considered sparse.

- pages 219-222, <u>Sport Hunting</u>: This section incorrectly implies that all hunting on the preserve regulated by the Board of Game is "sport" hunting. In fact, the state hunting regulations provide for general hunting (including subsistence) through resident and non-resident seasons. Further, rural and non-Alaska residents currently can hunt on preserve lands. We recommend use of the term "general hunting" when not specifically referring to subsistence.
- page 276, <u>Wildlife and Fish Motorized Activities</u>: The description of Alaska state statutes prohibiting the disturbance of fish spawning habitats incorrectly implies that motorized boat access on navigable waters may violate state laws if operated without a Title 16 permit. We request a revision to accurately reflect state laws with regard to disturbance of fish spawning habitats and motorized boat use.
- page 438, <u>Appendix J: Development of Alternatives, item #6</u>: Under "Coordination ...", we request expansion to confirm coordination with the State of Alaska on management of fish, wildlife, and navigable waters.

Subsistence and Cultural Resources

We request modifications to the various subsistence program references that accurately clarify the respective federal and state roles regarding subsistence. Although state subsistence harvest regulations exist for subsistence use on all lands, the Federal Subsistence Board regulations in some instances supercede these state regulations on federal public land. Regardless of who is regulating harvests, the state retains responsibility for overall management of fish and wildlife regulation of harvests is only one tool of management.

- page 2, <u>Snowmobile use</u>: We request revision of this paragraph to reflect the importance of snow machines for subsistence activities in winter.
- page 20, <u>Potential Effects on Cultural Resources</u>: Consumptive uses, including subsistence activities, were established activities prior to enactment of the park and have been recognized by Congress in ANILCA. For thousands of years, humans have been, and will continue to be, a natural part of the ecosystem. We request the plan specifically consider that the cultural values of the local people are a living part of the unit's cultural resources.
- page 22, <u>Subsistence Management</u>: It is difficult to evaluate the relationship between the referenced Subsistence Management Plan and the Backcountry Plan, since no specific details are provided about the Subsistence Management Plan. We recommend language be added clarifying which plan takes precedence for protecting and providing for continued subsistence uses of the park and preserve.
- page 181-187, <u>Affected Environment Subsistence</u>: Although this section presents a useful overview of subsistence activities and harvest estimates involving park and preserve lands, no reference is made to research projects that will add more current information for the four resident zone communities, including an ethnographic overview and assessment report prepared for the Service by ADF&G's Division of Subsistence. We recommend

recognition of these studies, as well as a geographic place names report prepared for the Service by James Kari.

- page 183, middle of page: "There is no known use of airplanes by local rural subsistence users" Aircraft have played an important role for local residents in accessing remote lands throughout Alaska, in some cases pre-dating overland motorized access. This unsubstantiated statement illustrates the need to conduct the previously recommended cooperative study of pre-ANILCA activities and access methods. We request a revision, such as "The SERVICE is not aware of current aircraft use by local subsistence users to access preserve lands."
- page 341 <u>Alternative B</u> paragraph 1, and page 342, <u>Alternative C</u>, paragraph 1: The assumption with all the alternatives, especially B and C, is that visitor contact with cultural resources automatically has negative consequences. While we understand the point being made, we are concerned that the visitor attraction value of some cultural resources is an overlooked opportunity. With proper education, interpretation and monitoring, some cultural resources could be viewed as visitor assets deserving attention.
- Appendix A: <u>ANILCA 810 Analysis:</u> The "Findings" section of this analysis concludes that increasing recreational use in parts of the park and preserve could impact subsistence uses. Even if the plan would not directly restrict subsistence uses, we are concerned that the Service could use the plan to manage user conflicts in ways that inappropriately favor recreational uses. Consistent with our January 2000 comments on the Kantishna firearm restrictions (part of the snowmobile regulation package), we request the Service to "guard against management decisions which treat legally-authorized subsistence uses secondarily to non-consumptive uses." We request assurances in the "Actions Common to All Alternatives" that subsistence use will remain a priority throughout implementation of the plan.

Cabins

The draft plan appears to be responsive to accommodating some of the expected increase in park visitation, as evident by the proposals to construct a wall tent for winter use at Mile 7 of Park Road and campsites in Little Switzerland. However, the draft plan falls short in addressing public use cabins on a park wide basis. Such cabins are proposed to be placed only on state lands outside the park boundary and only under Alternative E (page 64). We request the Service re-evaluate this position and consider placement of public use cabins on park lands, such as those public use cabins in other federal areas managed by the U.S. Fish and Wildlife Service, U.S. Forest Service and the Bureau of Land Management. In addition, we request the Service consider including possibilities for a system of huts that would provide a new and unique way for people to experience the park.

Currently, none of the alternatives provide for public use of administrative cabins. In response to the State's suggestion to offer use of these cabins to the public the draft plan states, "Agency regulations do not provide for opening existing administrative cabins in wilderness for public use" (page 393). It is our understanding that public use of administrative cabins is not prohibited

in Wilderness, in fact, the park in the past has allowed concessionaires and their clients to use these cabins in winter.

pages 187-188: ANILCA Section 1302 provides for cabins for uses other than subsistence. In addition, ANILCA Section 1315 allows for existing cabins and provides for the construction of new cabins for public use in ANILCA Wilderness Areas. We request these specific ANILCA provisions be addressed in the plan with management options included among the alternatives.

Temporary Facilities (Actions Common to All Alternatives, under Management Tools)

Blanket prohibitions of temporary facilities in ANILCA units (e.g., page 38, paragraph 4; and page 39, paragraph 1) is contrary to ANILCA Section 1316, which states: "where the taking of fish and wildlife is permissible, the Secretary shall permit the continuance of existing use and future establishment of temporary campsites, tent platforms, shelters, and other temporary facilities." Prohibiting temporary facilities and equipment necessary to participate in hunting, fishing, and trapping where legal in the park additions and preserve would serve as a de facto closure of activities otherwise allowed under ANILCA. We urge the Service to work with ADF&G in identifying what those needs are and appropriate limitations to reduce impacts to the resources, consistent with Section 1316.

RS 2477 Rights of Way

The State has accepted numerous routes crossing Denali National Park and Preserve under the provisions of the RS 2477 grant (listed below). We request the <u>Transportation and Access</u> section beginning on page 222 include a cooperatively developed generic overview of RS 2477 rights of way. Among other things, this section should address that although the Federal Land Policy and Management Act of 1976 repealed Revised Statute 2477 (43 USC 932, or RS 2477), it preserved valid, existing rights that had already vested. RS 2477 rights of way clearly have implications for Denali National Park backcountry management, particularly in the park addition areas. We request the generic discussion list, or reference in the Appendix, the routes that have been asserted by the state to date and reference that both the state and the Service have respective rights and responsibilities concerning use of these routes. Assuming that most individual routes are not expected to be specifically addressed in the plan, we recommend such acknowledgement in the section "Issues and Impact Topics Considered But Not Addressed" section (page 21).

These trails appear in state statute (AS 19.30.400) as a state right-of-way, along with several other routes that affect Denali National Preserve. These include, but are not limited to:

RST 340 - Lignite-Stampede, RST 341 - Roosevelt-Kantishna RST 343 - Roosevelt – Glacier RST 343 - Kobi-Kantishna RST 344 - Lignite-Kantishna RST 345 - Kobi-McGrath (via Nikolai & Big River) RST 346 - Nenana-Kantishna RST 348 - Spruce Creek Trail RST 414 - El Dorado Sled Road RST 491 - Rex-Roosevelt Trail RST 492 - Glacier-Kantishna via Caribou Creek RST 493 - Quigley Ridge Trail

On page 51 and in subsequent alternatives under the heading of "Trails," the draft plan states that "no new trails or routes (either summer or winter) would be added besides those identified in the 1997 Entrance Area and Road Corridor Development Concept Plan and the 1997 "South Side Denali Development Concept Plan." We request this section acknowledge valid existing rights (such as RS 2477 rights of way), or clarify that it only refers to Service construction of new recreational trails.

- page 4, <u>Regional Location Map</u>. We request depiction and identification of the Stampede Road. As noted above, it was also identified as an RS 2477 right-of-way (RST 340, Lignite – Stampede and RST 344, Lignite-Kantishna) from the Healy area to Kantishna.
- page 48, <u>Easements</u>. We request notation that the Windy Creek trail has also been asserted by the state as a valid RS 2477 right-of-way, thus affecting the private land over which the trail passes. A map of the route is enclosed for your information.
- page 242, <u>Transportation Modes</u>. A potential northern transportation corridor "approximately follow[ing] the Stampede Trail alignment" is mentioned; we request that the text note this is just one of the possible alignments under investigation.

Kantishna Airport

We request that the plan note the completion of the Kantishna Airport Master Plan in 2002. We are enclosing a copy of the approved airport layout plan for your information. Because of its relevance to backcountry management at Denali, at a minimum, the basic findings would be relevant additions to the document. The airport and its role in bringing visitors and supplies to Kantishna could be specifically mentioned on page 205 under "Kantishna Area."

North Denali Access

On page 21-22, the draft plan lists Denali North Access as a topic not addressed. We recognize that the substance of thes studies are outside the scope of the backcountry plan; however, we request the plan address how north access developments could influence backcountry management if new access is developed in the future. Would a formal amendment to the backcountry management plan be expected? We also request the plan address the possibility of an extended hiking trail from the park road north along the Savage River to state land. The south end on park land has already been constructed. The North Denali recreation facility study will explore this possibility.

Other Access

page 14, <u>Bicycles</u>: We request this section clarify whether bicycles are allowed under the existing regulations.

- page 14, <u>Case Law:</u> Since these cases apply to "lower 48" park units, we request the discussion clarify how these decisions are affected by ANILCA.
- pages 45 and 226, <u>pack animals</u>: Contrary to statements made on these two pages, pack animals are allowed for uses other than subsistence in the park additions. The use of pack animals is protected as a traditional activity under ANILCA Section 1110(a) and the implementing regulations at 43 CFR Part 36.
- page 233, <u>Closures</u>: We request this discussion be expanded to note that temporary closures require a public notice and hearing before a closing takes effect per 36 CFR §13.30 and 43 CFR Part 36.
- page 259, <u>pack animals</u>: The general use of pack animals, other than dogs, is rare. We are unaware of data substantiating the increases projected under the No Action Alternative. We appreciate that the draft plan recognizes that regulations are necessary to limit the use of pack animals; however we question the need for such regulations at this time.

Adaptive Management

The "Plan Implementation" section on Page 67 indicates that *adaptive management* will be used when implementing the plan, and indicates that new information will trigger proposed management plan changes as needed on an annual basis. This open-ended approach appears to go beyond the typical level of fine-tuning that is common among such plans. Without additional guidance it is difficult to review the draft plan as a whole and predict long term planning outcomes. We recommend the plan elaborate on criteria and sideboards to clarify management intent for both the public and future managers.

Environmental Analysis

Many of the park management proposals, especially in Alternatives B and C, are based on the presumption that uses are rapidly increasing and that access technology will put additional pressure on the park. While the population of Alaska has indeed "grown more than 50 percent since 1980" (page 2), statewide trends in the last five years indicate that the number of non-resident recreational users has leveled off.

We agree that plan implementation, as proposed, could cause cumulative impacts to visitor use on non-park adjacent lands. Visitors to the region desire to go to Denali National Park and Preserve because it is a premier visitor attraction. To minimize these regional impacts, we urge the Service to reevaluate its management and provide more diverse opportunities for park users throughout the unit.

page 66. We disagree with the environmental analysis that this alternative "fails to attain the widest range of beneficial uses" because this alternative actually provides the widest range of beneficial uses for all park visitors. Though there could be additional impacts to wildlife, vegetation, natural soundscapes, and wilderness, the level of impact may be acceptable given more opportunities for active management to reduce those impacts, and the resulting benefits to park users.

- page 244. This page summarizes studies that document the negative effects of snowmobiles on air quality. Most, if not all, of these studies were conducted outside Alaska, and two are over 25 years old. We request the impact analysis address the applicability of these studies for currently used machines in Alaska.
- page 256, Conclusion. We disagree with the statement that Alternative E provides the "greatest level of negative impacts on physical resources." Granted, the *potential* for impacts is higher, but as the draft plan notes, active management options available in Alternative E, such as hardening well-used campsites, could reduce or eliminate many impacts and would allow substantially increased use with minimal added cumulative impacts.
- page 258, <u>Vegetation and Wetlands Alternative A, last paragraph</u>: Based on the 1974 and 1975 studies referenced on page 244 (which presumably are the basis for this discussion) it is not apparent how these studies were interpreted for Alaska.
- page 346-360, <u>Socioeconomics</u>: The statements that Alternatives B and C would increase income in the local economy appear unsubstantiated. One could just as easily conclude that decreased access and commercial services combined with restrictive public use limits would create fewer area jobs and thus less local income.

Thank you for the opportunity to provide our views, analyses, and recommendations. We remain available to clarify any of our concerns and look forward to working with you, as appropriate, on revisions.

Sincerely,

/ss/

Sally Gibert State ANILCA Coordinator

Enclosures

Appendix B: Wilderness Management Plan Requirements

The Denali National Park and Preserve Backcountry Management Plan is intended to serve as a Wilderness Management Plan for the park's designated wilderness and lands determined suitable for wilderness designation. This plan does not, however, follow the outline recommended in Appendix D of Reference Manual 41 for constructing Wilderness Management Plans since its primary purpose is to serve as a General Management Plan (GMP) amendment and several wilderness plan components are addressed in other park planning documents.

This appendix identifies the correspondence between the recommended wilderness plan structure and the relevant components covered by this plan or the existing GMP which together establish the wilderness planning framework for Denali National Park and Preserve.

I. Introduction

- A. **Goals and Objectives of the Plan**. This element is covered in Chapter 1 under Purpose, Need, and Management Goals.
- B. **Identification of the Wilderness Area**. Map 3-1 in Chapter 3 depicts the Denali Wilderness and areas determined suitable for wilderness designation.
- C. Legislation and Pre-Existing Conditions Affecting Wilderness Management. Legislation is covered in Chapter 1 under Applicable Laws, Regulations, and Case Law. Pre-Existing Conditions are discussed in Chapter 3.
- D. Relationship of Wilderness Management Plan with Other Management Plans. This element is explained in Chapter 1.
- II. Wilderness Management Proposed Goals and Actions
- A. **Inventory of Administrative Facilities.** Chapter 3 identifies all backcountry administrative facilities. None of these facilities has been found to be incompatible with wilderness.
- B. Establish Desired Future Conditions. This element is covered in Chapter 2 under Management Area Descriptions under Actions Common to All Action Alternatives and through the management area designations provided in each alternative.
- C. **Establish Monitoring Indicators**. This element is addressed in Chapter 2 as part of the Management Area Descriptions.
- D. Establish Standards for Indicators. This element is also addressed in Chapter 2 as part of the Management Area Descriptions.
- E. **Establish Visitor Use Levels**. A numerical cap on the number of climbers on Mount McKinley during the prime climbing season is set in each alternative in Chapter 2. However, in general the plan relies the Visitor Experience and

Resource Protection (VERP) process to establish capacity, which uses indicators and standards to specify thresholds in terms of resource impacts rather than determining a set amount of allowable use.

- F. **Staff Organization and Accountability**. The existing administrative structure is described in Chapter 3. Changes to this structure are proposed in each alternative and Actions Common to All Action Alternatives in Chapter 2 and detail is also provided in the analysis of impacts to Park Operations and Management in Chapter 4.
- G. Application of "Minimum Requirement" Concept. Commitment to the minimum requirement process is broadened to the entire backcountry as identified in Actions Common to All Alternatives in Chapter 2. A minimum requirement procedure is included as Appendix D.
- H. Access by Persons with Disabilities. Various forms of backcountry access that are available to all visitors are also suitable for persons with disabilities under most alternatives, including airplane, motorboat, snowmachine, and dog team.
- I. **Stock Use**. Stock use is generally covered with other modes of surface transportation under the Access management framework provided in Chapter 2.
- J. Fire Management. A separate fire management plan was completed in 2004 (NPS 2004a).
- K. Cultural Resources. Cultural resources are addressed in the 1998 *Denali National Park and Preserve Resource Management Plan* (NPS 1998).
- L. Climbing and Mountaineering. This activity is managed to the wilderness standard throughout the backcountry. Waste management and the use of power drills and anchors are discussed under Actions Common to All Action Alternatives. Air access is discussed in each alternative under Access. General guidance for guided services is covered under the Guided Activities and Commercial Services portion of each alternative and Actions Common to All Action Alternatives.
- M. **Interpretation and Education**. There is a section for this topic under the Administration and Research sections of each alternative and Actions Common to All Acton Alternatives.
- N. **Management of Valid Existing Rights and Congressionally Authorized Uses**. This element is covered under the 1986 *General Management Plan* in the following sections: the Special Use Zone subsection of Proposed Management Zoning, Potential RS2477 Rights-of-Way, and Access to Inholdings. Amendments were not required at this time.
- O. Interaction with Other Federal Land Management Agencies. This interaction is documented in Chapter 5, Consultation and Coordination.
- P. Scientific Activities. There is a section for this topic under the Administration and Research sections of each alternative and Actions Common to All Acton Alternatives.

III. Environmental Compliance.

The entire Backcountry Management Plan and Environmental Impact Statement, including the environmental consequences analysis in Chapter 4, meets National Environmental Policy Act requirements.

Appendix C: ANILCA Section 810(a) Summary of Evaluations and Findings

I. Introduction

This evaluation and finding was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It evaluates the potential restrictions to subsistence activities that could result from implementation of the backcountry management plan for Denali National Park and Preserve. The *Draft Backcountry Management Plan and Environmental Impact Statement* describes a range of alternatives for consideration.

II. The Evaluation Process

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the Federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency:

- 1. gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;
- 2. gives notice of, and holds, a hearing in the vicinity of the area involved; and
- 3. determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity would involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps would be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the national park system in Alaska. Denali National Park and Preserve additions were created by ANILCA Section 202(3)(a) for the purposes of:

"The park additions and preserve shall be managed for the following purposes, among others: To protect and interpret the entire mountain massif, and additional scenic mountain peaks and formations; and 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; and to provide continued opportunities including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities."

Subsistence is an allowed use in the ANILCA additions to Denali National Park and Preserve (Sec. 202(3)(a)).

The potential for significant restriction must be evaluated for the proposed action's effect upon

"... subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use." (Sec. 810(a))

III. Proposed Action on Federal Lands

The "Description of Alternatives" section of the *Draft Backcountry Management Plan and Environmental Impact Statement* describes in detail the alternatives for consideration. Following is a brief summary of each.

Alternative 1: No Action

The National Park Service would continue the present management direction, guided by the 1986 *General Management Plan*, the 1997 *Entrance Area and Road Corridor Development Concept Plan*, the 1997 *South Side Denali Development Concept Plan*, the 1997 *Strategic Plan*, and backcountry management plans from 1976 and 1982. Recreational use and access patterns would continue to develop, and the agency would respond as necessary on a case-by-case basis. No new services or facilities would be developed to meet increased levels of use in the backcountry, except for those identified in the entrance area or south side plans.

There would be no new management areas defined for the backcountry of Denali National Park and Preserve. The entire backcountry would continue to be defined as a "Natural Area" under the 1986 General Management Plan. The only distinctions between areas of the backcountry would be the legislative distinctions of the designated Wilderness in the former Mount McKinley National Park, the 1980 national park additions, and the national preserves. There would be no resource or social standards defined for any portion of the backcountry.

Alternative 2

This alternative would distinguish a unique Denali experience based on dispersed use in a wilderness landscape with few sights or sounds of people or mechanized civilization. There would be few services, facilities, or signs of management presence. This alternative would most clearly distinguish the backcountry experience in Denali from the surrounding public lands, providing a place primarily for visitors who are very self-reliant, and including many opportunities for extended expeditions in very remote locations. Backcountry users seeking other experiences would find those opportunities on neighboring lands.

Alternative 3

This alternative would provide a variety of appropriate wilderness recreational activities by establishing areas to serve those visitors who want to experience the wilderness resource values of the Denali backcountry but require services, assistance, or short timecommitments. The areas would be the minimum necessary to provide these experiences based on present demand and would be focused along the park road, in Kantishna near the park road, and around the Ruth Glacier (along with existing mountaineering activity on the Kahiltna Glacier). The majority of the backcountry would be managed for dispersed, self-reliant travel and would include opportunities for extended expeditions in very remote locations. Growth in other uses would be accommodated on neighboring lands.

Alternative 4

This alternative would also provide a variety of appropriate wilderness recreational activities and experiences by establishing areas to serve those visitors who want to experience the wilderness resource values of the Denali backcountry but require services, assistance, or short time-commitments. However, the areas would be of sufficient size to accommodate anticipated growth in the next 15-20 years and would be focused along the park road; in Kantishna near the park road; at the Ruth, Tokositna, and Kahiltna Glaciers; and in the Dunkle Hills/Broad Pass area. The remainder of the backcountry would be managed for dispersed, self-reliant travel and would include opportunities for extended expeditions in very remote locations.

Alternative 5

This alternative would create two distinct geographic areas that provide different kinds of visitor experiences in the Denali backcountry. The old Mount McKinley National Park and the Denali additions north of the Alaska Range would be primarily managed for dispersed, self-reliant travel although no areas would be managed specifically to preserve opportunities for extended expeditions in remote locations. Areas along the park road and in Kantishna that presently receive a relatively high volume of use and large parts of the additions south of the Alaska Range would be managed for a greater intensity and variety of appropriate recreational activities and would have more visible management presence and opportunities for more services and facilities.

IV. Affected Environment

Introduction

The backcountry of Denali National Park and Preserve includes the entire park except the development sub-zones delineated in the 1997 *Entrance Area and Road Corridor Development Concept Plan*. For some topics the backcountry management plan includes uses even in the development sub-zones, but proposed actions are consistent with the *Entrance Area and Road Corridor Development Concept Plan* and the *South Side Denali*

Development Concept Plan. The study area includes designated, proposed, potential, recommended, and suitable wilderness, but the plan does not make recommendations for federally-designated Wilderness.

Park Environment

Denali National Park and Preserve is located in the interior of Alaska and is dominated by an east to west line of towering, glaciated mountains known as the Alaska Range. The range rises abruptly from lowlands of 500 to 2,000 feet in elevation to the pinnacle of Mount McKinley, North America's highest mountain, at 20,320 feet. The range is perpetually snowclad above approximately 7,500 feet on the north and 6,000 feet on the south. Glaciers are numerous and tend to be larger and longer on the south side of the range than on the north.

Moisture from the Gulf of Alaska is blocked by the Alaska Range, causing a continental climate to the north of the range and more of a maritime climate to the south. Moisture-laden air from the south results in greater levels of precipitation on the southern flanks of the range. The average annual precipitation at park headquarters is 15 inches, while at some higher elevations in the park the total precipitation exceeds 80 inches and snowfall exceeds 400 inches. Normal snowpack throughout the region averages between 20 and 40 inches.

Vegetative cover in Denali is typical of interior Alaska taiga. Lowland floodplains are dominated by dense, deciduous or coniferous forest, or by a mixed forest of balsam poplar and white spruce. Upland forests tend to be more open with mixed or continuous stands of black spruce, white spruce, or aspen. Upland forests give way to shrub communities at elevations above approximately 2,400 feet. Glacial rivers flowing from the Alaska Range create broad floodplains that are sparsely vegetated. Tall shrub communities of willow and alder grow on moist slopes and along drainages, and low shrub communities of dwarf birch and willow grow at higher elevations or on dry slopes. Alpine tundra, composed of dryas and dwarf willow shrub, mat and cushion species, or grass and sedge mixes, grows on slopes and ridges to about 6,000 feet. More than 650 species of flowering plants inhabit the slopes and valleys of the park.

The original Mount McKinley National Park was established in 1917 primarily as a refuge for large mammals. In 1980, ANILCA enlarged the Old Park to more than 6 million acres and re-designated the area as Denali National Park and Preserve. The protected subarctic ecosystem of Denali provides habitat for 30 species of mammals, at least 152 species of breeding birds, 16 species of fish (twelve resident species and four anadromous Pacific salmon species), and 1 amphibian. The American peregine falcon (*Falco peregrinus anatum*), the subspecies that nests in the Denali region, was formerly listed as an endangered species under the Endangered Species Act but was delisted as of August 25, 1999 (64 FR 46542). No federally designated threatened or endangered species are known to occur within Denali National Park and Preserve (see Appendix E of the original draft plan, consultation letter from the U.S. Fish and Wildlife Service, NPS 2003d).

About 100 archeological sites are recorded within Denali National Park and Preserve. Archeological investigations conducted within and immediately adjacent to the park strongly suggest that sites dating from the Paleoarctic tradition (10,000 years before present) through the Protohistoric period (200 years before present) exist within the park. Excavations at the Dry Creek site, situated near the northeastern boundary of the park, have yielded one of Alaska's earliest dates, 11,000 years before present (BP). The Carlo Creek site, situated along the Nenana River on the eastern boundary of the park, is dated at approximately 8,000 BP. These sites may depict tool technologies and subsistence patterns representing the earliest peopling of North America by means of the Bering Land Bridge.

The Denali area was used historically by several Athabaskan Indian groups. The Ahtna people of Cantwell arrived from the east, the Tanana people came into the area from the north traveling up the Nenana and Toklat Rivers, and the Koyukon people who lived at Lake Minchumina ascended the McKinley, Foraker, and Herron Rivers. The Upper Kuskokwim people who still live in Nikolai and Telida approached the park from the west, and the Dena'ina people approached the park from the south. Subsistence activities included large mammal hunting, fishing, and small game trapping.

A more comprehensive description of existing conditions can be found in the affected environment section of the *Draft Backcountry Management Plan and Environmental Impact Statement*.

V. Subsistence Uses and Needs Evaluation

Background Information

The 1980 additions to Denali National Park and Preserve are open to subsistence uses in accordance with Section 202 (3)(a) of ANILCA. Lands within the former Mount McKinley National Park are closed to subsistence activities. Congress found and declared in Title VIII, Subsistence Management and Use, Section 801 (3), that the continuation of the opportunity for subsistence uses of resources on public and other lands in Alaska is threatened by the increasing population of Alaska, with resultant pressure on subsistence resources, by sudden decline in the populations of some wildlife species which are crucial subsistence resources, by increased accessibility of remote areas containing subsistence resources, and by the taking of fish and wildlife in a manner inconsistent with recognized principles of fish and wildlife management.

Furthermore, Congress declared it to be the policy in Section 802 (1), that consistent with sound management principles and the conservation of healthy populations of fish and wildlife, the utilization of the public lands in Alaska is to cause the least adverse impact possible on rural residents who depend upon subsistence uses of resources of such lands; consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for each unit established, designated, or expanded by Title II; it is the purpose of Title VIII to provide the opportunity for rural residents engaged in a subsistence way of life to do so.

Denali National Park and Preserve has a total of about 380 eligible local rural residents who qualify for subsistence use of park and preserve resources. Denali's subsistence users primarily reside in the communities of Cantwell, Minchumina, Nikolai, and Telida. Other local rural residents who do not live in these designated resident zone communities, but who have customarily and traditionally engaged in subsistence activities within the park, may continue to do so pursuant to a subsistence permit issued by the park superintendent. There are about 12 individuals from McKinley Village, Nenana, Healy, Tanana, and the community of Colorado south of Cantwell that have received subsistence use permits. Each year, between one and seven people engage in subsistence activities in the Kantishna area and about 50 households in Cantwell acquire moose permits.

Denali has two areas designated as National Preserves. Both federal subsistence and State of Alaska hunting and trapping are permitted in the national preserves. State harvests are regulated by State game laws passed by the Alaska Board of Game. Federal subsistence harvest is regulated by federal regulations passed by the Federal Subsistence Board.

ANILCA provides a preference for local rural residents over other consumptive users should a shortage of subsistence resources occur and allocation of harvest becomes necessary. This is particularly important for national preserves were state hunting and trapping is allowed. When the harvest must be limited, state hunting opportunities must be restricted first before any reduction in the harvest for federal subsistence users occurs.

Areas receiving the most extensive subsistence use activities are the northwestern park and preserve region near Lake Minchumina, and the southeastern park region near Cantwell, and the southern Kantishna Hills region near Kantishna. Cantwell area subsistence users primarily use park lands in the Windy Creek, lower Cantwell Creek, and Bull River drainages. In more recent years the Kantishna Hills region has seen increased utilization for subsistence resources. In the northwestern region, there is a long history of established traplines that extend throughout the ANILCA park and preserve additions up to the boundaries of the former Mt. McKinley National Park. Denali National Park and Preserve lands are responsible for only a portion of the estimated community subsistence harvests reported by these communities since a significant portion of the areas used by these communities for subsistence are beyond the park and preserve boundaries

Overall, Denali's main subsistence species are moose, caribou, salmon, hare, rock and willow ptarmigan, spruce grouse, ducks and geese, and a few species of freshwater fish. Less frequently used large mammals include black bear, brown bear and Dall sheep. Fresh water fish include burbot, dolly varden, grayling, lake trout, northern pike, rainbow trout and whitefish. Important fur animals include marten, mink, red fox, wolf, lynx, weasel, wolverine, land otter, beaver, muskrat, and coyote.

The National Park Service recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerably from previous years because of such factors as weather, surface snow conditions for traveling, wildlife migration patterns, natural population cycles, and wildlife conservation practices of leaving a trapline fallow periodically.

Potential Impacts to Subsistence Users

Increases in types and levels of recreation have the potential to interfere with subsistence activities. As popular places become crowded, it is expected that recreational use will disperse into more remote or infrequently-used places. Potential restrictions to subsistence may occur if visitors frequent areas used for subsistence. Visitors, especially those who travel via motorized means, may disturb wildlife and interfere with subsistence users who are hunting or scouting for subsistence resources.

In the last five years, non-subsistence snowmachine use has expanded dramatically in and adjacent to the southeastern areas of the park, particularly in the area near Cantwell and Broad Pass. Along with increasing popularity for snowmobiling have come dramatic improvements in snowmachine technology. Because of the increased reliability, power and flotation ability of the newer snowmachines, snowmachiners have been accessing more distant areas and operating in significantly steeper and higher terrain than in past years.

Open habitat, mountain slopes, and reasonably good snow deposition in the Broad Pass area have attracted increasing numbers of snowmachiners from areas of the state accessible to the Parks Highway. Typically, non-subsistence snowmachine groups tend to travel in larger numbers and spend more time traveling in basins and drainages.

As the range of non-subsistence snowmachiners overlaps with subsistence use areas, the potential for conflict between these user groups increases. Snowmachine users can interfere with subsistence traplines, displace furbearers, and create paths that encourage animals to travel farther from places where subsistence activities typically occur. For several years, subsistence users have expressed concerns about the impacts and conflicts of increasing recreational use and increasing non-subsistence snowmachine use on subsistence resources and subsistence activities. Members of Denali's Subsistence Resource Commission have specifically expressed concerns regarding the effects of increasing levels of snowmachine use in the Broad Pass/Cantwell area upon moose, furbearers, and ptarmigan populations and their distributions (Denali Subsistence Resource Commission Meeting Minutes, April 30, 2001; April 29, 1996; August 9, 1996; and June 28, 1993). Concerns about the impacts of increasing non-subsistence uses were also mentioned by Lake Minchumina area residents during public scoping (see also Letter from Collins, 3/3/01).

The Denali Subsistence Resource Commission Meeting Minutes (June 1993) document high levels of non-subsistence related snowmachine use in the Cantwell area. It was

noted that riders were primarily using drainages and basins, essentially saturating the area and displacing furbearers, causing local trappers to pull their traps prematurely in December of that year.

In the Preserves, sport hunting can also interfere with subsistence as subsistence users would have to compete with sport hunters for game.

Evaluation Criteria

To determine the potential impacts of the alternatives on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources:

- 1. The potential to reduce important subsistence fish and wildlife populations by (a) reductions in number, (b) redistribution of subsistence resources, or (c) habitat losses;
- 2. What effect the action might have on subsistence fisher or hunter access;
- 3. The potential for the action to increase fisher or hunter competition for subsistence resources.

1. The potential to reduce populations

(a) Reduction in Numbers:

Alternatives 1-3

Actions in these alternatives are not expected to reduce numbers of wildlife.

Alternative 4 (Preferred Alternative)

Expanding the hunting guide area in the southwest preserve has the potential to reduce wildlife populations as animals in this area could be shot; however, geographic and temporal limitations would prevent a significant restriction to subsistence resources.

Alternative 5

Expanding the hunting guide area in the southwest and northwest preserves has the potential to reduce wildlife populations as animals in these areas could be shot; however, geographic and temporal limitations would prevent a significant restriction to subsistence resources.

(b) Redistribution of Resources:

Alternative 1 (no action)

Increases in recreational activities in subsistence use areas have the potential to redistribute wildlife populations. Use levels among a variety of activities are expected to increase, especially near access points and at destinations that are already popular. Visitors engaged in recreational activities have the potential to harass or frighten wildlife. In addition to the mere presence of people, human-generated noise, and noise from machines, such as airplanes and snowmachines, could cause wildlife to move away from visitors. As popular areas become crowded, visitor use is expected to disperse to other areas of the park, which could force wildlife to vacate those areas.

For example, wildlife may be displaced by snowmachines in the Broad Pass area south of Cantwell, along the Stampede corridor, in the southwest preserve, and in the Tokositna and Lower Ruth areas, and may expend valuable energy fleeing from them. Potential adverse impacts on wildlife most likely would occur during mid-to-late winter, when wildlife is likely to be in a nutritionally-stressed condition. Some dispersion is also possible in the northwest preserve as wildlife could be frightened by non-subsistence motorboat and snowmachine use. This scenario would be likely in alternative 1 where park staff would have little ability to educate visitors about wildlife before visitors go into the backcountry.

Subsistence users in the Cantwell area have expressed concern about increasing snowmachine use in the Broad Pass area, as noted above. Subsistence users in the northwest preserve and adjacent park additions have also expressed concerns about motorized use. Additional non-subsistence use involving snowmachines and motorboats in subsistence use areas, such as along Birch Creek, could result in displacement of furbeareres and moose, cabin vandalism and unauthorized use, disturbed traps, and conflicts between recreational and subsistence users (letters from Miki and Julie Collins, 7/16/00, 7/24/00 and 3/3/01). Introducing new or expanded recreational uses into these areas increases the potential for conflict between consumptive and non-consumptive users. Subsistence trappers may be adversely affected during certain times of the year by displacement of furbearers, and subsistence hunters may be adversely affected during winter hunting seasons by the temporary displacement of wildlife, particularly moose and caribou.

Because of concerns about the declining number of ptarmigan in Wildlife Management Unit 13, which encompasses the east side of the south additions and important subsistence use areas south of Cantwell, hunting bag limits have been reduced and the season shortened to close on March 31. One of the reasons for shortening the season from April 30 to March 31 was to avoid hunting and activity during the nesting period in April. Increased recreation, particularly snowmachine use, could have a negative effect by causing displacement of ptarmigan populations during their sensitive breeding and nesting period (Denali Subsistence Resource Commission Meeting Minutes, August 9, 1996 and June 28, 1993).

For several years, subsistence users have expressed concerns about the impacts and conflicts of increasing recreational use and increasing non-subsistence snowmachine use on subsistence resources and subsistence activities. Members of Denali's Subsistence Resource Commission have specifically expressed concerns regarding the effects of increasing levels of snowmachine use in the Broad Pass/Cantwell area upon moose, furbearers, and ptarmigan populations and their distributions (Denali Subsistence Resource Commission Meeting Minutes, April 30, 2001; April 29, 1996; August 9, 1996; and June 28, 1993). The Denali Subsistence Resource Commission Meeting Minutes

(June 1993) document high levels of non-subsistence related snowmachine use in the Cantwell area. It was noted that riders were primarily using drainages and basins, essentially saturating the area and displacing furbearers, causing local trappers to pull their traps prematurely in December of that year. As the range of non-subsistence snowmachine use overlaps with subsistence use areas, the potential for conflict between these user groups increases.

Non-subsistence snowmachine users would interfere with subsistence traplines, displace furbearers, and create paths that encourage animals to travel farther from places where subsistence activities typically occur. Trappers begin trapping as early as November 1. The trapping season closes by the end of February; however, increasing levels of non-subsistence snowmachine use in the Cantwell/Broad Pass area would continue to displace wildlife, and trappers would continue to pull their traps by December because it would be inefficient to set traps in an area in which furbearers have been displaced.

Increased use of the park, particularly non-subsistence snowmachine use, would likely displace moose and caribou from critical wintering areas on park lands in the Windy and Cantwell Creek drainages. Local moose populations and the Cantwell group of the Nelchina Caribou herd use areas within the former Mount McKinley National Park and the ANILCA park additions of Windy Creek, Cantwell Creek, and the Bull River drainages during winter. These areas along the Alaska Range in the vicinity of Windy Pass provide important winter habitat for moose and caribou because snow depths associated with the pass area are less than in other areas.

Non-subsistence snowmachine use is often concentrated in these high-elevation basins where riders spend many hours at a time. These basins provide critical winter habitat for moose and caribou. Moose and caribou would continue to be displaced from these critical wintering areas as non-subsistence snowmachine use increases. This could significantly increase the stress and nutritional demands upon moose and caribou and result in some moose or caribou mortality, depending on the environmental conditions and the body reserves of moose or caribou in a given year.

Non-subsistence snowmachine use originating in Cantwell begins when adequate snowcover is present, and during early winter, use is relatively low. As snowpack increases so does snowmachine use. In late winter when the days are lighter, warmer, and there's lots of snow, non-subsistence snowmachine use is highest. This corresponds with the time of the year when moose and caribou are at their lowest nutritional states. Nonsubsistence snowmachine use would continue to induce stress on moose and caribou in the Windy and Cantwell drainages, especially in late winter when the animals are in a nutritional deficit. The magnitude of the impact would depend on snow depth. Die off would be greater as snow depth increases because displaced animals would have a more difficult time moving through the snow to forage and to get away from snowmachine use.

Due to the potential for high levels of widespread recreation that could create unfavorable conditions for wildlife (i.e. presence and noise from visitors would scare wildlife), alternative 1 would have major impacts on distribution of subsistence resources.

Alternative 2

Redistribution of wildlife populations is not expected under alternative 2 because of the emphasis on protecting wildlife habitat and highly dispersed recreation. Snowmachine use in the park additions and preserve would be limited to traditional activities, which would result in an immediate decrease in the non-subsistence snowmachine use mentioned under alternative 1. The impacts described under alternative 1 would therefore not occur. Subsistence opportunities would likely improve as compared to current conditions because visitor use, particularly non-subsistence snowmachine use, would be reduced, so wildlife would be less likely to be frightened and move elsewhere.

Alternative 3

Alternative 3 provides for dispersed recreational uses, including some motorized access, in parts of the park additions and preserve that are used for subsistence. Because non-subsistence uses would be managed for low encounter rates and minimal impacts to natural resources in most of the park additions and preserve, only minimal redistribution of populations would occur.

Snowmachine use would be limited to subsistence and other traditional activities in the park and preserve additions, and to established winter corridors for recreational use. Therefore, there would be an immediate decrease in non-subsistence snowmachine use throughout the park and preserve, but the winter corridors would result in areas of more concentrated snowmachine use.

Establishing corridors would channel snowmachine use in the Broad Pass area; to the toes of the Ruth, Tokositna, and Kanikula glaciers from the Tokositna River; and along the Yentna, Tokositna, and Kantishna/Muddy Rivers (135 linear miles of winter corridors). Trapping occurred west of Cantwell Creek in the 1990's, but it does not generally occur there presently, so high use snowmachine corridors designated under this alternative in the Broad Pass area would not conflict with areas around Cantwell that are currently used for subsistence activities. Along most of the other corridors, these higher use areas overlap with areas currently or traditionally used for subsistence activities. Encounters with wildlife along these corridors could cause behavioral disturbance, increase stress levels, and temporarily displace wildlife.

Minor impacts that would result would be attributable to snowmachine use, airplane access, and other increasing recreational uses that could scare wildlife and cause them to relocate.

Alternative 4 (Preferred Alternative)

Under this alternative, access by snowmachine to the park and preserve additions would continue to grow. Designating corridors for winter use would focus use in the following places: from the southern park boundary to the Old Park boundary near the West Fork

Chulitna, Bull River, and Cantwell Creek; to the toes of the Ruth, Tokositna, and Kanikula glaciers from the Tokositna River; along the Yentna, Tokositna, and Kantishna/ Muddy Rivers. In a future wilderness proposal, accommodation would be made as necessary for recreational snowmachine access along corridors and throughout those areas designated as Management Area A (11% of the total park area and along 135 linear miles of winter corridors). Winter corridors would result in areas of more concentrated snowmachine use and areas designated as management area A would allow for an encounter rate of up to five parties per day, including two parties of up to six people. Nearly all of the winter corridors overlap with areas currently or traditionally used for subsistence activities.

For several years, subsistence users have expressed concerns about the impacts and conflicts of increasing recreational use and increasing non-subsistence snowmachine use on subsistence resources and subsistence activities. Members of Denali's Subsistence Resource Commission have specifically expressed concerns regarding the effects of increasing levels of snowmachine use in the Broad Pass/Cantwell area upon moose, furbearers, and ptarmigan populations and their distributions (Denali Subsistence Resource Commission Meeting Minutes, April 30, 2001; April 29, 1996; August 9, 1996; and June 28, 1993). The Denali Subsistence Resource Commission Meeting Minutes (June 1993) document high levels of non-subsistence related snowmachine use in the Cantwell area. It was noted that riders were primarily using drainages and basins, essentially saturating the area and displacing furbearers, causing local trappers to pull their traps prematurely in December of that year. As the range of non-subsistence snowmachine use overlaps with subsistence use areas, the potential for conflict between these user groups increases.

Trappers begin trapping as early as November 1. The trapping season closes by the end of February; however, increasing levels of non-subsistence snowmachine use in the Cantwell/Broad Pass area would continue to displace wildlife, and trappers would continue to pull their traps by December because it would be inefficient to set traps in an area in which furbearers have been displaced.

Increased use of the park, particularly non-subsistence snowmachine use, would likely displace moose and caribou from critical wintering areas on park lands in the Windy and Cantwell Creek drainages. Local moose populations and the Cantwell group of the Nelchina Caribou herd use areas within the former Mount McKinley National Park and the ANILCA park additions of Windy Creek, Cantwell Creek, and the Bull River drainages during winter. These areas along the Alaska Range in the vicinity of Windy Pass provide important winter habitat for moose and caribou because snow depths associated with the pass area are less than in other areas.

Wildlife may be displaced by snowmachines in the Broad Pass area south of Cantwell, along the Stampede corridor, in the southwest preserve, and in the Tokositna and Lower Ruth areas, and may expend valuable energy fleeing from them. Potential adverse impacts on wildlife most likely would occur during mid-to-late winter, when wildlife is likely to be in a nutritionally-stressed condition. Some dispersion is also possible in the northwest preserve as wildlife could be frightened by non-subsistence motorboat and snowmachine use.

Subsistence users in the northwest preserve and adjacent park additions have also expressed concerns about motorized use. Additional non-subsistence use involving snowmachines and motorboats in subsistence use areas, such as along Birch Creek, could result in displacement of furbeareres and moose, cabin vandalism and unauthorized use, disturbed traps, and conflicts between recreational and subsistence users (letters from Miki and Julie Collins, 7/16/00, 7/24/00 and 3/3/01). Introducing new or expanded recreational uses into these areas increases the potential for conflict between consumptive and non-consumptive users. Subsistence trappers may be adversely affected during certain times of the year by displacement of furbearers, and subsistence hunters may be adversely affected during winter hunting seasons by the temporary displacement of wildlife, particularly moose and caribou.

Because of concerns about the declining number of ptarmigan in Wildlife Management Unit 13, which encompasses the east side of the south additions and important subsistence use areas south of Cantwell, hunting bag limits have been reduced and the season shortened to close on March 31. One of the reasons for shortening the season from April 30 to March 31 was to avoid hunting and activity during the nesting period in April. Increased recreation, particularly snowmachine use, could have a negative effect by causing displacement of ptarmigan populations during their sensitive breeding and nesting period (Denali Subsistence Resource Commission Meeting Minutes, August 9, 1996 and June 28, 1993).

Redistribution of wildlife could also occur as a result of expanding the hunting guide area in the southwest preserve. Human presence, aircraft used to access the area, and gunshots may frighten wildlife, causing animals to relocate.

Due to the potential for high levels of widespread recreation and increases in nonsubsistence snowmachine use that could create unfavorable conditions for subsistence wildlife populations, alternative 4 would have moderate impacts on subsistence resources and opportunities.

Alternative 5

There would be considerable potential for redistribution of resources under alternative 5 because of continued increases in non-subsistence activities in important subsistence use areas. Redistribution of wildlife populations would result from greater levels of motorized use, including snowmachine use, motorboats, and airplane landings.

Access by snowmachine to the park additions and preserves would continue and grow. Designating corridors for winter use would focus snowmachine use in the following places: from the southern park boundary to the Old Park boundary near the West Fork Chulitna, Bull River, and Cantwell Creek; to the toes of the Ruth, Tokositna, and Kanikula glaciers from the Tokositna River; to Kantishna from the Sushana River; along the Yentna, Tokositna, and Kantishna/Muddy Rivers. In a future wilderness proposal, accommodation would be made as necessary for recreational snowmachine access along corridors and throughout those areas designated as Management Area A (18% of the total park area plus 183 linear miles of corridors). Winter corridors would result in areas of more concentrated snowmachine use and areas designated as management area A would allow for an encounter rate of up to five parties per day, including two parties of up to six people. Nearly all of the winter corridors overlap with areas currently or traditionally used for subsistence activities. Increases in snowmachine use would likely frighten animals and cause them to relocate. Potential adverse impacts on wildlife most likely would occur during mid-to-late winter, when wildlife is likely to be in a nutritionally-stressed condition.

Redistribution of wildlife could also occur as a result of expanding the hunting guide areas in the southwest and northwest preserves. Human presence, aircraft used to access the area, and gunshots may frighten wildlife, causing animals to relocate.

For several years, subsistence users have expressed concerns about the impacts and conflicts of increasing recreational use and increasing non-subsistence snowmachine use on subsistence resources and subsistence activities. Members of Denali's Subsistence Resource Commission have specifically expressed concerns regarding the effects of increasing levels of snowmachine use in the Broad Pass/Cantwell area upon moose, furbearers, and ptarmigan populations and their distributions (Denali Subsistence Resource Commission Meeting Minutes, April 30, 2001; April 29, 1996; August 9, 1996; and June 28, 1993). The Denali Subsistence Resource Commission Meeting Minutes (June 1993) document high levels of non-subsistence related snowmachine use in the Cantwell area. It was noted that riders were primarily using drainages and basins, essentially saturating the area and displacing furbearers, causing local trappers to pull their traps prematurely in December of that year. As the range of non-subsistence snowmachine use overlaps with subsistence use areas, the potential for conflict between these user groups increases.

Trappers begin trapping as early as November 1. The trapping season closes by the end of February; however, increasing levels of non-subsistence snowmachine use in the Cantwell/Broad Pass area would continue to displace wildlife, and trappers would continue to pull their traps by December because it would be inefficient to set traps in an area in which furbearers have been displaced.

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Subsistence users in the northwest preserve and adjacent park additions have also expressed concerns about motorized use. Additional non-subsistence use involving snowmachines and motorboats in subsistence use areas, such as along Birch Creek, could result in displacement of furbeareres and moose, cabin vandalism and unauthorized use, disturbed traps, and conflicts between recreational and subsistence users (letters from Miki and Julie Collins, 7/16/00, 7/24/00 and 3/3/01). Introducing new or expanded recreational uses into these areas increases the potential for conflict between consumptive and non-consumptive users. Subsistence trappers may be adversely affected during certain times of the year by displacement of furbearers, and subsistence hunters may be adversely affected during winter hunting seasons by the temporary displacement of wildlife, particularly moose and caribou.

Because of concerns about the declining number of ptarmigan in Wildlife Management Unit 13, which encompasses the east side of the south additions and important subsistence use areas south of Cantwell, hunting bag limits have been reduced and the season shortened to close on March 31. One of the reasons for shortening the season from April 30 to March 31 was to avoid hunting and activity during the nesting period in April. Increased recreation, particularly snowmachine use, could have a negative effect by causing displacement of ptarmigan populations during their sensitive breeding and nesting period (Denali Subsistence Resource Commission Meeting Minutes, August 9, 1996 and June 28, 1993).

Due to the potential for high levels of widespread recreation that could create unfavorable conditions for wildlife (i.e. presence and noise from visitors would scare wildlife), Alternative 5 would have major impacts on distribution of subsistence resources.

(c) Habitat Loss:

None of the alternatives would result in significant habitat loss. Alternative 5 would result in the greatest habitat loss. Proposed facilities in alternative 5 include some trails and campsites on the south side of the park additions and temporary facilities to support winter recreation. These facilities would result in only negligible or temporary habitat loss.

2. Restriction of Access:

Access for subsistence uses on the ANILCA park and preserve additions is granted pursuant to Sections 811(a)(b) and 1110(a). Section 811(b) of ANILCA states that "rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on the public lands." Section 1110(a) of ANILCA authorizes the use of snowmachines for traditional activities during periods of adequate snow cover.

None of the alternatives would restrict access for subsistence. The National Park Service would take action to manage visitor use under many circumstances if that use would be detrimental to subsistence resource values of the park. Proposed registration requirements would be designed to count and track the level of use and would not disrupt subsistence uses. Subsistence users would be registered automatically by meeting eligibility requirements.

3. Increase in Competition:

Alternative 1

Increasing use of the preserve areas could eventually result in additional hunting activity and competition for wildlife resources. For example, Lake Minchumina area subsistence users have expressed concerns that unrestricted hunting in the northwest preserve, especially along the Muddy River, would deplete moose populations and prevent subsistence hunters from obtaining meat (letter from Miki and Julie Collins, 7/24/00). Although there is less subsistence use in the southwest preserve, the same effect could occur in that area.

The park and preserve additions are open to both subsistence and non-subsistence fishing. Subsistence use of fisheries is generally infrequent except in the northwest preserve. National Park Service regulations and provisions of the Alaska National Interest Lands Conservation Act mandate that if and when it is necessary to restrict the taking of fish, subsistence users are the priority consumptive users on federal public lands. They would be given preference on such lands over other consumptive uses (ANILCA, Section 802(2)). Continued implementation of the ANILCA provisions should mitigate any increased competition from resource users other than eligible subsistence users.

Increased non-subsistence use in the park and preserve additions, especially snowmachine use, leads to more frequent user conflicts (letter from Russ Wilson, 12/28/ 99; letter from Miki and Julie Collins, 7/24/00). Conflict is likely in areas where nonsubsistence use is rapidly increasing, such as south of Cantwell. Higher levels of use have the potential to displace local wildlife resources farther from common access corridors and into the Old Park, where these resources would be out of reach of subsistence users. In other places, such as in the northwest preserve, increased non-subsistence use over time, particularly snowmachine and motorboat use, could result in less wildlife being locally available, so subsistence users would have to travel farther to locate and harvest subsistence resources. To prevent any restriction to subsistence resources due to increased recreational use in the park additions and preserve (especially along common access corridors), the National Park Service would take a reactionary approach that may result in emergency closures to recreation.

Increased use and access near subsistence traplines near Lake Minchumina encourage snowmachiners and other travelers from the Kantishna area and the road system to use subsistence trapline routes. Every year the trapline is open, additional users follow it into the park. Subsistence users find it necessary to patrol their cabins to make sure recreational users are not using them illegally, and this requires additional time away from subsistence activities. Additional trails made from recreational users can confuse the dog teams of the subsistence users. To avoid conflicts with recreational users, subsistence users have altered their trapping schedule by pulling sets early. Subsistence users have stated that rapid increases in numbers of people cause considerable concern about their way of life and connection to a pristine environment being threatened (letter from Collins, 6/2/00).

Alternatives 2 and 3

None of the proposals in alternatives 2 and 3 are expected to result in increased competition for subsistence resources. Non-subsistence snowmachine use in the Broad Pass area, for example, could be expected to decrease significantly in alternative 2, resulting in far fewer conflicts with subsistence uses.

Alternative 4 (Preferred Alternative)

Increases in recreation and facilitated access would occur throughout the park; however, management zoning would allow the park to manage for desired conditions in areas used for subsistence.

Minor competition would occur in the southwest preserve as the hunting guide area would be expanded.

Alternative 5

As in alternative 1, improved access to the preserve areas over time could result in additional hunting activity and competition for wildlife resources. Alternative 5 differs from alternative 1 in that non-subsistence use would be managed using the tools described in Actions Common to All Action Alternatives to achieve the desired conditions for each management area. However, more hunting may occur in the southwest and northwest preserve since there would be an additional guiding company in each. The potential for increased competition would likely be about the same as under alternative 1. The potential for restrictions to subsistence access could be expected to be minor or local.

VI. Availability of Other Lands and Alternatives to the Proposed Action

The backcountry management plan and general management plan amendment includes all areas within the park additions and preserve that are open to subsistence uses. Therefore, there are no other lands that can be substituted in the proposed action.

VII. Alternatives Considered

The backcountry management plan includes a full range of alternatives with proposals for different levels of recreational use and access improvements. This range of alternatives includes some alternatives in which impacts on subsistence uses would be avoided (see Findings below).

VIII. Findings

The above evaluations demonstrate that the National Park Service would have to take reactionary measures, such as closing areas to recreation, in order to prevent a significant restriction of subsistence resources as reasonably foreseeable from alternative 1 (no action alternative). There would be no significant restriction from alternatives 2, 3, 4, or 5; however, increases in non-subsistence use from alternatives 4, and to a greater extent alternative 5, would negatively impact subsistence resources and opportunities in the Cantwell, Kantishna, and Minchumina areas.

Continuing current management direction under alternative 1 would result in rapidly increasing recreational use in parts of Denali National Park and Preserve, including in important subsistence use areas. The main impact from non-subsistence activities, such as snowmachine use and motorboat use, would be redistribution of wildlife resources available to subsistence users and competition for resources. This impact could be expected to increase over time as visitor use increases. There are no provisions in current management plans to allocate between recreational and subsistence uses, so increased user conflicts could be expected at some locations.

The Broad Pass area southwest of Cantwell is an important subsistence use area as well as a popular destination for non-subsistence snowmachine use during the winter. The Subsistence Resource Commission has documented concerns about restrictions on subsistence uses because of rapidly increasing recreational uses. Other subsistence use areas of concern include the Stampede corridor and the northwest preserve. The northwest preserve could be affected by increasing snowmachine and motorboat use over time.

Alternative 5 includes provisions for managing recreational uses and allocating between recreational and subsistence uses. This could be expected to result in fewer impacts than under alternative 1. However, the zoning scheme under alternative 5 allows for higher levels of resource impacts (as compared to the other action alternatives) and provides for increased access throughout much of the park and preserve additions, including important subsistence use areas. This alternative would also expand hunting guide areas

in the southwest and northwest preserve; however, the areas would be limited geographically and use would be limited to only certain times of the year to prevent a significant restriction to subsistence resources. In light of additional access and activity proposed under this alternative, the National Park Service may have to take management action in order to prevent a significant restriction to subsistence resources throughout the life of the backcountry management plan (the next 15-20 years).

For subsistence purposes, alternative 2 is recommended as the preferred management option considered in the environmental impact statement because it would have the least overall impacts to subsistence resources and opportunities.

While alternative 4 (preferred alternative) is not recommended as the preferred management option for subsistence, this alternative would not cause a significant restriction to subsistence resources. Widespread visitor use has the potential to create conflicts with subsistence due to increased competition and redistribution of resources; however, management zoning under this alternative protects subsistence resources by allowing for managed growth and lower levels of use in areas used for subsistence. Alternative 4 would not restrict access for subsistence. The National Park Service would take action to manage visitor use under many circumstances if that use would be detrimental to subsistence resource values of the park.

Appendix D: Backcountry Units and Requirements

The 1976 *Backcountry Management Plan* for Mt. McKinley National Park established a system of backcountry units, associated use limits, a mandatory permit system, and made other administrative decisions such as the prohibition of open fires and pets within the park backcountry. Notice of the permit and use limit decisions was provided in the Federal Register on June 11, 1976 in volume 41, number 114. Subsequent regulations were promulgated at 36 CFR § 13.63 (b) that allowed camping in accordance with the Backcountry Management Plan.

Since that time, as part of 1986 *General Management Plan* and other administrative actions necessary to respond to emerging issues, operational revisions to this 1976 plan have occurred such as changes in unit boundaries, the unit numbering system, and the adjustment of a few overnight use limits within the subset of units where a backcountry camping permit is currently required. These changes have been incorporated as revisions to the original 1976 plan and continue to be implemented through existing regulations and, when appropriate, the Superintendent's Compendium for Denali National Park and Preserve.

Map D-1 shows the system of backcountry units that is currently in use at Denali National Park and Preserve. Table D-1 shows how the revised existing backcountry management plan is being currently implemented with respect to backcountry camping permits, Bear Resistant Food Container use, and overnight camping limits.

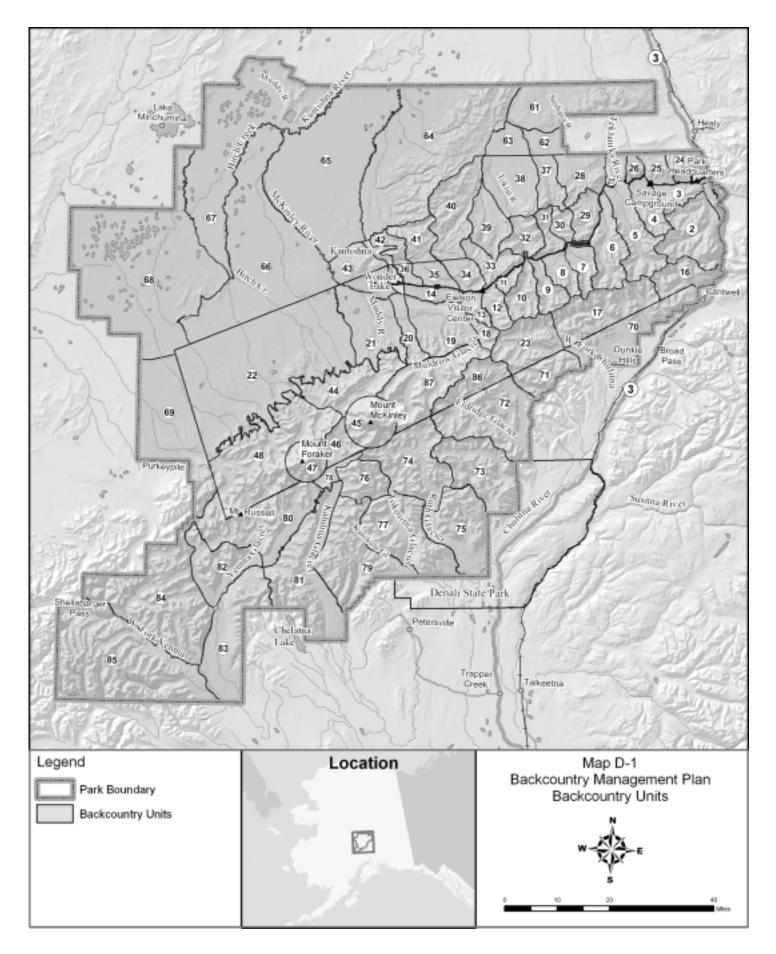


Table D-1 Permit and Bear Resistant Food Container Requirements – Denali National Park and Preserve

Unit	Unit Name	Backcountry	Bear Resistant Food	Overnight Limit (# Of
Number		Camping Permit	Container	People)
31	Polychrome Mountain	Required	Required	6
32	Middle Toklat	Required	Required	4
33	Stony Hill	Required	Required	4
34	Mount Galen	Required	Required	4
35	Moose Creek	Required	Required	4
36	Jumbo Creek	Required	Required	2
37	Lower East Fork	Required	Required	6
38	Lower Toklat	Required	Required	6
39	Stony Creek	Required	Required	4
40	Clearwater Fork	Required	Required	12
41	Spruce Peak	Required	Required	12
42	Eureka Creek	Required	Required	12
43	Eldorado Creek	Required	Required	12
44	Peters Glacier	Required		
45	Mount McKinley	Required		
46	Upper Kahiltna	Required		
47	Mount Foraker	Required		
48	Herron Glacier	Required	an an a	
61	Stampede			
62	Southeast Stampede	10.00 M	10 H H	
63	Southwest Stampede			
64	Kantishna Hills		10 M M	
65	Moose - McKinley			
66	McKinley - Birch	10.00 M	10 H H	
67	Birch - Foraker Preserve			
68	Herron - Highpower Preserve	10 M M	10 M M	
69	Swift Fork			
70	Bull River			
71	Ohio Creek			
72	Eldridge Glacier			
73	Buckskin Glacier			
74	Upper Ruth			
75	Lower Ruth	and a	10 H H	
76	Mount Hunter			
77	Tokositna Glacier			

 Table D-1
 Permit and Bear Resistant Food Container Requirements – Denali National Park and Preserve, continued

-									
-	-		-	-				Required	Required
Middle Kahiltna	Little Switzerland	Upper Yentna-Lacuna	Lower Kahiltna	Dall-Yentna Preserve	Yentna River Preserve	Mount Dall Preserve	Kitchatna Preserve	Mount Mather	Mount Brooks
78	79	80	81	82	83	84	85	86	87

 Table D-1
 Permit and Bear Resistant Food Container Requirements – Denali National Park and Preserve, continued

Appendix E: Minimum Requirement Procedure

STEP 1 – DETERMINING THE MINIMUM REQUIREMENT

SHEET 1

Is Administrative Action Needed?

What is the problem/issue that **may** require administrative action? Do not include methods or tools here. This sheet only refers to the issue or problem, not proposed action/project, or tools to be used. Include references from other legislation, policy, or plans, decisions, analyses, and how this issue is addressed in those documents.

Describe briefly or attach description:

The following questions assist in analyzing whether the issue needs to be resolved in wilderness. Do not consider what tools are to be used here. Please circle **Yes** or **No**, and explain your reasoning:

 Is this an emergency? Yes No If yes, follow established procedures for search and rescue (SAR), fire or other plans/policies. If no, please continue.

2. Is this problem/issue subject to valid existing rights, such as access to a valid mining claim, state lands, etc? Yes No If no, continue with Sheet 1. If yes, briefly explain here and then proceed to Sheet 3

3. Can the problem/issue be addressed by administrative actions outside a wilderness area? (For example, the administrative actions could be an information program at the visitor center or trailhead instead of a physical action in the wilderness, etc) Yes No If yes, conduct actions outside wilderness. If no, continue with Sheet 2.

 Is there a special provision in legislation (the 1964 Wilderness Act or subsequent laws), that allows this project or activity? (For example, maintenance of dams or water storage facilities, access to private inholdings, etc.) Yes No If yes, Go to SHEET 3; if no, Go To SHEET 2.

STEP 1: DETERMINING THE MINIMUM REQUIREMENT (Continued)

SHEET 2

Is Administrative Action Needed? (Continued)

The following questions are provided to evaluate whether resolving the issue protects wilderness character and values identified in the Wilderness Act. Answer the questions in terms of the need to resolve the issue/problem. If the answer to most of the questions is yes, then the issue/problem probably requires administrative action. Please circle Yes or No for each answer, and briefly explain.

- If the issue/problem is not resolved, or action is not taken, will the natural processes of the wilderness be adversely affected? Yes No Why/How?
- If the issue/problem goes unresolved, or action is not taken, will the values of solitude or primitive and unconfined type of recreation be threatened? Yes No Why/How?
- 3. If the issue/problem goes unresolved or action is not taken will evidence of human manipulation, permanent improvements, or human habitation be substantially noticeable?

Yes No Why/How?

4. Does addressing the issue/problem or taking action protect the wilderness as a whole as opposed to a single resource?

Yes No Why/How?

5. Does addressing this issue/problem or taking action contribute to protection of an enduring resource of wilderness for future generations?

Yes No Why/How?

 Is this an issue for reasons other than convenience or cost of administration? Yes No Why/How?

If administrative action is warranted, then proceed to Sheet 3 to determine the minimum tool or method for resolving the problem.

STEP 2: DETERMINIMG THE MINIMUM TOOL

SHEET 3: Determining the Minimum Tool: Fill out a Sheet 3 for each alternative.

Identify and describe a range of alternatives including those that utilize traditional tools and non-motorized and mechanized means as well as other methods.

Alternative # _____

Describe briefly or attach description:

Circle yes or no:		
Does this alternative involve:		
use of temporary road?	Yes	No
use of motor vehicles?	Yes	No
use of motorized equipment?	Yes	No
use of motorboats?	Yes	No
landing of airplanes?	Yes	No
landing of helicopters?	Yes	No
use of mechanical transport?	Yes	No
creating a structure or installation?	Yes	No
Other impacts to wilderness character?		
	Yes	No

The next set of descriptions may be put on Optional SHEET 3a, if desired:

Describe the biophysical effects/benefits of this alternative:

Describe the social/recreational effects/benefits:

Describe societal/political effects/benefits:

Describe health and safety concerns/benefits:

Describe economic and timing considerations/benefits:

Describe heritage resource considerations/benefits:

STEP 2: DETERMINIMG THE MINIMUM TOOL (Continued)

SHEET 4: Selection of the Minimum Tool Alternative

Attach all alternative sheets to this summary page.

What is the method or tool that will allow the issue/problem to be resolved or an action to be implemented with a minimum of impacts to the wilderness?

The selected alternative is # _____.

Describe the specific operating requirements for the action. Include information on timing, locations, type of actions, etc. (Use this space or attach a separate sheet.)

What are the maintenance requirements?

What standards and designs will apply?

Develop and describe any mitigation measures that apply.

What will be provided for monitoring and feedback to strengthen future effects and preventative actions to be taken to help in future efforts?

Approvals:	
Prepared by:	Date:
Recommended by:	Date:
Recommended by:	Date:
Approved by:	Date:

Appendix F: Cost Analysis

The following cost analysis is derived from management actions and predicted impacts on park operations as described in chapters 2 and 4.

Table B-1: Cost Analysis

		Alterr	native	
Cost Component	2	3	4	5
Visitor Information	209,000	319,000	438,000	438,000
Field Operations/Enforcement	-298,000	192,000	445,000	763,000
Aerial Patrol/Monitoring	40,000	54,000	72,000	90,000
Planning/Commercial Use Mgt.	41,000	41,000	124,000	166,000
Facility Maintenance	0	218,000	253,000	379,000
Research and Monitoring	246,000	246,000	655,000	838,000
Total	238,000	1,070,000	1,987,000	2,674,000
CONSTRUCTION One time Costs Inch	ding Fauing	nent and Mat	ariale	
CONSTRUCTION – One-time Costs Inclu	ıding Equipr			
	uding Equipr	nent and Mat Alterr 3		5
CONSTRUCTION – One-time Costs Inclu Building Facilities Broad Pass visitor contact station		Alter	native	5 800,000
Building Facilities	2	Alter 3	native 4	
Building Facilities Broad Pass visitor contact station	2	Alter 3 800,000	ative 4 800,000	800,000
Building Facilities Broad Pass visitor contact station Public use cabins Trail Facilities	2	Alter 3 800,000	ative 4 800,000	800,000
Building Facilities Broad Pass visitor contact station Public use cabins	2 0 0	Altern 3 800,000 0	ative 4 800,000 0	800,000
Building Facilities Broad Pass visitor contact station Public use cabins Trail Facilities Hiking trails	2 0 0	Altern 3 800,000 0	ative 4 800,000 0	800,000

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Appendix H: Development of Indicators and Standards

Development of indicators and standards for the Denali National Park and Preserve Backcountry Management Plan follows the process described in the 1997 *Visitor Experience and Resource Protection Handbook* (NPS 1997b), which provides guidance for implementation of the VERP framework at national park units. Under the 1978 National Parks and Recreation Act (NPRA, 16 USC § 1 note, 92 Stat. 3467), the National Park Service is required to address carrying capacity in its general management plans. VERP is the framework through which the NPS meets this statutory mandate, considering carrying capacity as "the type and level of visitor use that can be accommodated while sustaining acceptable resource and social conditions that complement the purpose of a park."

The VERP framework involves the following essential steps:

- 1) Describe a potential range of desired visitor experiences and resource conditions (prescriptive management areas or zones)
- 2) Allocate the potential zones to specific locations in the park
- 3) Select indicators and standards for each zone; develop a monitoring plan
- 4) Monitor resource and social indicators
- 5) Take management action as needed if standards are being approached or exceeded.

Management areas (zones) are described and allocated in chapter 2, indicators and standards selected, and monitoring protocols outlined. *Indicators* are defined as specific, measurable physical, ecological, or social variables that reflect the overall condition of a zone. *Standards* are defined as the minimum acceptable condition for each indicator variable.

Indicators

The following characteristics were considered desirable for indicators of visitor experience and resource quality in the Denali backcountry:

- Specific
- Objective
- Reliable and repeatable
- Related to visitor use
- Sensitive to visitor use
- Responsive to management action
- Cost efficient and effective
- Significant in terms of the issues being addressed by planning

Appropriate indicators are derived from the purposes and desired future conditions of the management areas described in chapter 2. They are not intended to measure every aspect of the resource conditions and visitor experience in the backcountry, but to provide a few

key variables that can be monitored to broadly indicate whether desired conditions are being achieved.

National Park Service planning staff used many sources of information to develop the indicators in the revised draft plan, including consultation of available literature (for example, Vande Kamp et al. 2001; Manning and Lime, 2000; Merigliano, 1989), the results of park-specific surveys (e.g. Swanson et al., 2002), consultation with park resource experts, NPS experts in other locations, and subject matter authorities in other agencies (for example, personal comm. with Skip Ambrose, NPS National Soundscape Program; David Cole and Alan Watson, Aldo Leopold Institute). Public involvement and comment on the revised draft plan is expected to be a very important source of information for the final set of indicators to be published with the final management plan.

The draft indicators selected for the Denali Backcountry Management Plan include the following:

Trail and Campsite Disturbance. Trail and campsite disturbances are the most common impacts of recreation use in wilderness areas (Hendee and Dawson, 2002). This type of disturbance shows up frequently in studies of potential indicators of quality (Vande Kamp et al., 2001), and appears as a concern for some visitors in a Denali survey of overnight backcountry users (Swanson et al., 2002). This type of disturbance serves as an indicator of overuse, usually along particularly popular travel routes and at popular destinations. Backcountry patrols have gathered data primarily in the Denali Wilderness that can be used to quantify the level of existing disturbance.

Litter and Human Waste. Studies of outdoor recreation indicators of quality have shown that litter and other signs of use impacts to be universally important (Vande Kamp et al., 2001). In a survey of overnight backcountry users at Denali, 89% reported being somewhat bothered or very bothered by seeing litter in the backcountry, and 100% reported being somewhat bothered or very bothered by seeing toilet paper or human waste (Swanson et al., 2002). The percentage of visitors encountering litter or human waste is the specific indicator.

Evidence of Modern Human Use and Landscape Modifications. These indicators are derived from direction provided by the Wilderness Act and the unique history of Denali as described in the Wilderness section of chapter 3. Management decisions have been driven by a long-held ethic that the landscape should not be altered by human development. The "Landscape Modifications" category is not truly an indicator, but simply an instruction to NPS managers as to whether modifying the landscape by adding trails, sanitation facilities, fixed ropes, or other permanent fixtures is acceptable in order to accommodate visitor use. In light of that management guidance, this category also communicates an appropriate expectation to backcountry visitors. The number of encounters with evidence of modern human use is intended to capture the entire range of impacts on wilderness character from vehicles, equipment, and facilities that are

generally incompatible with the park's history and legislative purpose, although it is recognized that some specific exceptions are allowed by ANILCA, the Wilderness Act, and other legislation.

Natural Sound Disturbance. In addition to being a resource that can be damaged in its own right, the degree of natural sound disturbance is also related to wilderness character and experience. It has been a major source of concern for national park managers across the country (e.g., NPS 1995b). However, it is also is factor in the wilderness experience of visitors, as indicated by visitor comments and a recent Denali overnight backcountry visitor survey, which showed that the number of encounters with aircraft, the average time of aircraft encounters per day, and the average daily maximum loudness were all significant predictors of decreasing overall visitor enjoyment of the backcountry (Swanson et al., 2002). These are translated into specific indicators that are the maximum number of motorized noise intrusions per day over the natural ambient sound level (thus factoring in the relative importance of loud, highly noticeable noise), the percentage time per hour that motorized noise is audible, and the maximum sound level. These specific indicators were also informed by indicators being developed for other national parks (Ambrose, pers. comm.).

Encounters with People and Encounter with Large Groups. Although literature over the past few years has shown the idea of "solitude" to be considerably more complex than a simple encounter rate, the encounter rate remains a useful indicator. Although a weak indicator of visitor satisfaction with wilderness experience, there is a relationship (Stewart and Cole, 2001; Watson, 1995). More importantly, encounter rates are correlated with use density which in turn is related to a variety of desirable wilderness characteristics such as opportunities to view wildlife and low user conflict for desired routes or camps (Cole, pers. comm.). Normative evaluations of wilderness user desires for wilderness experience often show a preference for few encounters, most famously noted in early research by the University of Washington Cooperative Parks Study Unit (Stankey, 1973). The survey of overnight backcountry users at Denali demonstrated that 78% of surveyed visitors preferred to see two or fewer other parties per day (Swanson et al., 2002).

Camping Density. The ability to camp out of sight and sound of others is has been demonstrated to be an important indicator of quality of wilderness experience (Vande Kamp, 2001). Eighty-two percent of respondents in the Denali backcountry survey indicated a preference to have no parties camped within sight or sound (Swanson et al., 2002).

Accessibility and Administrative Presence are not true indicators because they are not dependent on the amount of visitor use and they are completely dependent either on management action or actions outside of management control. They are intended to provide guidance to management on the degree to which ranger patrols or resource management activities should be visible in an area, and the degree to which management should actively seek to provide access to an area.

Standards

There are five characteristics of good standards. They are:

- Quantitative
- Time or space-bounded
- Expressed as a probability
- Impact-oriented
- Realistic

While research can help determine existing conditions and the realism of particular standards, setting standards is an inherently subjective process that relies heavily on professional judgment of land managers familiar with the resource and public involvement. Proposed standards for this plan were selected by National Park Service planners and resource managers with reference to the best resource information available and with reference to the purposes of the national park and preserve as specified in legislation. However, consistent with the VERP process there is a need for public involvement in selecting appropriate standards, which is to be accomplished during the public comment period on the draft plan. The standards presented in alternatives are proposals only and are intended to be modified with the assistance of the public.

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